

Midd-West High School

2024-25 Course Selection Guide for Academic & Career Planning



Guidance Counselors

Mrs. Sassaman	Students w/ last names A-G
Mrs. Rorke	Students w/ last names H-P
Mrs. Prendergast	Students w/ last names Q-Z

NON-DISCRIMINATION STATEMENT

The Midd-West School District will not discriminate in educational programs, activities, or employment practices based on race, color, national origin, gender, disability, age, religion, sexual orientation, ancestry, union membership, or any other legally protected classifications. The announcement of this policy is in accord with Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990.

Employees and program participants who have an inquiry or complaint of harassment or discrimination or need information about accommodations for people with disabilities should contact: the Office of Superintendent, Midd-West School District, 568 East Main Street, Middleburg, PA, 17842-1295.

Graduation Requirements

To be eligible to graduate from Midd-West High School, students shall successfully complete a program of study consisting of at least the minimum number of total credits in planned courses required for graduation. Those planned courses shall include:

- Three (3) planned courses in mathematics in grades 9-12 to include one in algebra and two (2) other mathematics credits. (The algebra requirement may be completed prior to grade 9, but a student must still earn 3 math courses in grades 9-12).
- Three (3) planned courses in science in grades 9-12 to include general science, biology and one (1) other science credit. (General science may be waived when students are accelerated to Biology in grade 9, but students must still complete 3 courses in grades 9-12).
- Three (3) planned courses in social studies in grades 9-12 to include one in world history, one in American history and one in American government.
- Four (4) planned courses in English in grades 9-12, consisting of one planned course each year, with the exception of students enrolled full-time at SUN Tech during their senior year.
- A planned course in health education.
- A planned course in physical education for each year with the exception of students who are enrolled full-time at SUN Area Technical Institute or an approved off-site program during their senior year.
- Two (2) planned courses in arts and humanities.
- Planned courses in approved electives as needed to meet the total number of credits required for graduation.

In addition to the criteria outlined above, students in graduation cohort 2023 and beyond shall demonstrate proficiency on the Algebra, Literature, and Biology Keystone Exams or an alternative graduation pathway according to Act 158.

Grade level status shall be determined by the number of credits completed:

- | | |
|---------------------------|----------------------|
| • Grade 10 | 6 completed credits |
| • Grade 11 | 13 completed credits |
| • Grade 12 | 19 completed credits |
| • Required for graduation | 27 completed credits |

Students must earn a minimum of five and one-half (5.5) credits during their senior year unless waived by the student's individual education plan and/or by prior approval of the Board of School Directors. Courses with fewer than ten (10) students enrolled will unlikely be offered; during the course selection process, students are strongly advised to select several optional electives in the event a first choice is not available. This is no guarantee students will receive all requested courses.

Independent Study Options: Students who have demonstrated high performance and completed all levels of a given course or area of study may submit a proposal for an independent study with the permission of the instructor. The proposal must include designated outcomes, a planned project, materials and resource lists, a process and timeline (with benchmark dates) for completing the project, and a self-evaluation component, as well as any criteria required by the instructor. Enrollment in the independent study is contingent upon approval by the instructor and building administration.

Honors Option: At the teacher's discretion, courses may include an honors option for students interested in completing high-rigor learning tasks. Students who take this option will be required to complete a set number of honors assignments across the school year and at the completion of the year, will receive credit for a weighted course.

CAREER PATHWAYS FRAMEWORK

The Career Pathways Framework has been adopted from the Pennsylvania Department of Education and is based on PA Career Standards. **Students will be well-served by this framework as a way of exploring career choices and selecting courses of study throughout their High School experience that best prepare them for the career path they choose.**

ARTS & COMMUNICATIONS (AC)

This pathway is designed to cultivate students' awareness, interpretation, application and production of visual, verbal and written work.

Cluster Areas include: Performing Arts; Visual Arts and Publishing Arts

The AC pathway may be for you if you are interested in: news reporting and writing; interviewing and reviewing; multi-media productions; acting; radio, TV, film and/or video; performing in a band, chorus; attending concerts; drawing, painting, creative artwork

BUSINESS, FINANCE & INFORMATION TECHNOLOGY (BFIT)

This pathway is designed to prepare students for careers in the world of business, finance and information services.

Cluster Areas include: Marketing, Sales & Service; Finance; Business Management

The BFIT pathway may be for you if you are interested in: a business environment; office management; sales; computers & technology; presentations to groups; telecommunications; advertising; different work sites; insurance; record keeping

ENGINEERING & INDUSTRIAL TECHNOLOGY (EIT)

This pathway is designed to cultivate students' interest, awareness and application to areas related to technologies necessary to design, develop, install, or maintain physical systems.

Cluster Areas include: Construction & Architecture; Manufacturing; Engineering & Engineering Technology; Transportation, Distribution & Logistics

The EIT pathway may be for you if you are interested in: building & construction; tools, equipment, & materials; woodworking; math & science classes; fitness & sports; precision work; design & architecture; engineering; computer technology; production management; how things work

HUMAN SERVICES (HS)

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

Cluster Areas include: Counseling; Personal Care; Education; Law; Public Safety & Government; Hospitality & Tourism

The HS pathway may be for you if you are interested in: working with people; owning your own business; aging adults; child development; family & social services; food preparation; teaching; counseling

SCIENCE & HEALTH (SH)

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

Cluster Areas include: Health Science; Agriculture; Food & Natural Resources; Science, Technology & Math

The SH pathway may be for you if you are interested in: health care environment; science & medicine; medical research; food production; environment & conservation; pharmacy; physical therapy; sports & fitness; information systems; radiology

MWHS courses noted on this handout are organized as “MUST

MUST TAKE (required) for all Pathways:				
All students in grades 9-12 must take the courses listed below no matter what Pathway they select or are interested in. These courses must also be successfully completed for graduation from MWHS.				
English/Language Arts	Mathematics	Science	Social Studies	Other
English/Contemporary Literature 9 or Honors English/Contemporary Literature 9	Algebra course (credited if taken in 8 th grade)	General Science (may apply to accelerate directly to Biology in 9 th grade)	American History 9 or Honors American History 9	PE (grades 9-12)
English/Contemporary Literature 10 or Honors English/Contemporary Literature 10	2 additional math credits	Biology	World History 10 or Honors World History 10	Health 10
English 11 or Honors English 11	(3 total math credits in grades 9-12)	1 additional science credit	Government & Economics 11	
English 12 or AP Literature				

Midd-West High School College Credits While in High School and Dual-Enrollment Opportunities

Midd-West High School Agriculture Program

Students enrolled in the Midd-West Agricultural Program have the potential to earn college credits by successfully completing the program.

Students have the potential to earn college credits by successfully completing the *General Production Agriculture* curriculum at Midd-West. The following schools are currently giving 3.0-9.0 credits: Delaware Valley College and Harrisburg Area Community College

Students successfully completing the *Agricultural Mechanics* Curriculum at Midd-West are eligible to receive up to 10.0 credits at SUNY College of Agriculture and Technology at Cobleskill

Dual-Enrollment Credits

Students enrolled in Agricultural Business Management will receive 3.0 dual-enrollment credits through Harrisburg Area Community College. It may be possible to transfer these credits to an institution of your choice.

Midd-West High School Sports Management Course Dual Enrollment

Students enrolled in the Midd-West Sports Management course have the potential to earn college credits by successfully completing the program. The course is designed for students interested in sports, entertainment, and event marketing. This course emphasizes the management principles related to the business of sports. It includes personnel, programs, marketing, media, financial management, and an overview of career possibilities in this growing field.

Midd-West High School has a dual enrollment program with Southern New Hampshire University that allows qualified high school students the opportunity to earn college credit while still in high school. Students who enroll and successfully complete this course are entitled to receive three (3) University credits and an official SNHU transcript with a paid fee.

Commonwealth University Early College (CUEC) Program

Commonwealth University is offering the opportunity to take regular, for-credit university courses to qualified seniors while still in high school. Students may be able to save up to 75 percent on tuition in Commonwealth University’s Early College Program. Senior high school students may enroll in college/university-related early admission programs during their senior year, provided they meet certain conditions. Please see School Board Policy 241 and Administrative Regulation (AR) 241 for more information.

HACC- Harrisburg Area Community College Dual Enrollment (DE):

High school juniors and seniors have the opportunity to take courses at a HACC campus or online that count toward high school credit and college credit, giving the student a head start and a feel for what a college course entails. The best part? The cost for a high school student to take a dual enrollment course is \$125 per credit. In the [file](#) below are the steps to admissions if you are interested.

High School to HACC to a career in Architecture- Earn the Architectural Technology Diploma while still in high school. Online courses begin as early as the spring of the junior year. Credits transferable to other Architecture or Construction Management programs as HACC. Graduates of the Architecture AA Transfer degree are transferable to Temple University, Drexel University, Morgan State University, and more. For more information, see the related file below and speak with your guidance counselor.

Lackawanna College Dual Enrollment (DE):

High school juniors and seniors have the opportunity to earn college credit by taking courses at Midd-West or online through Lackawanna College, giving the student a head start and a feel for what a college course entails. The cost for a high school student to take a dual enrollment course is \$100 per credit. Courses include Accounting II/III, Statistics, AP Literature and Composition, Psychology, Sociology, AP US History, Chemistry, Honors Chemistry, AP Chemistry including labs, Sustainable Floral Design, Plant and Greenhouse Science, Crop and Soil Science, and Animal Science. Additional courses will be offered at the Lackawanna College Sunbury Center as well as online (when available on LC course schedules). Credits are transferable to the State System of Higher Education Schools. Registration and money due for Dual-Enrollment College Credit will be due in the second semester.

Susquehanna University

Susquehanna University offers courses free to local high school students on a very limited availability basis. If interested, students must see their guidance counselor for more information and to register for courses.

Semester course offerings and availability can be found at: <https://websu.susqu.edu>.

SUN Area Technical Institute-

SUN Area Technical Institute also has Dual-Enrollment Opportunities for students to earn college credit. Please see the section at the end of the course description book for specific details.

Please contact your guidance counselor for more information about these opportunities or any other scheduling questions.

Agricultural Science and Engineering

An Agricultural Science and Engineering Education at Mid-West High School will provide students with an understanding of and an appreciation for the production, utilization, and management of food, feed, fiber, and natural resources through experiential and inquiry-based learning opportunities. A complete Agricultural Science and Engineering Education at Mid-West High School has three essential components: Classroom/Laboratory Instruction, FFA, and Supervised Agricultural Experience. Students are encouraged to join FFA if they enroll in an agricultural course. SAE requirements may apply. All courses in this field of study include learning objectives that are aligned to PA Core Standards—Reading for Science and Technical Subjects and PA Core Standards—Writing for Science and Technical Subjects. Numerous courses count as science credits toward graduation requirements.

225 Agriculture Education 8 (.25 credit)

Grade 8

This introductory course will cover a wide range of topics, including Animal Science, Food Science, Plant Science, Tractor/Farm Equipment Safety, and Leadership Development. Students will learn how big the agricultural industry really is and explore how agriculture impacts their daily lives. Hand-on activities outside and in the animal lab, shop, and greenhouse will have students handling live animals, growing plants, and working with agricultural equipment.

701 Leadership Development (.5 credit) EVEN YEARS ONLY – offered 2024-25

The purpose of this course is to provide students with opportunities to develop knowledge, skills, and abilities to realize their fullest potential to be premier leaders, grow personally, and ultimately be successful in their chosen career. Public speaking, goal setting, personal growth, and career exploration will be emphasized, among other topics. Any student who desires to grow their leadership skills is encouraged to take this course. All students enrolled in this course are given the opportunity to participate in the National FFA Organization and are required to maintain a Supervised Agricultural Experience (SAE) throughout the school year.

705 Introduction to Agricultural Engineering (.5 credit)

This hand-on course of Introductory Agriculture Engineering is the recommended course for all future Agriculture Engineering courses. This course includes both the safety instruction and certification of equipment used in both metal and wood processes, drawing and designs, and construction of various engineering projects used today in the Agricultural Industry.

706 Introductory Electric ARC and Gas Welding (1 credit)

Introductory Electric ARC and Gas Welding builds on instruction learned in Introductory Agricultural Engineering and combines basic instruction with hands-on training in the field of metal working. This course includes instruction in sheet metalworking, welding, metal cutting, and fabrication. Instruction includes gas welding processes and shielding, AC and DC welding.

Recommended: Introduction to Agricultural Engineering

707 Agricultural Building & Construction (1 credit)

Combining modern approaches in the construction of Agricultural Building and systems is the basis of this course. Students selecting this course will find hands-on instruction and practice in areas of building site set-up, laser and optics surveying, concrete and masonry, and building principles used today in construction.

Recommended: Introduction to Agricultural Engineering

708 Small Gasoline Engines Repair and Overhaul (1 credit)

Agricultural Power Engineering instructs students with theory and hands-on instruction in small engines. This course includes instruction on small engines (2-cycle and 4-cycle) gasoline and diesel, along with hands-on overhaul and repair instructions. Students electing this course will be instructed in overhaul procedures, engine testing, and ordering engine parts.

Recommended: Introduction to Agricultural Engineering

709 Introduction to Agricultural Sciences (1 credit)

This course is a prerequisite for higher-level agriculture courses. Students are introduced to current events in agriculture, crops, soils, conservation, livestock, and fields of agriculture service and occupations. Students will participate in the National FFA Organization and learn about its importance in agricultural education. Topics include but are not limited to public speaking, leadership, animal science, plant science, and natural resources. Students are also required to maintain a Supervised Agricultural Experience (SAE) throughout the school year.

710 Sustainable Floral Design (.5 credit) ODD YEARS ONLY – offered 2025-26

This course will include plant anatomy and physiology, plant and tool identification, floral handling, and retail marketing. Students will design/develop floral arrangements, which could include corsages, boutonnieres, dish gardens, centerpieces, and bouquets after design mechanics and the history of floral design have been studied. Throughout the course, students will also analyze how the floral industry impacts the agricultural industry economically, environmentally, and socially at the local through international levels, including studying current sustainable topics in the industry. All students enrolled in this course are given the opportunity to participate in the National FFA Organization and are required to maintain a Supervised Agricultural Experience (SAE) throughout the school year.

College Credit Opportunity: Lackawanna College ECL115 – Sustainable Agriculture

715 Agriculture Business & Finance (1 credit) ODD YEARS ONLY – offered 2025-26

This course offers dual enrollment with HACC. In this course, students will analyze food, feed, fiber and natural resource production systems through the study of economics, marketing, business planning, public relations, and politics involved with the day-to-day operations of any agriculturally related business. Area of study and research will focus on efficient and sustainable production and processing models that are competitive in today's global markets. Students will gain an understanding of the economic value of agriculture in Snyder County, Pennsylvania, and the United States and the world.

716 Advanced Welding and Pipe Fitting (1 credit)

Advanced Metal Engineering combines advanced instruction in Introductory Electric ARC and gas welding with hands-on training in the field of today's world of advanced metalworking. This course includes instructions in welding processes, including MIG, TIG, HELIARC, and Plasma processes in metal shaping and construction. Pipe fitting will be the second part of this course and will include the use and joining of PVC, steel, and copper tubing used today in the Agricultural Industry.

Prerequisite: Introductory Electric ARC and Gas Welding

718 Electrical Wiring & Motors (1 credit) EVEN YEARS ONLY – offered 2024-25

Grades 10-12

The course is designed to introduce the student to Agricultural, industrial, and residential applications in a specialized area of electricity. This introductory course will provide skill levels to enable completers to perform homeowner electrical applications and repair jobs without professional assistance. The student will be able to draw, read and interpret electrical plans, wire electrical fixtures, calculate materials lists, and identify various tools and building materials. Additionally, students will be able to read electrical diagrams and repair and use electrical motors. Student evaluation includes tests, problem-solving quizzes, class participation, shop safety habits, and skill development exercises.

721-724 SAE (Supervised Agricultural Experience) I-IV (1 credit)

This course does not meet during the regular school day, but credits outside-of-class experiences incorporated into the agricultural science or engineering course the student is currently taking. An SAE or a Supervised Agricultural Experience is a student-managed project where FFA members own and operate an agricultural business, get a job or internship, plan and conduct scientific experiments or explore careers within the agricultural industry. The agricultural science and engineering instructors supervise these outside-of-class projects as students maintain accurate records within the online Agricultural Experience Tracker (AET) record-keeping system. Experiences are based on the knowledge and skills taught in the agricultural science and engineering courses and customized to the student's selected career objective.

730 Plant & Greenhouse Science (.5 credit) EVEN YEARS ONLY - offered 2024-25

This course will focus on the anatomy and physiology of plants, greenhouse management, plant reproduction, and integrated/biological pest control. Students in this course will be responsible for maintaining the greenhouse and using it to research and cultivate various plants. All students enrolled in this course are given the opportunity to participate in the National FFA Organization and are required to maintain a Supervised Agricultural Experience (SAE) throughout the school year. May count as a science credit.

College Credit Opportunity: Lackawanna College AGR110 – Biological Pest Management

731 Crop & Soil Science (.5 credit) ODD YEARS ONLY – offered 2025-26

This course will enable students to study the common agricultural crops grown in Snyder County, including hay, corn, and small grains. Topics included in this course are integrated pest management, soil science, sustainable agriculture, and nutrient management. Students will work through labs using research techniques with hands-on learning throughout the course. All students enrolled in this course are given the opportunity to participate in the National FFA Organization and are required to maintain a Supervised Agricultural Experience (SAE) throughout the school year. May count as a science credit.

College Credit Opportunity: Lackawanna College AGR235 – Soil Science

732 Forestry Science (.5 credit) EVEN YEARS ONLY - offered 2024-25

This course will focus on the science and management of trees as a natural resource. Topics of study may include tree identification, tree production, forest management, forestry equipment, and specialty products. Students may work outside to identify trees, measure trees, calculate the value of a timber stand, develop plans to manage existing stands of trees, and safely use basic forestry equipment to care for trees. All students enrolled in this course are given the opportunity to participate in the National FFA Organization and are required to maintain a Supervised Agricultural Experience (SAE) throughout the school year. May count as a science credit.

736 Animal Science (.5 credit) EVEN YEARS ONLY – offered 2024-25

This course will focus on the science behind the care and management of agricultural animal species. Students will study key livestock species, including beef, dairy, goats, sheep, swine, equine, and poultry, used in agriculture and in everyday life. Topics include, but are not limited to, basic anatomy, reproduction, nutrition, healthcare, and related careers. Students will also become familiar with animal-based industries in Snyder County and Pennsylvania. All students enrolled in this course are given the opportunity to participate in the National FFA Organization and are required to maintain a Supervised Agricultural Experience (SAE) throughout the school year. May count as a science credit.

Note: This course was formerly titled Livestock Science.

College Credit Opportunity: Lackawanna College AGR 130 – Sustainable Livestock Management

737 Veterinary Science (1 credit) EVEN YEARS ONLY – offered 2024-25

This course deals with the advanced study of animal science as it relates to veterinary medicine. Students will use knowledge and skills in veterinary terminology, biology, and zoology. Students will build upon previous knowledge to intensely study comparative anatomy and physiology of animal systems, nutrition, reproduction, and diseases, and clinical and surgical procedures in various species. Topics will relate to both livestock and companion animals and do not focus on one specific species. All students enrolled in this course are given the opportunity to participate in the National FFA Organization and are required to maintain a Supervised Agricultural Experience (SAE) throughout the school year. May count as a science credit.

Prerequisite: Livestock Science OR Small Animal Pet Care

743 Natural Resource Science (.5 credit) ODD YEARS ONLY – offered 2025-26

This course gives students an in-depth understanding of our natural resources. Students will study topics including but not limited to ecology and wildlife, soil science and conservation, forestry, water and watershed management, fossil fuels and alternative energies, conservation vs. preservation, natural resource policies and regulations, and career exploration. Each unit will be tailored to the natural resource concepts found in Pennsylvania. All students enrolled in this course are given the opportunity to participate in the National FFA Organization and are required to maintain a Supervised Agricultural Experience (SAE) throughout the school year. May count as a science credit.

744 Advanced Animal Science (1 credit) ODD YEARS ONLY – offered 2025-26

Students will further their knowledge and skills in a wide range of animal agriculture principles, including anatomy and physiology, health and management, and facilities and handling. The efficient production and effective management of selected animal enterprises are covered, including beef and dairy cattle, swine, sheep and goats, poultry, and equine. Practices in veterinary medicine and those associated with small animal care are included as well as career exploration. Students will study topics through hands-on lab exercises that may include dissections, injections, animal handling, common animal production practices, etc. All students enrolled in this course are given the opportunity to participate in the National FFA Organization and are required to maintain a Supervised Agricultural Experience (SAE) throughout the school year. May count as a science credit.

Prerequisite: Introduction to Agricultural Sciences & Animal Science (formerly Livestock Science)

Business, Computer & Information Technology

Business, Computer & Information Technology (BCIT) courses provide instruction that offers students the opportunity to enhance their abilities and gain skills to be successful in life. The goal of the BCIT Department is to prepare our students to be financially responsible citizens as they begin their careers and contribute to society as a whole. BCIT provides students with knowledge of communication and interpersonal skills, career awareness and pathways, finance, marketing techniques, the legal system and contracts, technology, and video production, which are all business topics that prepare students for the 21st Century. All courses in this field of study include learning objectives that are aligned to PA Core Standards—Reading for Science and Technical Subjects and PA Core Standards—Writing for Science and Technical Subjects.

260 Business, Computer & Information Technology 8 (.25 credit)

Grade 8

This 8th grade elective course will cover the beginning aspects of Business, Computer and Information Technology (BCIT) courses by providing students the opportunity to design and develop a business of their choice. Students will be encouraged to use their creative abilities and explore several computer software packages. Course activities will include the creation of web pages, videos, and reports. A competition will be held to determine the best business idea to give students a taste of what competitions are available in other business courses that are offered. The main goal of this course is to get students excited about BCIT.

758 Sport Management (.5 credit) - EVEN YEARS ONLY - offered 2024-25

Grades 11-12

This course emphasizes the management principles related to the business of sports. It includes personnel, programs, marketing, media, financial management, and an overview of career possibilities in this growing field. Students will gain an understanding of the historical evolution of professional sports management practice, current issues and future trends in the various sectors of the sports industry, and career opportunities available in sport management. Further, this course will enhance the student's written and verbal communication skills, critical thinking skills, and ability to discuss and formulate a position on ethical dilemmas in sports. Students enrolled in the Mid-West Sports Management course have the potential to earn college credits by successfully completing the program.

College Credit Opportunity: Southern New Hampshire University

759 Computer Applications (.5 Credit) – CURRENTLY NOT OFFERED

Computer Applications will focus on various 21st-century skills, emerging technologies, and the utilization of each for learning. Throughout the class, students will explore word processing, spreadsheet, database management, and communication tools as well as demonstrate how these applications can be applied in educational, personal, and professional settings. The course will enable students to expand upon their abilities to think critically, write, reflect, communicate, and collaborate in a virtual, interactive environment.

760 Introduction to Business (1 credit)

Introduction to Business lays a general business foundation needed for further study in the business field. This course prepares students for a better economic life. Some of the topics include economic systems, entrepreneurship, consumer rights and responsibilities, bank services, writing checks, investments, managing money, and insurance.

761 Accounting (1 credit)

Grades 10-12

Accounting is defined by the American Institute of Certified Public Accountants (AICPA) as "The art of recording, classifying, and summarizing in a significant manner and in terms of money, transactions, and events which are, in part at least, of financial character, and interpreting the results thereof." Accounting is the language of business, and in Accounting I, instruction will be given on the theories, concepts, and practical application of accounting in order to plan, record, analyze and interpret financial information. Accounting I focuses on accounting for a service business organized as a sole proprietorship and the analyzing of transactions, journalizing, posting to a general ledger, and preparing a worksheet and financial statements.

763 Supply Chain Management (.5 Credit) Grades 10-12 - CURRENTLY NOT OFFERED

Supply Chain will take students through the process of taking raw materials to the finished product in major businesses. This course is meant for students interested in the business field after graduation. Processes that will be discussed include, but are not limited to, purchasing, inventory control, material waste management, warehousing, and final delivery of products to consumers.

764 Business and Economics (.5 credit)

This course lays the groundwork for understanding economics as a discipline and as an introductory preparation for college. Economics provides functional knowledge for business and the engagement of the free market through supply and demand, equilibrium price, production and productivity (CPI and GDP and economy of scale), labor supply and demand, competition, and the US Economy, economic stability, and international trade. Students explore the effects of guiding economic theory. Current economic news about the economy will be interspersed regularly to understand and apply concepts.

765 Corporate and Business Law (.5 credit)

This course will examine the elements of Business Ethics, Contracts and Negotiations, including offer, acceptance, legality, consideration, sales contracts, written and verbal contracts as well as contract disputes. Employment Law including employment contracts, employee discrimination, employee injuries, salary negotiations, workforce ethics, and manager and employee relationships. Patents including protecting inventions, patent lawsuits, patent breaches, copyrighting laws, fair use act, and monopolies. Consumer Law including consumer rights, deceptive advertising, and warranties.

766 Office Specialist – (.5 credit)

An advanced course in personal computers using Microsoft Windows and Office Suite applications. Students will receive hands-on experience in MS Windows, Word, Excel, PowerPoint, and other programs. In this course, students will learn to manage and manipulate numerical data in a spreadsheet using MS Excel. Topics covered will include spreadsheet terminology, creating worksheets, formatting data, working with formulas and functions, printing, and working with charts and graphics. Advanced topics may include Table and Scenario Management, using Solver and importing data into Excel. Students will be able to take the Microsoft Office Specialist Certification Tests after completing this course. Certification in Microsoft Word and Microsoft Excel is available through this course. The cost of each assessment is \$112.50 and is the responsibility of the student to pay if they wish to attain certification in one or both of those Office products. If the student passes the assessment(s), they will be reimbursed.

767 Computer Programming I (.5 credit) ODD YEARS ONLY – CURRENTLY NOT OFFERED**Grades 10-12**

Computer Programming I is a course designed to start developing programming skills. Topics will include methods, events, procedures, problem-solving, and graphics. Variables and logical thinking skills developed in Algebra will be used to create programs.

768 Marketing & Sales I (.5 credit)**Grades 10-12**

Why do the majority of Americans purchase the most up-to-date products and services? The answer is marketing; a process by which companies determine what products or services may be of interest to customers and the strategy to use in sales, communications, and business development. Corporations today spend millions of dollars to entice the American public to purchase products and services. Want a better understanding as to why, be a part of Marketing and Sales.

769 Marketing & Sales II (1 credit)

This course continues on with the major principles of marketing and sales and provides authentic application of learned concepts through work with *The Stampede*, the MWHS school store. Even though this course meets for the equivalent of ½ of a school year, students will log additional hours to merit a full credit of study. **Students will contract at the start of the year to work a designated number of hours dedicated to the operation of *The Stampede*.**

776 Personal Finance & Careers (.5 credit)**Grades 10-12**

Finance and Career Development exposes students to five themes: decision-making and goal-setting, career decisions and planning, money management (budgeting, banking, credit, savings, and investing), consumer skills, and risk protection. This class has two primary points of emphasis. One is to learn and practically apply the necessary life skills associated with developing a career path and acquiring employment through the job acquisition process. The second is to explore key issues regarding personal finance. Students will receive instruction in four areas of money management in addition to an opportunity to apply skills associated with being a responsible consumer-- primarily the purchase of goods and services and the role they play in the economy. Finally, the class will discuss topics related to risk protection and develop a financial security plan to achieve long-term financial success.

778 Youth Leadership (1 Credit)

Grades 10-12

Open to all students in grades 10-12. This course is designed to promote civic and personal responsibility, as well as assertive leadership, through activities that give the students the opportunity to apply and refine those skills. Practical experiences are offered in public speaking, communication skills, group dynamics, organizational skills, time management, social/community involvement, leadership styles, decision-making, and committee management. Activities include professional meetings, service to social/civic groups, and school projects that require responsible planning, organization, and management. Students will develop leadership skills that will last a lifetime and prepare them for college and careers. DECA learning activities and programs will be an integral part of the course curriculum and experience for students.

809 Multi-Media I (.5 credit)

This course is designed to give an overview and practical application of video production. Students will learn the basic elements of video production and recording, including the proper use of camera and editing equipment. A video production project will be undertaken, and evaluation will be based primarily on performance. Out-of-class video assignments may be assigned in relation to the completion of class projects.

810 Multi-Media II (.5 credit) – CURRENTLY NOT OFFERED

This course is the continuation of Multimedia I and will expand on the basics learned in that course. Multimedia II students will be the leaders of project works and will advance with their knowledge of Multimedia I skills. Also, this course is for students looking for careers in Multimedia and the opportunity to further their understanding of the different avenues available to them.

Prerequisite: Multi-Media I

English

Command of the English language is essential for all students. Although many courses are required, elective and/or advanced courses will benefit students in any of the career pathways. Possible careers for students who excel in English include creative writing, editing, film, journalism, and telecommunications. All courses in this field of study include learning objectives that are aligned to PA Core Standards—English Language Arts.

201 English and Contemporary Literature 8 (2 credits)

Grade 8

The two 8th grade language arts courses are integrated to provide a strong foundation for high school-level study in literature and composition with a focus on the PA Common Core standards in reading, writing, listening and speaking.

301 English and Contemporary Literature 9 (1 credit & .5 credit)

This course focuses on achieving a mastery of the PA Core Standards—English Language Arts. As students progress through the course, they will develop oral and written communication skills as they are required to apply key principles of grammar, usage, and mechanics to their work. In addition, students will demonstrate critical thinking skills in both oral and written analysis of various literary selections, including informational texts. This course will also integrate the exploration of contemporary literature and is designed to reinforce reading, writing, and thinking skills. Students will read a variety of genres, write in response to literature, and learn to use specific strategies to support their understanding of text.

306 Honors English and Contemporary Literature 9 (1 credit & .5 credit)

This course focuses on achieving a mastery of the PA Core Standards—English Language Arts, but at an accelerated pace and with a deeper understanding as compared to English/Contemporary Literature 9. As students progress through the course, they will develop oral and written communication skills as they are required to apply key principles of grammar, usage, and mechanics to their work. In addition, students will demonstrate critical thinking skills in both oral and written analysis of various literary selections, including informational texts. This course will also integrate the exploration of contemporary literature and is designed to reinforce reading, writing, and thinking skills. Students will read a variety of genres, write in response to literature, and learn to use specific strategies to support their understanding of text, which will prepare them for subsequent accelerated ELA courses and postsecondary study.

Prerequisite: Students must have an 88% overall GPA and 88% in the prior year's ELA course.

401 English and Contemporary Literature 10 (1 credit & .5 credit)

This course focuses on achieving mastery of the PA Core Standards—English Language Arts. As students advance, they will be required to demonstrate a more thorough application of both oral and written communication skills in assignments that demand a progressively higher quality of grammar, usage, and mechanics. In addition, students will be asked to display a high degree of creative thinking and literary analysis in a variety of oral and written activities, including informational texts. This course will also continue to focus on the exploration of contemporary literature and is designed to reinforce reading, writing, and thinking skills. Students will read a variety of genres, write in response to literature, and learn to use specific strategies to support their understanding of text.

406 Honors English and Contemporary Literature 10 (1 credit & .5 credit)

In addition to focusing on achieving mastery of the PA Core Standards in ELA, this course will move at an accelerated pace, focusing more intensely and more frequently on literary analysis and composition. As students advance, they will be required to demonstrate a more thorough application of both oral and written communication skills in assignments that demand a progressively higher quality of grammar, usage, and mechanics. Students will be asked to display literary analysis and creative thinking in various modes, including media. This course will also continue to focus on the exploration of contemporary literature and is designed to reinforce reading, writing, and thinking skills. Students will read a variety of genres, write in response to fiction and nonfiction literature, and learn to use specific strategies to support their understanding of text. Students will participate in various extension activities, collaborative efforts, and more rigorous assessment opportunities.

Prerequisite: Students must have an 88% overall GPA and 88% in the prior year's ELA course.

501 English 11 (1 credit)

This course focuses on achieving mastery of the PA Core Standards—English Language Arts. Students will read extensively from American literature, including informational texts. This reading will serve as the springboard to the sound analytical thinking and purposeful writing that will be emphasized throughout the course.

502 Honors English 11 (1 credit)

This course focuses on achieving mastery of the PA Core Standards—English Language Arts, but at an accelerated pace and with a deeper understanding as compared to English 11. Students will read extensively from American, British and World Literature, including informative texts. The close reading of these texts and the purposeful writing emphasized throughout the course will hone students' literacy skills in preparation for AP Literature and Composition and postsecondary study. Students planning to enroll in the ACE program as a senior are encouraged to take Honors English 11 as a junior.

Prerequisite: Students must have an 88% overall GPA and 88% in the prior year's ELA course.

600 Advanced Placement (AP) Literature and Composition (1 credit)

The Advanced Placement Literature and Composition course offers a year's work in a college-level English class. The focus of the course will be to study how language conveys meaning through the use of various elements, such as diction, figurative language, imagery, tone, and point-of-view. By examining literature closely, analyzing and interpreting it in depth, and then responding to it in clear, focused, specific writing, the student will be engaged in critical reading, thinking, and writing. **The course will prepare students to take the AP exam. Students enrolled in this course will be required to take the AP exam.** If a course final is given, it will be comparable to the AP exam. Students may take this course instead of English 12. **Summer reading and completion of assignments prior to the start of the school year is required.**

Prerequisite: Students must have an 88% overall GPA and 88% in the prior year's ELA course.

College Credit Opportunity: Lackawanna College

601 English 12 (1 credit)

This course focuses on achieving mastery of the PA Core Standards—English Language Arts. Students will read extensively from British and world literature, including informational texts. This reading will serve as the springboard to sound analytic thinking and purposeful writing that will be emphasized throughout the course. English 12 also provides opportunities for the presentation of graduation projects, as well as writing experiences that prepare students for college and the workplace.

802 Creative Writing I (.5 credit)**Grades 10-12**

This course is for 10-12th grade students and will delve into creative thinking in regard to poetry, plays, and short stories. In contrast to traditional academic writing, students will write in ways that display imagination or invention. Once a prompt or assignment is given, students are encouraged to take the reins and express themselves in a creative and unique way. Students are required to receive a B or higher in their previous English class or otherwise approved by the teacher.

803 Creative Writing II (.5 credit)**Grades 11-12**

This course is a further progression of Creative Writing. Students will continue to develop their own unique creative style expressed through assignments that examine the elements of a novel, writing short stories and writing a novelette. If possible, students will enter a short story of their choosing into a writing competition.

Prerequisite: Creative Writing I

805 Contemporary Literature 11/12 (.5 credit)

This course is provided for students in grades 11 & 12 as an opportunity to continue the habits of reading, writing about, and discussing literary works of their choice.

814 Yearbook (1 credit)**Grades 10-12**

Students in this course will gather content, design, publish, and sell the high school yearbook. It is highly recommended that students in the yearbook class are also enrolled in computer art or have taken it previously. Students will serve as the primary source of obtaining content for the yearbook. Students will have an opportunity to use the Yearbook Camera (Canon DSLR) and their cell phones to gather photos. This class is offered primarily as a full credit, meet everyday class, but there is also a half credit, every other-day class to help with schedule conflicts.

Students must have obtained at least a B in their previous year English class to take Yearbook or have an English teacher recommendation. For 10th-12th graders, but 9th graders may take with teacher recommendation.

815 Yearbook II (1 credit)**Grades 11-12**

Students in this course will gather content, design, publish, and sell the high school yearbook. It is highly recommended that students in the yearbook class are also enrolled in computer art or have taken it previously. Students will serve as the primary source of obtaining content for the yearbook. Students will have an opportunity to use the Yearbook Camera (Canon DSLR) and their cell phones to gather photos. This class is offered primarily as a full credit, meet everyday class, but there is also a half credit, every other-day class to help with schedule conflicts.

Students must have obtained at least a B in their previous year English class to take Yearbook or have an English teacher recommendation. For 11th-12th graders, but 10th graders may take with teacher recommendation if completed Yearbook I.

Family & Consumer Science

The knowledge and skills gained through courses in the Family and Consumer Science curriculum enable students to gain independence as young adults. All courses in this field of study include learning objectives that are aligned to PA Core Standards—Reading for Science and Technical Subjects and PA Core Standards—Writing for Science and Technical Subjects.

216 FCS 8 (.25 credit)**Grade 8**

This 8th grade elective course will provide students with the opportunity to learn essential life skills that they can use for a lifetime. Family and Consumer Science will allow students to develop skills in food and nutrition, childcare and safety, clothing care, and personal responsibility. Students will learn basic kitchen skills, safe food handling, healthy meal planning, and food preparation. Childcare and safety will focus on caring for children while babysitting. Clothing care will include basic hand sewing and repair techniques.

819 Foods I/Fun with Food (.5 credit) ODD YEARS ONLY - offered 2025-26

Nutrition and cooking principles are learned and practiced through food science experiments and cooking labs. Basic knowledge will be provided in kitchen measuring, safety, sanitation, food preparation and techniques, and meal management. Units of study will include fruits, eggs, dairy products, meats, and yeast breads.

822 Child Development Infancy (.5 credit)

Grades 9-12

CD1: This course will focus on healthy relationships, pregnancy and delivery, and infancy. Teen pregnancy and parenting will be simulated through the implementation of the Empathy Belly and Real Care Baby. Students will be introduced to a career in Early Childhood Education in order to understand children's growth and development. This is an excellent elective for every teenager, including teen parents. It will also help those pursuing a career as a medical professional, educator, social worker, or counselor.

823 Cooking On My Own (.5 credit) EVEN YEARS ONLY - offered 2024 – 2025

This course is designed to teach students about meal planning, food preparation, and nutritious living while living away from home. Skills for healthy food choices and cooking on a budget are emphasized. Practical labs and helpful information will provide students with experiences in this important life skill. Units of study will include safety and sanitation, microwaving, vegetables, poultry, quick breads, and pastries.

824 Child Development Toddler (.5 credit)

Grades 9-12

CD2: This course will emphasize toddler through preschool ages. Students will develop a positive understanding of children's growth and development and a solid foundation in early childhood and parenting skills. The course includes practical application of concepts in the on-site Head Start preschool classroom. This course is excellent for students who plan to major in early childhood education, elementary education, social work, speech pathology, psychology or the medical profession. It is also for students that enjoy children and want to learn effective parenting skills. Students begin work on Child Development Associate (CDA) program.

Prerequisite: Child Development 1 or teacher permission

825 Culinary Career – 0.5 credits

Grades 10-12

Culinary Career will equip students with the foundational knowledge and skills to pursue a career in the culinary field. Students will study safety and sanitation in order to obtain the ServSafe Food Handler Certification. Students will prepare a variety of foods for school events, community, and also small business projects. ServSafe food handling certification is available through this course. The cost of the assessment, \$42, is the responsibility of the student. If the student passes the assessment, they will be reimbursed.

Prerequisite: Cooking on My Own or Fun with Foods

826 Child Development Young Child (.5 credit)

Grades 10-12

CD3: This course will focus on working with young children and preparing students for teaching by providing learning experiences in the on-site Head Start laboratory classroom. Students will practice observation techniques and prepare and teach learning activities. This course is an excellent choice for anyone interested in a career in any field that involves working directly with young children. Students will continue working on the Child Development Associate (CDA) program. **Prerequisite: Child Development 1 and 2 or teacher permission**

Mathematics

Mathematics is essential for all students regardless of the career path a student chooses. Beyond the required mathematics curriculum, elective and/or advanced courses will benefit students. Advanced math courses are particularly important for careers in the areas of engineering, medicine, finance, and mathematics education, to name a few. All courses in this field of study include learning objectives that are aligned to PA Core Standards—Mathematics.

222 Algebra I (2 credits)

This course focuses on achieving a mastery of the PA Core Standards for Mathematics and prepares students for the Pennsylvania Algebra I Keystone Exam. Algebra I will bridge the gap between the near-concrete idea of arithmetic and the more abstract ideas of higher mathematics. Students will solve equations and inequalities; add, subtract,

multiply and divide real numbers, polynomials, and algebraic rational expressions; graph linear equations and inequalities; solve systems of linear equations and inequalities; and apply these methods to problem-solving. Calculators and computers will be used throughout the course. It is highly recommended that students purchase their own calculator for homework use, but they should wait until the teacher identifies what type of calculator is best.

223 Algebra IA (2 credits)

224 Algebra IB (1 credit)

The complete Algebra I curriculum (see description above) is divided into two parts and spread across two years to enable students to grasp all algebra-eligible content at a more even pace. Students taking this variation of Algebra I will take the Algebra Keystone Exam at the conclusion of their second year in Algebra I after completing the Algebra IB segment. **Student performance data from a variety of sources will be used to inform placement decisions into these courses.**

322 Keystone Algebra (1 credit)

This course focuses on achieving mastery of the PA Core Standards of Mathematics and is designed to bridge the learning gaps of students who need this transitional course as a scaffold in preparation for success on the Algebra I Keystone exam. This class is intended for students who passed Algebra I, but were not proficient on the Algebra I Keystone exam. The purpose of Keystone Algebra is to solidify the foundational skills and concepts that were established in Algebra I to better enable students to build upon this foundation in future math courses. Topics covered in this course will include linear, quadratic, radical, and rational functions, inequalities, and data analysis. **Student performance data from a variety of sources will be used to inform placement decisions into this course.**

Prerequisite: Algebra I

324 Accelerated Algebra I/II (2 credits)

Students taking this accelerated variation of algebra will complete both algebra I and algebra II in one school year (see complete description of course content for 222 Algebra I and 424 Algebra II). **Student performance data from a variety of sources will be used to inform placement decisions into this course.**

424 Algebra II (1 credit)

This course focuses on achieving a mastery of the PA Core Standards for Mathematics. This course allows the student to explore additional areas of mathematics and increase algebraic and analytical skills. Subject matter to be covered includes real numbers, equations and inequalities, graphing, systems of equations and inequalities, relations and functions, polynomials, rational expressions and applications, radicals, quadratic functions, complex numbers/quadratic numbers, conic sections, sequences and series, and the binomial theorem. **Prerequisite:** Algebra I

427 Intermediate Algebra 2 (1 credit) – CURRENTLY NOT OFFERED

This course focuses on achieving mastery of the PA Core Standards of Mathematics and acts as a bridge between Algebra I and Algebra II for students who may not be ready for the pace and rigor of a traditional Algebra II course. The purpose of Intermediate Algebra is to solidify the foundational skills and concepts that were established in Algebra I to better enable students to build upon this foundation in Algebra II. Topics covered in this course will include linear, quadratic, polynomial, and radical functions.

Prerequisite: Algebra I (or completion of Algebra IA and IB)

522 Consumer Mathematics (1 credit)

This course is designed to increase student proficiency with basic math skills and their application to personal and business situations. Units will include money management, interest, taxes, travel, credit card use, insurance, and living on one's own. Students will demonstrate knowledge of math concepts and critical thinking skills that help them to become aware consumers, informed citizens, and valued employees.

523 Informal Geometry (1 credit)

The study of geometry has two points of emphasis: to learn and apply numerous geometric properties and to provide students with opportunities to develop organizational abilities using both inductive and deductive reasoning skills. The function of this course is not only to prepare students for work in a vocational setting but to develop the skills helpful in solving real-world applications. When possible, the topics will be presented with a hands-on approach. By using the compass and straight edge, the students will discover properties involving points, lines, planes, angles, polygons, and circles. Other topics include perimeter, area, volume, congruency, and similarity. This course uses an informal approach, which is not dependent on formal geometric proof.

Prerequisite: Algebra IA and IB (or Algebra 1)

524 Plane Geometry (1 credit)

The study of geometry has two points of emphasis: to learn and apply numerous geometric properties and to provide students with opportunities to develop organizational abilities using both inductive and deductive reasoning skills. The course begins with a single point and expands to lines, angles, polygons, circles, and solids. Congruency, similarity, and inequality are investigated. Other topics include coordinate geometry, perimeter, area and volume of geometric shapes. Time permitting, basic concepts of trigonometry will be introduced to prepare students for the study of higher-level math courses. This course can be taken concurrently with Algebra II.

Prerequisite: Algebra I

525 Accelerated Geometry (1 credit)

This geometry course is for students who took accelerated algebra I/II in 8th grade or a student who is advanced in mathematics and recommended by a teacher. The study of geometry has two points of emphasis: to learn and apply numerous geometric properties and to provide students with opportunities to develop organizational abilities using both inductive and deductive reasoning skills. The course begins with a single point and expands to lines, angles, polygons, circles, and solids. Congruency, similarity, and inequality are investigated. Other topics include coordinate geometry, perimeter, area and volume of geometric shapes. Time permitting, basic concepts of trigonometry will be introduced to prepare students for the study of higher-level math courses. This course can be taken concurrently with Trigonometry.

Prerequisite: Algebra I, Algebra II & teacher recommendation

526 Trigonometry (1 credit)

This course is intended for students who would like to continue on to pre-calculus and calculus and will provide students with a balanced coverage of theory, skills and applications needed to build a strong foundation for more advanced mathematics courses. Through applications, students have the opportunity to see how algebraic and trigonometric concepts can be used to analyze and solve problems that occur in everyday life and the sciences. The Laws of Sines and Cosines are applied to the numerical solutions of triangles. Graphs of trigonometric functions are discussed, including phase shift, period and amplitude. Students will be able to perform algebraic skills to prove identities and solve trigonometric equations. They will be able to perform combined operations on a calculator to solve problems involving science, engineering, surveying and navigation as well as vector algebra. At the same time, theories and skills are developed and enhanced by using computers and graphing calculators.

Prerequisite: Algebra II & Geometry or this course can be taken concurrently with geometry.

527 Statistics (1 credit)

This course is especially recommended for students pursuing four-year college degrees. With the increased use of statistics in all fields, most college majors require at least one statistics course. The course will show students how to use statistics to make informed decisions and to picture and describe the world around them. Topics will include data classification, frequency distributions, and probability, with an emphasis on graphical interpretations. Real life examples from the fields of business, health sciences, sports, etc. will be used throughout the course.

College Credit Opportunity: Lackawanna College

627 Pre-Calculus (1 credit)

This course focuses on preparation for advanced mathematics instruction in high school or college-level calculus. This course consists of in-depth coverage of trigonometry, logarithms, analytic geometry, and upper-level algebraic concepts. This course can be taken after trigonometry or concurrent with trigonometry.

Prerequisite: Algebra II & Geometry

629 Calculus (1 credit)

This course includes both differential and integral calculus with algebraic functions, and some exponential, logarithmic, and trigonometry functions. Computer-related activities enhance concept development where applicable. Upon successful completion of this course, students should be adequately prepared to take a college calculus course. This course will be weighted as an honors level course.

Prerequisite: Pre-calculus

630 AP Calculus (1 credit) - CURRENTLY NOT OFFERED

AP Calculus (AB) is primarily concerned with developing understanding of the concepts of calculus and providing experiences with its methods and applications. Functions, graphs and limits; derivatives; and integrals will be focus areas of this course. **Students enrolled in this course will be required to take the AP exam.** If a course final exam is given, it will be comparable to the AP Exam. **Summer reading and assignments prior to the start of the school year**

are required.
Prerequisite: Calculus

Music

The music program is designed to be used by both beginning and advanced-level students, by students who will seek careers in music, those who simply enjoy listening to and performing music, and those who will become intelligent consumers of the fine arts. Music courses benefit students by enhancing a core academic high school program. All courses in this field of study include learning objectives that are aligned to PA Core Standards—Reading for Science and Technical Subjects and PA Core Standards—Writing for Science and Technical Subjects.

251 Music in Our Lives 8 (.25 credit)

Grade 8

The 8th grade exploratory music course is intended to foster an appreciation of music through tangible learning. To gain a better understanding of what music is "good for", students will participate as a performer, composer, audience member, designer, and researcher. Specific emphasis will be placed on music technology and electronic music composition. Through this course students will develop confidence and self-awareness as they actively discover the use of music for enhancing everyday life.

253 Concert Choir 8 (.5 credit)

Grade 8

This ensemble is comprised of male and female students, and no audition is required for participation. Students who enroll in this course will have the opportunity to develop their singing voice and knowledge of music repertoire, terminology, and sight-reading through a sequential program. Small group vocal lessons are scheduled to provide individualized attention, aiding in the development of vocal and musical skills. This ensemble performs in two major concerts each year. The course content is based on the Pennsylvania Academic Standards for the Arts and Humanities.

255 Concert Band 8 (.5 credit)

Grade 8

Concert Band for grade 8 is a group of musicians who will perform a variety of band literature. Emphasis is placed on the development and refinement of musical skills. Members are required to attend lessons, extra rehearsals, and concerts. Outside personal practice and learning of parts is required. Prerequisite: Must have played an instrument for at least one year.

851 Electronic Music Production (.5 credit)

Grades 10-12 *Must have teacher recommendation

In the Electronic Music Production course, students at Mid-West will learn the skills and techniques necessary to create electronic music in a variety of different styles. Additionally, they will learn the history of electronic music through listening examples, highlighting important people, technology and techniques associated with the style. The course will conclude with the students creating a 2 to 5 track album of original music.

853 Concert Choir (.5 credit)

This ensemble is comprised of male and female students in grades 9-12 and no audition is required for participation. Students who enroll in this course will have the opportunity to develop their singing voice and knowledge of music repertoire, terminology, and sight-reading through a sequential program. Small group vocal lessons are scheduled to provide individualized attention, aiding in the development of vocal and musical skills. This ensemble performs in two major concerts each year. Students may also have the opportunity to audition for select ensembles such as Vocal Ensemble, A Cappella Ensemble, National Anthem Singers, and PMEA Festivals such as District, Region, and All-State Chorus. The course content is based upon the Pennsylvania Academic Standards for the Arts and Humanities.
Concert Choir (854) for 1 credit may be available for students who are not in band.

854 Vocal Ensemble (1 credit)

Grades 10-12

Advanced course for students who wish to be challenged vocally. Students must successfully complete course 853 in addition to receiving teacher recommendation and also simultaneously enroll in course 853 (Concert Choir).

855 Concert Band (.5 credit)

Concert Band for grades 9-12 is a group of musicians who will perform a variety of band literature (Difficulty of Grade 2 to 3 1/2). Emphasis is placed on the development and refinement of more advanced musical skills and the techniques required for advancement to Wind Ensemble. Members are required to attend lessons, extra rehearsals, and concerts. Outside personal practice and learning of parts is required. Prerequisite: Must have played an instrument for a least one year. **Concert Band (856) for 1 credit may be available for students who are not in concert choir.**

856 Concert Band (1 credit)

This is an extension course offered for the Concert Band members in grades 9-12. In addition to the requirements described in the Concert Band description above these students will have the opportunity to become section leader. Individual emphasis will be placed on the development and refinement of more advanced musical skills and the techniques required for advancement to Wind Ensemble.

857 Music Theory I (.5 credit)

Music Theory I introduces the rudiments of music, sight singing, interval recognition, scale studies, key signatures, triads, transposition, orchestration, melody writing, keyboard skills, and harmonization of simple melodies. The skills acquired as a result of this course will form a solid foundation for the student interested in a music career. It will also be beneficial to the applied music student who wishes to expand his understanding of music structure. Much of the classroom time will be spent with analysis and correction of student efforts in an attempt to improve writing skills. Listening to and performing examples will be of great importance to the development of the students' musical skills. Previous musical experience is recommended.

858 Music Theory II (.5 credit)

Music Theory II is an extension of Music Theory I with continued focus on ear training skills such as intervals, sight-reading, and dictation. Also included in this course of study will be the introduction of minor scales and modes; major, minor, diminished, and augmented chord structures and their inversions; seventh chords; and non-chord tones and cadences. Basic analysis and counterpoint skills relating to the above areas of study will also be included, as well as music history and appreciation. Listening to and performing examples will be of great importance to the development of the students' musical skills.

Prerequisite: Music Theory I

860 Jazz History & Improvisation (.5 credit)

This course for students in grades 9-12 focuses on the study of Jazz music. In this course, students will develop repertoire of Jazz Tunes, Blues, Latin etc. Through ear training, transcription, Historical study, Jazz theory, development of executive skills (technical facility), and self-analysis, Students will develop the tools needed to become creative Jazz artists. Performance opportunities are available for all students.

Prerequisite: Students must be able to read music and adequately play one of the following jazz instruments: piano, bass, guitar, saxophone, trumpet, trombone, and percussion (possibly clarinet).

861 Wind Ensemble (.5 credit)

Wind Ensemble is a select group of musicians in grades 9-12 who perform a variety of band literature (Difficulty of Grade 3 to 5). Emphasis is placed on the acquisition and refinement of more advanced instrumental techniques. Members are required to attend lessons; complete play offs, attend extra rehearsals, and perform in concerts/graduation. Outside personal practice and learning of parts is required. Prerequisite: Must have played in the Concert Band or have instructor approval. Students in this ensemble have the opportunity to audition for Susquehanna Valley Band, and/or PMEA District Band/Orchestra.

862 Wind Ensemble (1 credit)

This is an extension course offered for the Wind Ensemble members in grades 9-12. In addition to the requirements described in the Wind Ensemble description above these students will become the section leaders for the ensemble. Emphasis is placed on learning conducting skills, score reading skills, rhythm reading, and leadership skills. Students may have the opportunity to lead sectionals or portions of the Wind Ensemble rehearsals.

864 Modern Band 1 (.5 credit)

Modern Band 1 is open to students in grades 9-12 and introduces the skills necessary to play electric guitar, acoustic guitar, electric bass, keyboard, drums, vocals, and music technology. This course emphasizes the music styles of the last 50 years (rock, pop, country, jazz, reggae, hip-hop, etc.). Many of these styles will be discussed, demonstrated, and performed by the students. This course fosters peer-to-peer development in the band setting while encouraging

students to perform cohesively as a single unit. Modern Band 1 is open to all students regardless of previous music experience.

865 Modern Band 2 (.5 credit)

Modern Band 2 is open to students in grades 9-12 who have some experience playing guitar, bass, drums, keyboards, and/or vocals. This course emphasizes the music styles of the last 50 years (rock, pop, country, jazz, reggae, hip-hop, etc.). Many of these styles will be discussed, demonstrated, and performed by the students. This course fosters peer to peer development in the band setting while encouraging students to perform cohesively as a single unit. Students in *Modern Band 2* will also be introduced to the art of songwriting and composition.

Prerequisite: Modern Band 1 or instructor approval

Physical Education & Health

Physical, emotional, and social health education is essential for all learners as it provides information and decision-making skills for healthy contributions to family, workplace, and society. These courses help students to develop a solid understanding of wellness and how to make wellness a part of lifelong learning. All courses in this field of study include learning objectives that are aligned to PA Core Standards—Reading for Science and Technical Subjects and PA Core Standards—Writing for Science and Technical Subjects.

241 Physical Education 8 (.5 credit)

441 Physical Education 9-12 (.5 credit)

The goal of Physical Education is to have all students leave high school with enhanced knowledge of the benefits of physical activity and concepts, principles, and strategies of movement. The attainment of this knowledge will favorably impact student lives by enabling them to achieve and maintain a physically active and healthful life. This course contains content based on the Pennsylvania Academic Standards for Health, Safety and Physical Education.

444 Physical Education – Weigh Training (1 credit)

Grades 10-12

The purpose of this course is to develop the physical skills necessary to be competent in many forms of movement as it relates to weight training. The integration of fitness concepts throughout the content is critical to the success of this course. Topics will include weight room safety, proper weight training techniques, and strength and agility development.

445 Health 10 (.5 credit)

This course is designed for 10th grade students to expand their previously learned knowledge of health skills and concepts into a greater understanding of healthful living and safety/injury prevention. First Aid and CPR are key components of this course. **This course requires administrative approval and is intended to accommodate course selection conflicts with advanced academic or career preparation implications.**

* Students enrolled in the Mid-West Cyber Academy are required to submit a plan for physical education that outlines at least 64 hours of physical activity for the academic year, with 16-hour benchmark documentation per marking period.

Science

Science courses benefit students of all career focus areas. Science background and knowledge is imperative to everyday life. Over the course of the next two years the sequence of the MWHs science curriculum will be shifted in a way to enable each course to build upon the learnings of the previous course. All courses in this field of study include learning objectives that are aligned to PA Core Standards—Reading for Science and Technical Subjects and PA Core Standards—Writing for Science and Technical Subjects.

231 Science 8 (1 credit)

Grade 8

8th grade science builds upon and extends previous learning from the elementary and middle school studies of the Earth, life, and physical sciences in preparation both for the 8th grade Science PSSA and for further study in the high school science courses. The 6th-8th grade curriculum addresses both the Pennsylvania Academic Standards for Science and Technology and Engineering Education and PA Core Standards in reading and writing as applicable to science, employing a spiraled-approach that allows for the study of a variety of diverse topics and continuous review and extension of previously-learned material. While a variety of approaches are used in the course of these studies, discovering scientific principles through experimentation in the laboratory is fundamental to this class.

331 General Science 9 (1 credit)

From a conceptual approach, this 9th grade science course will address major physical science topics that serve as building blocks to later study chemistry and biology. It will reinforce the nature of scientific inquiry and the reasoning required for measurement and data collection.

431 Chemistry (1.5 credits)

This course focuses on achieving mastery of applicable state standards. As students progress through this course, they will develop knowledge regarding matter and energy, atomic theories and bonding theories, and supporting mathematical formulas. Students will also demonstrate critical thinking skills in oral, written, and laboratory analyses of various concepts. In addition, students will participate in labs using the scientific method.

College Credit Opportunity: Lackawanna College

432 Chemistry in the Community (1.0 credit)

This course will provide students with the opportunity to explore chemistry concepts and their applications as they relate directly to societal issues. Topics covered include reactions in industry, gases, petroleum, water, and nuclear chemistry. This course is not recommended for students who are planning to attend college for a science major.

433 Honors Chemistry (1.5 credits)

This is an accelerated course with greater, in-depth coverage of those topics required for the Advanced Placement Chemistry course. As students progress through this course they will develop knowledge regarding matter, bonding theories, kinetics, acids and bases and thermodynamics. Students will also demonstrate critical thinking skills in oral, written and laboratory analyses of various concepts. In addition, students will participate in labs using the scientific method. Prerequisites – Students must have completed or are taking algebra 2 concurrently.

College Credit Opportunity: Lackawanna College

531 Biology (1.5 credits)

This course is a systematic, in-depth study of major biological principles, including biochemistry, cellular structure and organization, metabolism and cellular energetics, heredity and genetics, evolution, and ecology. Group lectures, class activities, and projects will be utilized to explore these topics in depth throughout the course. In addition, lab activities and investigations will be utilized to reinforce concepts, develop critical thinking skills, and develop scientific problem-solving and analytical skills. This course provides valuable practical knowledge and experience relating to everyday life and will help students become more informed consumers of scientific news and information. This course follows the PA standards to PA Standards to prepare students for the required Biology Keystone Exam.

533 Honors Biology (1.5 credits)

This course is designed for students with exceptional abilities and high achievement levels, who are planning a career in science as well as a foundational course for students who plan to take AP Biology. This course is a systematic, in depth study of major biological principles including biochemistry, cellular structure and organization, metabolism and cellular energetics, heredity and genetics, evolution, and ecology. Topics will be explored with greater depth than Bio 531 as the emphasis is an increased rigor of a limited number of core ideas rather than on memorizing a breadth of factual content. This course will also emphasize the use and development of scientific practices such as designing scientific experiments, representing and describing data, statistical data analysis, and argumentation. Course methods include group lecture, small group work, class activities, projects, and guided, inquiry based, and independent lab investigations. The course topics are directly correlated to the Pennsylvania State Standards and as such will prepare students for the required Biology Keystone Exam. There are significantly higher academic expectations of students in honors level courses. Students are expected to be more independent and highly motivated to study at home to internalize concepts and gain problem-solving skills. Students enrolled in this course will be required to complete daily homework assignments and an ongoing independent research project. In order to accelerate students who are serious about studying science, biology will be offered to 9th grade students who have scored advanced on the 8th grade science PSSA, or proficient on the 8th grade science PSSA along with attainment of a 92% or above each marking period in both 8th grade science and algebra I. Those students eligible and electing to take Biology in 9th grade will be required to successfully complete an online Ecology course prior to their enrollment.

631 Physics (1 credit)

Physics is the study of matter and energy. Topics covered will include but not be limited to mechanics, dynamics, energy, waves, electricity and magnetism. The emphasis in this course is on the conceptual development of physics principles with corresponding mathematics. These principles are studied using an algebraic method of analysis, along with laboratory experiments and demonstrations.

Prerequisite: Geometry / Accelerated Geometry

634 Organic Chemistry (.5 credit)

Organic chemistry is that branch of chemistry that deals with the structure, properties, and reactions of compounds that contain carbon. It is a highly creative science. Chemists in general and organic chemists in particular can create new molecules never before proposed which, if carefully designed, may have important properties for the betterment of the human experience. This class will focus on carbon nomenclature and the basic organic reactions needed for a solid base for future organic chemistry experiences. Students continuing their education in biological, chemical and medical backgrounds would benefit from this class.

635 Advanced Placement (AP) Biology (1.5 credits)

This course is designed to enable students to complete college level work in high school and experience the intricacies of combining fast-paced work with innovative concepts in the field of biology. Participating students will develop new ways to think and inquire within a rapidly changing study of molecular and cellular biology. Ten laboratories must be completed in order to take the exam. **Students enrolled are required to take the AP exam.** If a course final exam is given, it will be comparable to the AP exam. **Summer reading and assignments are required prior to the start of the school year.**

Prerequisites: Students should have completed chemistry or may be taking chemistry simultaneously. Statistics is also highly recommended.

636 Advanced Placement (AP) Chemistry (1.5 credits)

The AP Chemistry course is designed to be the equivalent of a general chemistry course typically taken during the First year of college. Topics covered are atomic structure, bonding and its properties, chemical reactions, kinetics, thermodynamics, equilibrium and acids and bases. There is a large laboratory component to the course. Students enrolled are required to take the AP exam in May. Summer reading and assignments are required prior to the start of the school year.

Prerequisite: Honors Chemistry

College Credit Opportunity: Lackawanna College

637 Advanced Placement (AP) Environmental Science (1 credit) – Only offered when there is sufficient interest.

This class meets for a double period, three days per cycle.

The AP Environmental Science course is the equivalent of a one-semester, introductory college course in environmental science. The goal of this course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. Students enrolled in this course must take the AP exam. If a course final exam is given, it will be comparable to the AP exam. Summer reading and assignments are required prior to the start of the school year.

Prerequisites – Grade of “C” or better in Biology; Chemistry (taken previously or concurrently)

** Special note – this course may be taken in 10th grade if prerequisites have been met.

638 Anatomy and Physiology (1 credit) This class meets for a double period, three days per cycle.

This course will introduce 11th & 12th grade students interested in pursuing a career in the allied health sciences to the structure and function of the human body. During this course, students will study the major systems of the human body, the skeletal system of a cat, and will be responsible for the complete dissection and study of the mink as it compares to other mammals. Summer reading and assignments are required prior to the start of the school year.

Prerequisites: Students must have received a “C” or better in Biology; Chemistry (taken previously or concurrently)

640 Astronomy & Earth Science (.5 credit)

Grades 11 & 12

This course is designed for 11th and 12th grades students to look at the Earth and its motion in space. Changes are observed as the Earth makes its trip around the sun and through the galaxy. Students make observations that occur

daily and yearly on the Earth's crust and in space. Class topics include space, sun-earth-moon system, solar system, stars and galaxies, minerals and rocks, plate tectonics, earthquakes, volcanoes, weathering, erosion, and deposition.

641 Advanced Physics (1 credit)

This course is available for students who are interested in pursuing post-secondary study in the field of science, mathematics, engineering, etc. and will extend student learning beyond the general physics concepts to include simple harmonic motion, light and optics, electric circuits and electric fields, nuclear physics, and thermodynamics, in addition to other topics in regular physics. Students will gain experience in working more in-depth and content specific problems.

Prerequisite: Physics and Trigonometry

642 Forensic Science (.5 credit)

Grades 11 & 12

11th and 12th grade students will apply the foundations of biology and chemistry to solve mock criminal investigations using a wide range of laboratory techniques used today to process and analyze evidence. Topics covered will include: microscopy, observation skills, crime scene analysis, hair and fibers, fingerprints, DNA, blood evidence, ballistics, arson, toxicology, death investigation, entomology, and forensic anthropology. Some topics will be graphic in nature so maturity in these situations should be considered prior to selecting this course.

Prerequisite: Biology and Chemistry (Chemistry may be taken concurrently)

643 Fundamentals of Engineering (1 credit)

This course will provide students with a succinct understanding of engineering by examining what it means to be an engineer, types of engineering, fundamental concepts understood by engineers, and engineering technology. This course will utilize classroom instruction, and feature teacher-directed lessons, activities, and labs.

Social Studies

The knowledge and skills gained through the study of social studies benefit students in nearly all choices of career. Studies of world history, geography and contemporary social issues will help students entering post-secondary colleges/institutions as well as those going directly into the military and/or the world of work. All courses in this field of study include learning objectives that are aligned to PA Core Standards—Reading for History and Social Studies and PA Core Standards—Writing for History and Social Studies.

211 Social Studies 8 (1 credit)

This course will focus on the history of America, beginning with the cultures of Native Americans and continuing with the early growth of the United States through the Civil War.

311 American History 9 (1 credit)

This course explores the history of the U.S. from the post-Civil War period to the Vietnam War Era. The course stresses the social, cultural, and political aspects of U.S. history.

313 Honors American History 9 (1 credit)

This course focuses on achieving a mastery of the PA Core Standards for History/Social Studies with an accelerated pace and with a deeper understanding as compared to American Cultures 9. As students progress through the course, they will develop oral and written communication skills necessary for the mastery of the state standards in history and social studies. In addition, students will demonstrate critical thinking skills in oral and written analysis of various primary and secondary sources. This course will prepare students for subsequent accelerated social studies courses and postsecondary study.

Prerequisite: Students will be eligible for this course if they earned an 88% or higher in 8th grade American Cultures and ELA courses.

411 World History 10 (1 credit)

This course is a survey of the major western and non-western historical developments and trends. It focuses on key concepts, themes, and patterns of interaction found throughout history. Students will connect to the events and ideas of the past and see global connections through their studies.

413 Honors World History 10 (1 credit)

This course focuses on achieving a mastery of the PA Core Standards for History/Social Studies with an accelerated pace and with a deeper understanding as compared to World History 10. As students progress through the course, they will develop oral and written communication skills necessary for the mastery of the state standards in history and social studies. In addition, students will demonstrate critical thinking skills in both oral and written analysis of various primary and secondary sources. This course will also prepare students for subsequent accelerated social studies courses and postsecondary study.

Prerequisites: Students will be eligible for this course if they earned an 88% or higher in each of their 9th grade American Cultures and ELA courses.

511 Government & Economics 11 (1 credit)

This course will begin with the foundations of government and the United States Constitution. It will then move into the federal, state, and local governments. The course will conclude with how citizens work in both the government and in society. Additionally, students will understand economic concepts and their impact and influence on government processes and society.

610 Advanced Placement United States History (1 credit)

This is a rigorous course offered as an elective for highly motivated 11th & 12th grade students. The course begins with the exploration of the Americas and continues through the formation and development of the United States up to the 1980's. Students will be required to complete extensive reading assignments, write thoughtful essays, and do independent projects. **Students enrolled in this course will be required to take the AP exam. If a course final exam is given, it will be comparable to the AP exam. Summer reading and assignments are required prior to the start of the school year. Enrollment also includes an Advanced Placement contract signed by both the student and parent.**

College Credit Opportunity: Lackawanna College

611 Sociology (.5 credit)**Grades 11 & 12**

This course is offered to juniors and seniors and serves as an introduction to the behavioral sciences and applies basic principles from these disciplines to the study of contemporary social problems.

College Credit Opportunity: Lackawanna College

612 Psychology (.5 credit)**Grades 11 & 12**

This is an introductory course for juniors and seniors that will examine basic psychology theories and principles of underlying human behavior and experiences. The course is designed to encourage students to question who they are, how they relate to others and to study the everyday behavior of people.

College Credit Opportunity: Lackawanna College

613 Contemporary Issues (.5 credit)**Grades 11 & 12**

This course for juniors and seniors will present the study of both eastern and western civilizations from the 1960s through current day, analyzing the connection between major historical events of this time period and contemporary global issues.

618 Sociology II (.5 credit)

Sociology II will focus on gender/age/health, the family, economy and politics, education and religion, science and the mass media, and population/urbanization. This course is designed as a hybrid course wherein students will be working with online and textbook resources along with the teacher as they navigate through the curriculum.

Prerequisite: Sociology I

College Credit Opportunity: Lackawanna College – may not be earned for both Sociology I and II

619 Psychology II (.5 credit)

Psychology II will focus on sleeping patterns and dreams, sensation and perception, learning principles, memory, psychological disorders, and health factors. This course is designed as a hybrid course wherein students will be working with online and textbook resources along with the teacher as they navigate through the curriculum.

Prerequisite: Psychology I

College Credit Opportunity: Lackawanna College – may not be earned for both Psychology I and II

Technology Education

Industrial Technology Education courses will benefit students interested in careers in engineering, architecture, computer technology, and a multitude of building and metalworking trades. In addition, basic courses will enhance use of leisure time for workers in any career area. All courses in this field of study include learning objectives that are aligned to PA Core Standards—Reading for Science and Technical Subjects and PA Core Standards—Writing for Science and Technical Subjects.

270 Technology Education 8 (.25 credit)

Grade 8

This 8th grade elective course explores many areas of technology that are used in our world today. Technology goes beyond just using a computer. Students will use technology to design, create, and build a variety of projects. In Drafting, you will design your own home using Computer Aided Design and Drafting software (CADD). In Woodworking, you will create a personalized cutting board for your home utilizing a CNC router. In the Power and Energy unit, you will build a rocket stove and learn about its physical principles. All students taking Introduction to Technology Education will be eligible to participate in the Technology Student Association.

870 Exploring Technology I (.5 credit)

This course is designed to introduce students to a variety of different technologies and how they are used in today's world. Students will be involved in lectures, demonstrations, and hands-on activities. Topics include safety, construction, manufacturing, energy and power, structures, transportation, and graphic design. Grades 9-12.

871 Exploring Technology II (.5 credit)

Grades 10-12

This course allows students to continue their exploration into the different technology fields. Through lectures, demonstrations, and hands-on activities, students will create more in-depth analyses and projects for each topic. Topics include safety, architecture, engineering, and communication.

Prerequisite: Exploring Technology I

873 Introduction to Drafting (.5 credit)

Grades 9-12

This course introduces students to the field of drafting and as a .5 credit course gives students the chance to see if they like drafting before committing to a full-year course. We will use CAD (computer aided drafting) to solve drawings and other technical problems. Topics shall include: drawing to scale, model representation, multi-view drawings as well as other problem solving assignments. This course is especially useful for students interested in drafting, architecture, or engineering. Mastery of basic math skills is necessary.

874 Drafting I (1 credit)

Grades 9-12

This course introduces students to the field of drafting. We will use CAD (computer-aided drafting) to solve drawings and other technical problems. Topics shall include: drawing to scale, model representation, multi-view drawings as well as other problem-solving assignments. This course is especially useful for students interested in drafting, architecture, or engineering.

875 Drafting II/ CAD (1 credit)

The focus of Drafting II will be using Computer Aided Drafting software (AutoCAD and SolidWorks) to complete both mechanical and architectural drawings. General goals include efficient drawing techniques, dimensioning applications and practices, rendering advanced sectional views, and proper plotting of drawings. Students will utilize CAD as it is currently used in industry.

Prerequisite: Drafting I or Introduction to Drafting

876 Drafting III/ Research and Development (1 credit)

The focus of this course will be integrating CAD into real-world problem solving. Concepts and topics will include product development, product improvement, 3D modeling, electronics and aeronautics illustrations, prototyping, concept modeling, and mapping. Students will have the opportunity to pursue additional topics relating to their career goals and interests.

Prerequisite: Drafting II

878 Wood Manufacturing I (1 credit)**Grades 10-12**

This course is designed to provide students in grades 10-12 with an understanding of basic tools, materials, and processes that are used in wood manufacturing. Primarily through hands-on experiences and instructor demonstrations, the students will explore many different aspects of the wood industry. Areas of study include the following: safety, wood identification, joinery, grading, cost calculation, and hand and power tools. Industry techniques and standards will be used to complete class-selected projects.

879 Wood Manufacturing II (1 credit)

This course is an extension of Wood Manufacturing I that will increase the study of project design and development. Students will select projects to design and construct using the most current manufacturing practices and techniques. Emphasis will be placed on the ability to manufacture or mass-produce the selected project. This will include CNC and assembly line techniques.

Prerequisite: Wood Manufacturing I

882 Construction I (.5 credit)

The construction course is designed to introduce students in grades 9-12 to some common careers in the construction industry. Students will collaborate on projects and get hands-on experience in multiple trades. This course can be taken as an introduction to particular construction fields or just to increase basic knowledge of home repair. Topics include: safety, foundations, framing, electricity, plumbing, household repairs, drywall, and exterior finishing.

884 Media and Technology (.5 credit) ODD YEARS ONLY – offered 2025-26**Grades: 9-12**

This course will introduce students to different medium and allow them to utilize technology in order to create a variety of projects. Topics include audio and video production, digital photography, 3D design, video game development, and web-based media.

885 Construction II (.5 credit)

The Construction II course is for students in grades 10-12. It is designed as a follow up to the Construction I course and will allow students to expand on previous experiences. Students will have the opportunity to explore particular trade related career interests. Topics include: safety, interior and exterior finishing, heating and cooling systems, and advanced wiring.

Prerequisite: Construction I.

886 Digital 3-D Design (.5 credit) EVEN YEARS ONLY – offered 2024-25

Open to students in grades 9-12, students in this course will explore the digital design fields and learn how to create characters, settings and more. The class will focus on modeling, animations, digital materials, textures, rendering and other basic design principles.

889 Invention and Innovation Design (1 credit)

This course will challenge you to use your academic skills to solve real-world problems. With a focus on STEM (Science, Technology, Engineering, Math) concepts, students will have the opportunity to formulate solutions to problems found in our society. Current technologies, design concepts, and science and engineering principles will be utilized. Included will be opportunities to compete against other schools in academic competitions. Grades: 10-12

Prerequisite: Accelerated Algebra I/II or Algebra II or Geometry or Accelerated Geometry

890 Invention and Innovation Development – (.5 credit)**Grades 10-12.**

This advanced course will challenge you to use your academic skills to solve real-world problems. With a focus on STEM (Science, Technology, Engineering, Math) concepts, students will have the opportunity to formulate and create solutions to a problem found in our society. Current technologies, design concepts, and science and engineering principles will be utilized.

Visual Arts

The visual arts curriculum is designed to accommodate both beginning and advanced level students, by students who will seek careers in art, those who enjoy just dabbling in the arts, and those who will become intelligent consumers of the arts. Courses in this section will enable students to acquire knowledge and skills that will facilitate a career in fine arts, graphic arts, photography, interior and display design, and art education—to name a few. All courses in this field of study include learning objectives that are aligned to PA Core Standards—Reading for Science and Technical Subjects and PA Core Standards—Writing for Science and Technical Subjects.

250 Art 8 (.25 credit)

Grade 8

This art course for 8th graders provides the opportunity to learn about how art can be experienced in everyday life. Students will experiment with a variety of techniques, processes and materials, such as clay, paint, and various drawing materials. Projects may include painting, drawing, sculpting, collage, constructing and designing. Students will also consider art-related careers as well as become informed about what art students at the upper levels experience.

750 Art I (.5 credit)

Art I is an elective course that is an introduction to major techniques and processes. Projects will explore the Elements and Principles of design, drawing, painting, color theory, collage, ceramics, and 3-D design. This course is essential to all other art courses.

751 Art II (.5 credit)

Art II is an elective course that builds upon what is learned in Art I. Students will explore Art History and Renaissance Art. Projects will continue to incorporate the Elements and Principles of design in drawing, painting, assemblage, calligraphy, tessellations, ceramics and advertising.

Prerequisite: Art I

752 Art III (.5 credit)

Art III is an elective art course that challenges students with independent and required projects including drawing, painting, advertising, color theory, 3-D design in ceramics and wire, sculpture, and black and white photography.

Prerequisite: Art II

753 Art IV (.5 credit)

Art IV will challenge students with required and independent work. Projects will include still-life drawing, painting, ceramics, photography, a series and jewelry design. Students will prove what has been learned throughout high school and will create a portfolio.

Prerequisite: Art III

755 Advanced Art (1 credit)

Advanced Art will push students to reach their highest potential. Many projects will be required, including several independent projects to develop problem-solving and creativity skills. Projects will involve drawing, painting, ceramics, photography, and portfolio collaboration.

Prerequisite: Currently taking or have taken Art III

756 Computer Art (.5 credit)

This class is an introduction to fine art on the computer. We will use Adobe Photoshop software to alter and create images. It is a fine art studio class that uses digital tools as the medium for artistic expression. Fundamental aesthetic and design concepts will be covered through presentations, and through class discussions of students' work.

754 Advanced Computer Art (.5 credit)

This course will teach advanced Photoshop techniques using the Adobe Photoshop program. We will take the basics learned in Computer Art and dive further into drawing, painting, and altering images using digital media. This course will allow for some independent work once the Photoshop tools and capabilities have been learned.

Prerequisite: Computer Art

757 Community Art (1 credit)

This course will research the connection between the application of public art and the vitality of a community. It will discuss the funding processes involved with the financial support for community art and local and government funding

opportunities for art programs. The course will delve into differing techniques and applications in community art. Students will have the opportunity to apply principles learned within this course to the planning, designing, and constructing of a community art display within our local municipality. The public/community art construction may include but may not be limited to window art, murals, signs, and sculptures.

Prerequisite: ART 1

747 3D Art (.5 credit)

3D Art Design is a studio project orientated class exploring different media areas of 3-Dimensional and Graphic design. The emphasis of this course is to expose students to 3D art mediums and to build their creative skills through the elements and principles of design. These projects will be mostly sculptural based for 3D work. Projects may include: Ceramic projects, Cardboard creation, soap carving, Duct Tape, Cardboard Shoe design, felting, and recycled art.

Prerequisite: Art II

World Languages

Command of more than one language is beneficial for all students. Although these courses are not required, they are recommended for those planning to attend liberal arts colleges. In addition, use of the Spanish language helps workers in all career areas in both professional and technical fields. Possible careers utilizing a second language range from fine arts and communication to international trade and government. All courses in this field of study include learning objectives that are aligned to PA Core Standards—Reading for Science and Technical Subjects and PA Core Standards—Writing for Science and Technical Subjects.

240 Introduction to German 8 (.25 credit)

245 Introduction to Spanish 8 (.25 credit)

Grade 8

Introductory German and Spanish courses will offer the students an opportunity to explore a new language and gain a basic understanding of a foreign culture and help students to decide which, if any, world language they are interested in taking for academic credit in High School. They will be exposed to basic conversation skills, such as introductions, greetings, age, and where someone is from, as well as the alphabet, numbers, and colors.

840 German I (1 credit)

German I students will be following the text, Klasse A1, which deals with such interesting topics as pastimes, school, shopping, family, etc. The students learn everyday vocabulary, various aspects of German culture and geography, and basic grammatical concepts through these lively topics. Students will learn to write original sentences and paragraphs in German. Several cultural celebrations are observed during the year.

841 German II (1 credit)

German II students will continue with the Klasse A1 textbook series. Through a wide variety of oral and written exercises in the German class and at home, the skills of comprehension, speaking, reading and writing are sharpened. The student is encouraged to converse in German, as much as possible, in the classroom. Students will continue to improve sentence and paragraph writing as they learn about health, town and home, clothing, travel, and more. Cultural appreciation is stressed through a variety of exercises.

Prerequisite: German I

842 German III (1 credit)

German III is designed to allow the student to sharpen the four skills to a relatively high degree. The target language is spoken in the classroom as much as possible. Some of the finer points of German grammar are studied at these levels, and a greater emphasis is placed on the reading of authentic German literature. More extensive writing exercises in the target language are also stressed. Cultural understanding and appreciation continue to be reinforced through a variety of exercises.

Prerequisite: German II

843 German IV (1 credit)

German IV is designed to allow the student to sharpen the four skills to a relatively high degree. At the completion of German IV the student should be well prepared for college-level German. The target language is spoken in the classroom as much as possible. Some of the finer points of German grammar are studied at these levels, and a greater emphasis is placed on the reading of authentic German literature. More extensive writing exercises in the target language are also stressed. Cultural understanding and appreciation continue to be reinforced through a

variety of exercises.

Prerequisite: German III

844 German Language and Culture Studies (.5 credit) CURRENTLY NOT OFFERED

This course is designed to increase understanding of the German language through the study of cultural aspects which enhance awareness and appreciation. The course will provide further exploration of German culture and language by developing writing skills, conducting independent research, interpreting international media sources, reading historical literature pieces, and exploration of modern and historic German speaking societies. This course may be appealing to students who have completed level two (2) of the traditional German language sequence but do not wish to advance into level three (3).

845 Spanish I (1 credit)

The students cover units in the text, Senderos, which deals with interesting topics such as everyday conversations, school, family, pastimes, describing people, etc. Through these topics the students learn everyday vocabulary, geography, Spanish culture, and basic grammatical concepts. Reinforcement from authentic printed and online sources enrich language acquisition. Throughout the year the students will develop novice language skills. Several cultural celebrations are observed during the year.

846 Spanish II (1 credit)

Spanish II builds on information learned in Spanish I. The students will finish the level I text and continue to work in the Level II, Senderos which stresses vocabulary, grammar, writing, and correct pronunciation. Vocabulary and grammar skills are expanded through topics like giving advice, chores and routines, food, town and home, and making plans. The students will be encouraged to converse in Spanish, as much as possible, in the classroom. Cultural appreciation is stressed through videos and a variety of activities.

Prerequisite: Spanish I

847 Spanish III (1 credit)

Spanish III builds on information learned in Spanish II. The students will be working with the textbook Senderos II and Senderos III which stresses vocabulary, grammar, writing, and correct pronunciation. The students will be encouraged to converse in Spanish, as much as possible, in the classroom. Topics include: going to the doctor's office, travel, childhood, nature, and significant landmarks. Cultural appreciation is stressed through videos and a variety of activities.

Prerequisite: Spanish II

848 Spanish IV (1 credit)

Spanish IV will be completing Senderos III and will use the grammar and speaking skills learned in the first three years. The students will read and translate several short stories and work on various projects. The students will be encouraged to converse in Spanish, as much as possible, in the classroom. Units include: studies on careers, art, literature, murder mysteries, and music. Cultural appreciation is stressed through videos and a variety of activities.

Prerequisite: Spanish III

849 Spanish Language and Culture Studies (.5 credit) CURRENTLY NOT OFFERED

This course is designed to increase understanding of the Spanish language through the study of cultural aspects which enhance awareness and appreciation. The course will provide further exploration of Spanish culture and language by developing writing skills, conducting independent research, interpreting international media sources, reading historical literature pieces, and exploration of modern and historic Spanish speaking societies. This course may be appealing to students who have completed level two (2) of the traditional Spanish language sequence but do not wish to advance into level three (3).

Other Programs

465 Driver Education (.25 credit)

This course focuses on providing students with the knowledge and skills that should enable them to become safer and more informed drivers. The attainment of these expectations will allow students to safely use the Highway Transportation System with greater confidence and higher skill levels. The course is based upon the Pennsylvania Department of Education Driver Education Content Expectations that describe what students should know and be able to do at the end of the thirty-hour classroom theory instruction.

This Pass/Fail course will be offered during the Supervised Study period. Students may take the course in grades 9-12 but must be 16 years old or turning 16 years old during the academic year taking the course.

466 Understanding Disabilities (.5 credit)

This course introduces the learner to common educational and developmental disabilities. Students will then be taught strategies for working with students with disabilities through hands-on, engaging activities. Students will then partner with special education classes to create meaningful learning opportunities for all. Students will learn compassion, tolerance, and understanding, in addition to introductory information about the field of special education.

779 Work Study Field Practicum (3 credits)

Grade 12

Seniors accepted into the MWHs Work Study Program will gain work experience in a real-world setting with advisement and supervision provided by MWHs faculty and a job site mentor. This practicum course will provide differentiated content (based on the relevancy of individual students' job placements) within a broad range of career-related knowledge and skills. Students will have the opportunity to earn 1-3 credits. Credits will be earned based on the number of hours worked per week (1 credit per 5 hours per week). **To learn more about the application process and required criteria for the Work Study Program, please see your guidance counselor.**

827 Choices (.5 credit) - Grade 8

This course is designed to ease the transition into high school and is a requirement for all 8th grade students. Modules in this course will include topics such as study skills, technology skills, behavioral health, relationships, decision-making, Internet safety, and career awareness and exploration.

965 CUEC Dual Enrollment at Bloomsburg University – (8 Credits)

Grade 12 – Must be approved and accepted into the program

Commonwealth University is offering the opportunity to take regular, for-credit university courses to qualified seniors while still in high school. Students may be able to save up to 75 percent on tuition in Commonwealth University's Eacrlly College Program. Senior high school students may enroll in college/university-related early admission programs during their senior year, provided they meet certain conditions. Please see School Board Policy 241 and Administrative Regulation (AR) 241 for more information.

SUN Area Technical Institute Programs

MWHs students who are interested in pursuing a technical career have the opportunity to attend SUN Area Technical Institute during their senior year.

The following programs are offered:

901—Advertising Art & Design (6 credits)

The program emphasizes your creative growth through instruction in art principles as well as technology skills through computer-based projects. You will gain a working knowledge of color, typography, and printing while you master Adobe software on the Mac and PC. You may find employment in graphic design, advertising, publishing, web page design, illustration, or photography. The number of opportunities for employment and advancement are expected to be bright for the next five to ten years. Salaries in this field range from \$8 to \$32 per hour within our local area.

902—Auto Technology (6 credits)

In the Automotive Technology course at SUN Tech, you are given the opportunity to learn the necessary skills and competencies to maintain, diagnose and repair the advanced systems on modern automobiles. You can use common hand tools as well as power tools such as impact wrenches, grinders, drills, tire machines and automotive lifts. You will also be using state-of-the-art equipment such as electronic engine analyzers, oscilloscopes, scan tools and internet-based information systems.

The Automotive Technology program consists of daily theory lessons which teach the skills needed to complete *nearly 350 hands-on exercises involving real cars and light trucks*. Both follow NATEF guidelines and expose you to most of the operating systems on modern automobiles. Areas covered include: electrical systems, steering and suspension, braking systems, engine repair, computerized powertrain control, and air conditioning.

903—Wood Design & Technology (6 credits)

As an Advanced Wood Products Manufacturing (AWPM) student, you can be trained to be a quality machine operator, production worker, finisher, or technician. You will learn to have a strong emphasis on quality and professionalism. Wood products manufacturing remains one of the top career fields locally and throughout the 20

State. AWPM is a State approved Program of Study. When you complete all of the required state tasks, you can earn college credits to numerous colleges throughout the State.

904—Carpentry (6 credits)

As a SUN Tech carpentry student you will learn all aspects of residential and light commercial construction through classroom theory and practical shop instruction and projects. All areas of residential construction will be covered, including but not limited to, floor, wall and roof framing, exterior and interior finish.

Look what you can learn in the Carpentry Program:

- Learn the skills necessary to properly build a house
- Work in a team setting.
- See the day go by so quickly you will wonder what happened to the time.
- Work on community service projects off campus.
- Use the most advanced tool, equipment and materials
- Be challenged every day by your instructor
- Earn college credits
- Do something different everyday

Emphasis is placed on developing the skills you will need for your future as a contractor.

905—Collision Repair Technology (6 credits)

The Collision Repair Technology course at SUN Tech is the first in the Commonwealth of Pennsylvania to be evaluated by the "National Automotive Technicians Education Foundation, Inc." (NATEF) and become certified by the "National Institute for Automotive Service Excellence" (ASE). The course includes theoretical study and practical application in all areas related to the collision repair industry including major and minor collision repair, MIG welding, base-clear and tri-coat refinishing, color matching and blending, SMC and urethane plastic repair, glass service, and supplement restraint systems. You will be evaluated on practical hands-on application skills and through ASE type-written examinations. You may be eligible for one-year service credit toward applying for ASE certification in any or all of the four specialized technical areas within the trade. Related areas of employment are: insurance adjustor, automotive refinish, parts and sales, and assembly line refinishing.

Computer & Networking Technology (6 credits)

As a SUN Tech Computer and Networking Technology student, you will learn a wide range of skills that will enable you to get an entry level job, skills to give you a head start in college, and even a way to make good money while going to college!

Look at all the exciting things that “you” can learn at SUN:

- Build, upgrade and repair computers
- Setup and configure routers, switches, firewalls, and servers
- Design web pages and flash animations
- Administer a computer network, setting up user accounts, servers, etc.
- Become **Certified** in copper and fiber optic network cabling
- Earn college credits from Penn College saving thousands of dollars
- Use cutting edge technology to prepare you for the workforce.
- Build laptop computers that you will use throughout the year!

907—Cosmetology (6 credits)

The Cosmetology course at SUN Tech includes theoretical studies and the application of all aspects of hair, skin and nail care. You will be trained in the theoretical areas of anatomy/physiology, decontamination, safety and management. Eighty percent of all course activities are hands-on applications including the operation of a clinic/salon area where you will work on clients just as you would in a licensed salon. The topics and skills covered include: hairstyling, hair cutting, hair coloring and lightening, permanent waving, hair straightening, braiding, skin care, massage, makeup, hair removal, nail care, artificial nails, nail art, ethnic hair care, male hair cutting and styling and product knowledge.

In order to acquire the 1250 hours of supervised instruction required for the PA State Board of Cosmetology licensing examination, you will attend a 300 hour summer program at SUN Tech prior to your senior year at SUN Tech.

917—Criminal Justice (6 credits)

This program offers the entry-level skills and knowledge required for employment in criminal justice professions such as police officer, security officer, correctional officer, 911 dispatcher, store security and military police. These 30

skills are acquired through a combination of classroom training and hands-on experience. The program offers job shadowing experiences, featured guest speakers, and field trips. To remain state of the art, the program uses three simulators to create real life experiences.

908—Dental Health Technology (6 credits)

As a dental assistant you will learn to prepare patients for treatment, sterilize instruments, practice infection control, prepare materials, and make study models from impressions. You will also be exposed to digital x-ray technology and provide chairside assisting with a local dentist to gain clinical experience.

909—Diesel & Truck Technology (6 credits)

The Diesel and Truck Technology course at SUN Tech prepares you for higher education or employment in the field of truck and bus repair or maintaining diesel engines and other related equipment used to power ships, trains, electric generators and construction machinery. A working knowledge of the trade is taught through theory and practice, disassembly of diesel engines, clutches, brakes (hydraulic and air brakes), electrical systems and electronic trouble shooting. If you are trained in Diesel Technology you can secure employment as a technician working on trucks, buses, agricultural and construction equipment. You will be given the opportunity to attain a Pennsylvania Vehicle Safety Inspection license and prepare to take the Automotive Service Excellence (ASE) tests.

911—Electrical Systems Technology (6 credits)

The Electrical Systems Technology class provides training through a combination of classroom instruction and practical, hands-on assignments. Projects, both within and outside of the school, give you hands-on experience in a safe, supervised environment. You will learn to design and build electrical systems to meet the requirements of the National Electrical Code and OSHA. Emphasis is placed on developing skills used in residential, commercial, and industrial installation, design and repair. Local methods, materials and requirements are taught, therefore making you highly employable.

912—Mechatronics (6 credits)

The Mechatronics course at SUN Tech teaches you the basic laws of electricity and applications of electronic circuitry through study and laboratory experimentation. You will also train for your FAA Part 107 Unmanned Pilot's License as well as the following list of projects and challenges.

- Learn to fly drones correctly and legally. Get your FAA Part 107 license.
- Create your own circuit designs – amplifiers, digital clocks, car alarms, your own individual designs!
- Work on campus with Penn College instructors – robotics labs – fiber optic labs
- Prepare and take for your FAA Part 107 Unmanned Aircraft License.
- Do different things every day. Build desktop computers, network computers, setup home theater systems, build robots, build laptops, and build your own test equipment.
- Repair you own equipment. You will have the skills to fix your broken electronics!
- Complete your first semester of college during your senior year. Start college in your second semester.
- Learn wind, solar and fuel cell basics.

913— Culinary Arts (6 credits)

The SUN Tech Food Service Program will provide you with the skills and experience needed to prepare for an entry-level position in the Food Service industry. The skills you will learn include:

- Basic operation of a restaurant
- Food preparation
- Safety and Sanitation
- Operation and maintenance of restaurant tools and equipment
- Creating and planning of menus for restaurant and catering functions
- Cooking & Baking
- Customer service including; hosting, serving, and bussing of tables.
- Cost Control

914—Health Professionals & Related Sciences (6 credits)

The Health Professions program at SUN Tech helps you learn the theory and practical skills required to help prepare you for a career in the health field. You will learn the duties of a Certified Nurse Aide and have the opportunity to perform skills learned as you deliver quality resident care while at our clinical affiliations at a local long term care

facility and local community hospital. You will learn the importance of commitment to other members of the health care team. Preparation is primarily in a simulated work environment combined with clinical application. Core subjects to be covered: 150 hour State approved Nurse Aide course, anatomy and physiology, Medical Abbreviations, Medical Terminology, Infection Control and Safety, Basic Nursing, Medical Assistant and Receptionist Skills, CPR/First Aid, Career Exploration, Employability Skills and Leadership. Two certification options exist depending on a pre-deleted pathway within the program. Health 114 works toward a BLS Health Care Provider certification, and Health 201 works toward a Patient Care Technician certification. Students should speak to their guidance counselor for more information regarding the two pathways within this program.

915—Masonry (6 credits)

Work in Masonry is a combination of physical and mental activity. Skills to master the tools of the trade along with efficient work habits are what you will learn at SUN. These skills will enable you to construct quality work that will stand the test of time. You will also develop an understanding of mathematics as it relates to building materials as well as blueprint reading, jobsite organization, and jobsite safety.

916—HVAC & Plumbing Technology (6 credits)

HVAC & Plumbing Technology students at SUN Tech learn through classroom instruction and practical shop assignments. You will learn basic system design as well as the installation and servicing of modern HVAC systems through practice in the laboratory or at an actual job site. Emphasis is placed on developing student skills used in residential and commercial installation and repair jobs. Additional training within this trade area is available in green technology learning about solar and geothermal energy.

918—Precision Metalworking (6 credits)

A machinist doesn't think of metal as something hard and unchangeable, because they can change it into anything they want. Students setup and operate machinery to fabricate and repair parts and components. A machinist performs cuts on materials to bring it to the desired shape and dimensions. Metal blocks can be transformed into intricate parts such as sprockets, gears, pistons, tools, wheels, and molds. These parts are then assembled into cars, bikes or the machinery which mass produce every conceivable manufactured good. Machinists are the foundation of all industries, and without them no manufacturing or construction job would exist. Machinists are the only skilled workers capable of reproducing the actual tool they are using! Advanced Precision Machining students are highly sought out by local employers, and have one of the highest job placement rates in the school. Many students pursue careers in engineering. You can qualify for advanced placement and/or dual enrollment at the Pennsylvania College of Technology, Thaddeus Stevens School of Technology and the Harrisburg Area Community College.

919—Welding (6 credits)

The SUN Tech Welding Program provides you with the hands-on training in all positions and theoretical backgrounds required for an entry-level position in the field of welding. You also have the opportunity to take a certification test (D1.1 or D1.5) at the end of the school year.

Welding processes you will learn:

- Shielded Metal Arc Welding
- Gas Metal Arc Welding
- Gas Tungsten Arc Welding
- Flux Core Arc Welding
- Submerged Arc Welding
- Oxyfuel Cutting/Welding/Brazing
- CNC/Manual Plasma cutting
- Blueprint Reading
- Nondestructive Testing Methods/Inspection
- Fabrication skills

Cooperative Education and Qualifications

The Cooperative Education program is a combined effort of SUN Tech and business/industry for training and offers opportunities for student to become directly involved with employers prior to graduation. The primary goal of the program is to introduce the student learner to the world of work via actual experience on the job. Cooperative Education is for the higher achieving student (95% attendance rate and 80%+ program grade) that wants to combine real world work experience with high quality education, simultaneously. This possibility exists in the 3rd and more importantly 4th marking periods of the year. Career assistance exists for our students upon graduation, as well.

Dual Enrollment Programs

The following nine programs offer PC NOW Dual Enrollment opportunities through the Pennsylvania College of Technology to students at SUN Tech: Advanced Precision Machining, Electronics Technology, Carpentry, Collision Repair Technology, Computer & Networking Technology, Diesel and Truck Technology, Drafting CAD Technology, HVAC, Welding Technology. PC Now credits cost the student \$50.00 per credit with no registration fee. Students must first qualify by passing a placement exam.

The following two programs offer College in the Tech School Dual Enrollment opportunities through the Harrisburg Area Community College: Health Professions and Related Services and Dental Health Technology. College in the Tech School Dual Enrollment credits cost \$30.00 per credit with a \$35.00 registration fee. Students must first qualify by passing a placement exam.

PC Now and College in the Tech School credits are transcript credits and transferable to other post-secondary institutions.

Students Occupationally and Academically Ready (SOAR) Credits

SOAR is a Pennsylvania Department of Education program that eases student's path from high school to college and from college into high-demand occupations by allowing them to earn college credits while still in high school. Learn more at www.collegetransfer.net