Mifflinburg Area High School

2022-2023

Course Selection Guide

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Introduction

Mifflinburg Area High School's curriculum combines a liberal education with a serious and thorough career preparation for the world of work. The high school staff and administration view its educational program as the first step for each student to develop the capacity to react creatively to new and unforeseen conditions. In addition, the variety of our approaches to education provides the opportunity for each student to acquire the knowledge and skills for today's world and to prepare for future careers.

Our school assumes that students come to our environment to learn, to pursue individual educational goals and to accept the responsibility for planning their programs with the advice and direction of their families, counselors, and faculty. The Mifflinburg Area School District offers a diploma to each student who completes the High School's requirements.

Each student is expected to master higher-order skills to function as a young adult in our technological society. Creativity, critical thinking, communication, problem-solving, value development, social involvement and behavioral management are skills we strive for our students to achieve. While each student possesses unique talents, all individuals encounter strengths and weaknesses within their own special character. With this variation in mind, it is appropriate for families and students to choose different levels offered in the Mifflinburg Area High School curriculum.

Students are offered, with family encouragement, the option of selecting more challenging Honors classes and Advanced Placement classes in science, social studies, English Language Arts, and mathematics. The Honors course level for ninth grade math is predetermined by a student's participation and success in the eighth grade Algebra I or Algebra II class. Parents are urged to consider their child's pattern of success and family expectations when considering an Honors level course. An Honors course challenges a student to work hard in high school to be exceedingly well prepared for entrance into any post-secondary educational program. Students are required to obtain an 86% in the prerequisites for all Honors and AP Courses.

Scheduling Overview

Students should carefully select courses that will satisfy all graduation requirements and prepare them to achieve their post-high school goals. During the scheduling process, students are encouraged to seek recommendations for course selections from their teachers, school counselors, and families. Career Pathways are outlined in this Course Selection Guide to provide further guidance as well.

All students will be scheduled for a combination of core courses and elective courses.

Core Courses

Students are required to take core coursework in the following subject areas:

· English Language Arts (Grades 9-12)

· Mathematics (Grades 9-12)

· Science (Grades 9-12)

· Social Studies (Grades 9-12)

· Economics or Consumer Economics (Grade 11)

· Physical Education (Grades 9-12)

· Drivers Education (Grade 10)

· Health (Grade 9)

· Career Communications (Grade 9)

· Research Writing and Public Speaking (Grade 9 or Grade 10)

Elective Courses

Elective courses are used to fill the remainder of a student's schedule. When selecting elective courses during the scheduling process, students should be mindful in choosing courses they are willing to take if scheduled for them. Students will be held to these requests, as they are utilized when building the Master Schedule and in making decisions regarding academic offerings.

Schedule Adjustments

The Mifflinburg Area High School Administration and School Counseling Department do their best to place students into courses of their choosing. However, not every request is always able to be fulfilled due to core course restraints and class size caps. Therefore, schedule adjustments may become necessary. Once students' schedules are released, details of how to request a schedule adjustment will be shared with students.

Schedule adjustments will be granted under the following circumstances only:

· a student is missing a core course in their schedule;

· a student has not met the prerequisites for a course for which the student is scheduled;

· a student does not meet the grade restriction requirement for a course;

· to accommodate for course failures and/or the successful completion of summer school;

· a student has not completed the required summer work for an Advanced Placement Course or Honors Course;

· a student did not request the course for which the student is scheduled (will be swapped out for another course that occurs the same day/block/short); or

· a student has an open block/short in their schedule.

*Please know that making any type of schedule adjustment for any core course will likely cause a student's schedule to shift, and it may not be possible to fit all the student's original courses back into it. A student's lunch period may change as well.

Graduation Requirements

Graduation from the Mifflinburg Area High School, which is accredited by the Pennsylvania Department of Education and the Middle States Association (reaccredited, 2017), must be in accordance with the graduation standards as established by the Mifflinburg Area School Board. The following are the minimum graduation standards:

Twenty-two (22) units of credit throughout Grades 9, 10, 11, and 12 shall be satisfactorily completed for graduation by all students. These credits shall include the following:

Five (5) units of credit in English Language Arts* are required for all students who spend four (4) years at Mifflinburg Area High School. These requirements are as follows: two (2) units in Grades 9/10 and one (1) unit each in Grades 10, 11 and 12.

Four (4) units of in English Language Arts* are required for all students who are enrolled in SUN ATI or the ACE Program at Bloomsburg University during their senior year. These requirements are as follows: two (2) units of credit in grade 9/10 and one (1) unit of credit in Grades 10 and 11.

Three (3) units of credit in mathematics.

Three (3) units of credit in science* including participation in at least one laboratory science.

Three (3) units of credit in social studies.

One (1) unit of credit in economics or consumer economics

One (1) planned course of study in health.

Physical education shall be taken in grades 9, 10, 11, and 12.

Five and one-half (5.5) units of credit in additional courses, known as electives, approved as graduation credits.

Credit will be awarded for high school level courses taken in the Middle School and will be noted on the High School transcript.

Remedial Coursework

All students not scoring at or above the proficient level on the Keystone Exams may be required to take remedial courses to improve upon the areas addressed in the PA Core Standards.

Grading System

A= 92–100% B= 84–91% C= 76–83% D= 70–75% E= 69% and below

WEIGHTED COURSES

Class rank shall be computed by the final weighted course percentage average for which credit is awarded. Weighted courses are listed below:

Class	Weight
Honors English Language Arts 9	1.04
Honors American Literature	1.04
Honors British Literature	1.04
Honors World Literature	1.04
Honors Algebra II	1.04
Honors Geometry-Trigonometry	1.04
Honors Advanced Math	1.04
Honors Biology	1.04
Honors Chemistry	1.04
Physics	1.04
Honors American Cultures I	1.04
Honors American Cultures II	1.04
Honors World Cultures	1.04
Spanish III	1.04
Spanish IV	1.04
French III	1.04
French IV	1.04

Class	Weight
AP Biology	1.08
AP Calculus AB	1.08
AP Chemistry	1.08
AP English Language	1.08
AP English Literature	1.08
AP European History	1.08
AP Physics	1.08
AP Psychology	1.08
AP Statistics	1.08
AP Studio Art 2-D	1.08
AP U.S. History	1.08
Penn College Now Courses	1.08

RECOMMENDED HIGH SCHOOL SEQUENCES

College and Career Readiness

The College and Career Readiness Program is designed to prepare students with in-depth knowledge in a traditional and disciplined mode to prepare an individual for a four-year college or to enter the workforce. Students may choose the courses that will best prepare them for their future.

Agriculture Mechanization

This is a sequence of courses designed to prepare students with skills for a variety of areas associated with the field of agricultural mechanization. Specific career areas may include mechanics/technicians, equipment and products sales and services, natural/public resources technician, and many other related occupations as well as those agriculture professions requiring further education.

Agriculture Production

This is a sequence of courses designed to prepare students with skills for a variety of areas associated with the field of agriculture production. Specific career areas may include farming, forestry, horticulture, surveying, agricultural business, and many other related occupations as well as those agriculture professions requiring further education.

Required Courses for College and Career Readiness

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

9th Grade	10th Grade	11th Grade	12th Grade
Choose One: • English Language Arts 9 • Honors English Language Arts 9 **Required:** • Career Communications • Research Writing and Public Speaking	**Choose One:** • English Language Arts 10 • Honors American Literature **Required** **(if not taken in 10th grade):** • Research Writing and Public Speaking	**Choose One:** • English Language Arts 11 • AP English Language and Composition • Honors World Literature • Honors British Literature	**Choose One:** • English Language Arts 12 • AP English Literature and Composition • Honors British Literature • Honors World Literature • MPower
Choose One: • Pre-Algebra • Algebra I • Algebra II • Honors Algebra II • Geometry • Honors Geometry – Trigonometry	**Choose One:** • Algebra I • Algebra II • Honors Algebra II • Advanced Math • Honors Advanced Math • Geometry • Honors Geometry-Trigonometry • Trigonometry w/Selected Topics	**Choose One:** • Algebra II • Advanced Math • Honors Geo-Trig • Geometry • Calculus • Trigonometry with Selected Topics • Probability & Statistics • AP Calculus AB • AP Statistics	**Choose One:** • Algebra II • Honors Advanced Math • Geometry • Trigonometry with Selected Topics • Advanced Math • Calculus • Probability and Statistics • AP Calculus AB • AP Statistics • MPower
Choose One: • Biology A • Biology • Honors Biology	**Choose One:** • Earth Science • Chemistry • Honors Chemistry • Biology B	**Choose One:** • Biology B • Earth Science • Physical Science • Anatomy and Physiology • Chemistry • Honors Chemistry • Physics • AP Chemistry • AP Biology	**Choose One:** • Physics • Anatomy and Physiology • AP Biology • AP Chemistry • AP Physics • Physical Science • Chemistry • Earth Science
Choose One: • American Cultures • Honors American Cultures	**Choose One:** • American Cultures II • Honors American Cultures II • AP United States History	**Choose One:** • World Cultures • AP European History • Honors World Cultures **Choose One:** • Economics • Consumer Economics	**Choose One:** • Psychology/Government • AP Psychology
Required: • Health/Physical Education	**Required:** • Physical Education • Drivers Safety Education	**Required:** • Physical Education	**Required:** • Physical Education
Recommended for College Bound Students: • World Language	**Recommended for College Bound Students:** • World Language	**Recommended for College Bound Students:** • World Language	**Recommended for College Bound Students:** • World Language
• Electives	• Electives	• Electives	• Electives

Required Courses for Agriculture and Mechanization

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

9th Grade	10th Grade	11th Grade	12th Grade
Choose One: • English Language Arts 9 • Honors English Language Arts 9 **Required:** • Career Communications • Research Writing and Public Speaking	**Choose One:** • English Language Arts 10 • Honors American Literature **Required** **(if not taken in 10th grade):** • Research Writing and Public Speaking	**Choose One:** • English Language Arts 11 • AP English Language and Composition • Honors World Literature • Honors British Literature	**Choose One:** • English Language Arts 12 • AP English Literature and Composition • Honors British Literature • Honors World Literature • MPower
Choose One: • Pre-Algebra • Algebra I • Algebra II • Honors Algebra II • Geometry • Honors Geometry – Trigonometry	**Choose One:** • Algebra I • Algebra II • Honors Algebra II • Advanced Math • Honors Advanced Math • Geometry • Honors Geometry-Trigonometry • Trigonometry w/Selected Topics	**Choose One:** • Algebra II • Advanced Math • Honors Geo-Trig • Geometry • Calculus • Trigonometry with Selected Topics • Probability & Statistics • AP Calculus AB • AP Statistics	**Choose One:** • Algebra II • Honors Advanced Math • Geometry • Trigonometry with Selected Topics • Advanced Math • Calculus • Probability and Statistics • AP Calculus AB • AP Statistics • MPower
Choose One: • Biology A • Biology • Honors Biology	**Choose One:** • Earth Science • Chemistry • Honors Chemistry • Biology B	**Choose One:** • Biology B • Earth Science • Physical Science • Anatomy and Physiology • Chemistry • Honors Chemistry • Physics • AP Chemistry • AP Biology	**Choose One:** • Physics • Anatomy and Physiology • AP Biology • AP Chemistry • AP Physics • Physical Science • Chemistry • Earth Science
Choose One: • American Cultures • Honors American Cultures	**Choose One:** • American Cultures II • Honors American Cultures II • AP United States History	**Choose One:** • World Cultures • AP European History • Honors World Cultures **Choose One:** • Economics • Consumer Economics	**Choose One:** • Psychology/Government • AP Psychology
Required: • Health/Physical Education	**Required:** • Physical Education • Drivers Safety Education	**Required:** • Physical Education	**Required:** • Physical Education
Recommended for College Bound Students: • World Language	**Recommended for College Bound Students:** • World Language	**Recommended for College Bound Students:** • World Language	**Recommended for College Bound Students:** • World Language
Required: • Intro to Ag • Masonry/Plumb • Electrical	**Required:** • Intro to Construction • Engines • Welding/Metal • Ag Fab I	**Required:** • Sustainable Ag • Farm Management • Ag Fab, Des, and Restoration II and III	**Required:** • Ag Fab, Des, and Rest III, IV, and V • Landscaping
• Electives	• Electives	• Electives	• Electives

Required Courses for Agriculture Production

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

9th Grade	10th Grade	11th Grade	12th Grade
Choose One: • English Language Arts 9 • Honors English Language Arts 9 **Required:** • Career Communications • Research Writing and Public Speaking	**Choose One:** • English Language Arts 10 • Honors American Literature **Required** **(if not taken in 10th grade):** • Research Writing and Public Speaking	**Choose One:** • English Language Arts 11 • AP English Language and Composition • Honors World Literature • Honors British Literature	**Choose One:** • English Language Arts 12 • AP English Literature and Composition • Honors British Literature • Honors World Literature • MPower
Choose One: • Pre-Algebra • Algebra I • Algebra II • Honors Algebra II • Geometry • Honors Geometry – Trigonometry	**Choose One:** • Algebra I • Algebra II • Honors Algebra II • Advanced Math • Honors Advanced Math • Geometry • Honors Geometry-Trigonometry • Trigonometry w/Selected Topics	**Choose One:** • Algebra II • Advanced Math • Honors Geo-Trig • Geometry • Calculus • Trigonometry with Selected Topics • Probability & Statistics • AP Calculus AB • AP Statistics	**Choose One:** • Algebra II • Honors Advanced Math • Geometry • Trigonometry with Selected Topics • Advanced Math • Calculus • Probability and Statistics • AP Calculus AB • AP Statistics • MPower
Choose One: • Biology A • Biology • Honors Biology	**Choose One:** • Earth Science • Chemistry • Honors Chemistry • Biology B	**Choose One:** • Biology B • Earth Science • Physical Science • Anatomy and Physiology • Chemistry • Honors Chemistry • Physics • AP Chemistry • AP Biology	**Choose One:** • Physics • Anatomy and Physiology • AP Biology • AP Chemistry • AP Physics • Physical Science • Chemistry • Earth Science
Choose One: • American Cultures • Honors American Cultures	**Choose One:** • American Cultures II • Honors American Cultures II • AP United States History	**Choose One:** • World Cultures • AP European History • Honors World Cultures **Choose One:** • Economics • Consumer Economics	**Choose One:** • Psychology/Government • AP Psychology
Required: • Health/Physical Education	**Required:** • Physical Education • Drivers Safety Education	**Required:** • Physical Education	**Required:** • Physical Education
Recommended for College Bound Students: • World Language	**Recommended for College Bound Students:** • World Language	**Recommended for College Bound Students:** • World Language	**Recommended for College Bound Students:** • World Language
Required: • Intro to Ag • Animal Science • Plant Science	**Required:** Sustainable Ag • Env Resources • Biotech • Horticulture	**Required:** • Landscaping • Masonry/Plumbing • Intro to Construction • Electrical	**Required:** • Ag Fab, Des, and Rest I • Welding/Metal • Farm Management • Vet Science
• Electives	• Electives	• Electives	• Electives

Career Pathways – A Brief Overview

What Are Career Pathways?

Each career pathway is a broad grouping of careers that share similar characteristics and have common employment requirements. A chosen pathway focuses a student's course toward preparing for a specific career goal area.

Career pathway planning is an educational approach to course scheduling that helps students focus their education on career development. The five career pathways identified below are clusters of occupations or careers that are based on the national career clusters.

In a career pathway system, students use the pathways as a guide to help prepare them for employment in a cluster that best fits their interests and abilities. Each career pathway represents a group of related occupations and industries represented in today's economy.

The 5 Pathway Options:

1. Pathway - Agri-Science, Science and Health (ASHS)
2. Pathway - Arts and Communications (AC)
3. Pathway - Business, Finance, and Information Technology (BFIT)
4. Pathway – Engineering and Industrial Technology (EIT)
5. Pathway - Human Services (HS)

Why Should students Choose a Career Pathway?

- To help focus on a career area that matches interests in high school
- To help set goals and discover classes necessary to achieve those goals
- To create career awareness and encourage planning for post-secondary education and opportunities
- To provide knowledge that relates one's high school education to the world after graduation

How Should Students Use This Information?

When scheduling, students should compare their course selections to their intended pathway to help determine whether their choices meet their post high school goals. Students should seek advice regarding their course selections from their families, counselors, administrators, and teachers.

Agri-Science, Health & Science (ASHS)

Designed to develop students' interests in life, physical, and behavioral sciences. Careers in this pathway are part of the health services field. They include occupations in hospitals, medical technology and medicine, nursing, optometry, pharmacy, psychiatry, psychology, therapy, and others.

Students might select this pathway if they…

- Are interested in the Health Care environment
- Enjoy medical research
- Are interested in environmental issues
- Enjoy conducting experiments
- Enjoy working outdoors
- Enjoy caring for people

Focus Areas

- Health Science
- Agriculture, Food, and Natural Resources
- Science, Technology, and Math

Possible Careers in This Pathway

- Physician
- Athletic Trainer
- Farmer
- Lab Technician
- Nurse
- Biologist
- X-ray Technician
- Animal Sciences Employee
- Veterinarian/Veterinarian Technician
- Occupational Therapist
- Dietician
- Forestry Worker
- Agribusiness Employee

Agri-Science, Health & Science (ASHS)

Recommended Courses for this Pathway

Please Note: Before selecting any course, be sure all prerequisites have been met. Check the course description pages of this booklet for prerequisite requirements.

9th Grade	10th Grade	11th Grade	12th Grade
· Honors Algebra II · Honors Geometry-Trigonometry · Honors Biology · Past, Present, and Future Technologies · Child Development · Introduction to Nutrition for Sports, Health, and Medicine Careers · Parenting and Newborn Development · Introduction to Agriculture · Supervised Ag Experience · Weight Training I · Sustainable Agriculture · Plumbing and Masonry · Introduction to Agricultural Electricity · Agricultural Environmental Resources · Ag Products and Services · Agricultural Biotechnology · Animal Science · Plant and Soil Science · Engines · Foods for Life	**All 9th grade courses plus the following:** · Advanced Math · Honors Advanced Math · Chemistry · Honors Chemistry · Earth Science · Entrepreneurship · Early Childhood Education · Nutritious Cooking · Global Foods · Agriculture Environmental Resources · First Aid/CPR AED Training with Current Issues in Health · Weight Training II · Advanced Food for Life · Farm Management · Agricultural Fabrication, Design, and Restoration 1, 2, and 3 · Introduction to Ag Construction · Introduction to Welding and Metal Working · Horticulture · Vet Science and Small Animals · Landscaping · Engines	**All 10th grade courses plus the following:** · AP Calculus AB · AP Statistics · Probability and Statistics · Calculus · Anatomy and Physiology · Physics · AP Biology · AP Chemistry · You're On Your Own · Invention, Innovation, and Product Development · Advanced Early Childhood Education · Ag Fabrication, Design, and Restoration 4 and 5	**All 11th grade courses plus the following:** · MPower · AP Physics · Science Technician · AP Psychology · Cooperative Supervised Ag Experience · Tech Elective Agriculture · Science Technician

Note: The recommended pathway courses are to be used as a guide in selecting coursework in accordance with your future.

Arts & Communication (AC)

Designed to develop students' awareness, interpretation, application, and production of visual, verbal, and written work. Careers in this pathway are linked to the humanities and include the performing and visual arts, literary arts, and the communication media.

Students might select this pathway if they…

- Are interested in art, music or writing
- Are creative and enjoy entertaining others
- Are good communicators
- Are open-minded
- Like to work in teams

Focus Areas

- Performing Arts
- Visual Arts
- Publishing Arts

Possible Careers in This Pathway

- Designer
- Singer
- Musician
- Journalist
- Public Relations Professional
- Speaker
- Columnist
- Artist
- News Anchor
- Commercial Artist
- Telecommunications Professional
- Graphic Artist
- Film Maker
- Screen Printer
- Videographer
- Photographer

Arts & Communication (AC)

Recommended Courses for this Pathway

Please Note: Before selecting any course, be sure all prerequisites have been met. Check the course description pages of this booklet for prerequisite requirements.

9th Grade	10th Grade	11th Grade	12th Grade
· Honors English Language Arts 9 · Crafts · Drawing · Lettering and Design · Painting · Pottery · Sculpture · Beginning Guitar · Advanced Guitar · Music Keyboarding I · Music Keyboarding II · Concert Choir · Concert Band · Concert Band/Concert Choir · Orchestral Strings · Music Appreciation · Music in Theater and Film · Past, Present, and Future Technology · Engineering Design · Graphic Communication · Digital Media · Digital Imaging · Fashion Design and Textiles · Foods for Life · Introductory Baking · Morning Video Production · Introduction to Yearbook · Marketing	**All 9th grade courses plus the following:** · Honors American Literature · Introduction to Creative Writing · American History Through Film · Advanced Painting · Advanced Pottery · Jazz and Popular Music · Intermediate Yearbook · Advanced Engineering Design · Advanced Communication Technology · Advanced Fashion Design and Textiles · Nutritious Cooking · Advanced Foods for Life · Global Foods · Advanced Morning Video Production	**All 10th grade courses plus the following:** · Asian-American Novel Study · Introduction to Women in Literature · Honors British Literature · Honors World Literature · AP English Language and Composition · AP English Literature and Composition · Portfolio Art · Music Theory I · Music Theory II · Advanced Yearbook · Yearbook Executives	**All 11th grade courses plus the following:** · AP Studio Art 2-D · MPower

Note: The recommended pathway courses are to be used as a guide in selecting coursework in accordance with your future.

Business, Finance, & Information Technology (BFIT)

Designed to prepare students for careers in the world of business, finance, and information services. Careers in this pathway are in the fields of business and marketing. Some occupations include those in advertising and merchandising

Students might select this pathway if they…

- Are interested in a business environment
- Like buying and selling merchandise
- Are interested in accounting
- Plan on owning their own business
- Like working in groups and planning events
- Like working with technology

Focus Areas

- Business Management
- Finance
- Marketing Sales and Service
- Information Technology

Possible Careers in This Pathway

- Accountant
- Entrepreneur
- Web Master
- Financial Planner
- Banker
- Event Planner
- Stockbroker
- Bank Teller
- Store Manager
- Advertising Agent
- Administrative Support Person
- Real Estate Expert
- Insurance Agent
- Computer Science Person
- e-Commerce Director
- Tourism Agent

Business, Finance, & Information Technology (BFIT)

Recommended Courses for this Pathway

Please Note: Before selecting any course, be sure all prerequisites have been met. Check the course description pages of this booklet for prerequisite requirements.

9th Grade	10th Grade	11th Grade	12th Grade
· Lettering and Design · Computer Applications · Introduction to Business · Manufacturing Enterprise · Computer Programming · Morning Video Production · Marketing · Introduction to Yearbook	**All 9th grade courses plus the following:** · Entrepreneurship · Advanced Morning Video Production · Business Law · Advanced Computer Applications · Intermediate Yearbook	**All 10th grade courses plus the following:** · Probability and Statistics · Economics · Introduction to Financial Accounting · You're on Your Own · Independent Programming I · Independent Programming II · Advanced Yearbook · Yearbook Executives	**All 11th grade courses plus the following:** · Accounting II · MPower

Note: The recommended pathway courses are to be used as a guide in selecting coursework in accordance with your future.

Engineering & Industrial Technologies (EIT)

Designed to develop students' interests, awareness, and application to areas related to technologies necessary for design, development, installation, and maintenance of physical systems. Careers in this pathway are related to engineering, science technology, construction, manufacturing, and transportation.

Students might select this pathway if they…

- Enjoy building things
- Enjoy math and science
- Like designing systems
- Are detail oriented
- Are able to work in a team setting

Focus Areas

- Construction and Architecture
- Manufacturing
- Engineering and Engineering Technology
- Transportation, Distribution, and Logistics

Possible careers in This Pathway

- Engineer
- Dispatcher
- Drafter
- Machinist
- Carpenter
- Plastics
- Assembler
- Architect
- Carpenter
- Warehouse Manager
- Auto Mechanic
- Equipment Operator
- Health and Safety Manager
- Plumber
- Welder
- Mason
- Electrician
- Machine Operator

Engineering & Industrial Technologies (EIT)

Recommended Courses for this Pathway

Please Note: Before selecting any course, be sure all prerequisites have been met. Check the course description pages of this booklet for prerequisite requirements.

9th Grade	10th Grade	11th Grade	12th Grade
· Honors Algebra II · Honors Geometry-Trigonometry · Engineering Design · Past, Present, and Future Technologies · Energy, Power, and Transportation · Electronic Principles and Applications · Architectural CAD · Non-Metallic Materials · Manufacturing Enterprise · Graphic Communication · Digital Media · Digital Imaging · Plumbing and Masonry · Intro to Ag Electricity · Introduction to Agriculture	**All 9th grade courses plus the following:** · Trigonometry with · Selected Topics · Advanced Math · Honors Advanced Math · Chemistry · Honors Chemistry · Earth Science · Advanced Engineering Design · Advanced Energy, Power, and Transportation · Advanced Electronic Principles and Applications · Advanced Architectural CAD · Advanced Non-Metallic Materials · Innovation and Technology · Advanced Communication Technology · Introduction to Agriculture · Introduction to Ag Construction · Ag Construction · Intro to Welding and Metal Working · Engines · Ag Engines and Tractors · Agriculture Fabrication, Design, and Restoration 1, 2, and 3	**All 10th grade courses plus the following:** · Calculus · AP Calculus · Probability and Statistics · AP Statistics · Physics · AP Chemistry · Invention, Innovation, and Product Development · Architectural Computer Aided Drafting – Penn College NOW Course · Ag Fabrication, Design, and Restoration 4 and 5	**All 11th grade courses plus the following:** · AP Physics · Cooperative Supervised Ag Experience · Tech Elective Agriculture · Science Technician · MPower

Note: The recommended pathway courses are to be used as a guide in selecting coursework in accordance with your future.

Human Services (HS)

Designed to develop students' interests, skills, and experiences for employment in careers related to human needs. Careers in this pathway are linked to family/consumer science, economic, and political and social systems. Some occupations in this career focus area include those in hospitality and recreation, public and community service, and the broad field of social services.

Students might select this pathway if they…

- Are interested in caring for people
- Enjoy communicating with people
- Like to help others reach their potential
- Like to serve others' needs
- Enjoy working with children and the elderly
- Recognize others' differences

Focus Areas

- Education
- Counseling, Family, and Consumer Science
- Law, Public Safety, and Government
- Hospitality and Tourism

Possible Careers in This Pathway

- Counselor
- Chef/Caterer
- Dispatcher
- Postal Clerk
- Teacher
- Lawyer
- Police Officer
- Salesperson
- Military Officer
- Hotel Manager
- Military Officer
- Government Worker
- Cosmetologist
- Sales Consultant
- Dispatcher
- Sports Recreation Employee

Human Services (HS)

Recommended Courses for this Pathway

Please Note: Before selecting any course, be sure all prerequisites have been met. Check the course description pages of this booklet for prerequisite requirements.

9th Grade	10th Grade	11th Grade	12th Grade
· Honors American Cultures I · Child Development · Introduction to Nutrition for Sports, Health, and Medicine Careers · Parenting and Newborn Development · Foods for Life · Introductory Baking · Global Foods · Weight Training I	**All 9th grade courses plus the following:** · Trigonometry with Selected Topics · Earth Science · American History Through Film · Holocaust & Genocide Studies · Honors American Cultures II · AP United States History · Early Childhood Education · Nutritious Cooking · Advanced Foods for Life · First Aid/CPR/AED training with Current Issues in Health · Weight Training II	**All 10th grade courses plus the following:** · Honors World Cultures · Probability and Statistics · Anatomy and Physiology · AP European History · You're on Your Own · Advanced Early Childhood Education	**All 11th grade courses plus the following:** · AP Psychology · MPower

Note: The recommended pathway courses are to be used as a guide in selecting coursework in accordance with your future.

English Language Arts

Faculty

- Mr. Clemens
- Mrs. Corman
- Mrs. Faunce
- Mrs. Mowery
- Mrs. Zimmerman

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C036 AP English Language and Composition

NCAA Approved **CAREER PATHWAY: AC**

AP English Language and Composition is an advanced placement course in which students read nonfiction and prose to explore the use of rhetoric in writing. Students write expository, analytical, persuasive, and informative essays. Through extensive reading and writing, students become writers on a college level. There are extensive summer reading and writing assignments. Students are expected to take the AP Exam in May.
Prerequisite: Students write a timed essay to be reviewed and submit two teacher recommendations. A performance contract is signed by a parent/guardian and student. Students must have a minimum of an 86% and be proficient on the Keystone Literature Exam to consider this class.

Various texts as approved by The College Board
CREDIT: 1.00 GRADE: 11 (recommended) or 12 PREREQ: Recommended as Noted

C035 AP English Literature & Composition

NCAA Approved **CAREER PATHWAY: AC**

AP English Literature and Composition is an advanced placement course in which students read literary works in the genres of fiction, verse, drama, and essay. Students study the work, characters, conflicts, and themes, and analyze structure, meaning, value and relationship to contemporary experience as well as historical context. Through extensive reading and writing, students learn to analyze literature and synthesize their findings in writing on a college level. There are extensive summer reading and writing assignments. Students are expected to take the AP Exam in May.
Prerequisites: Students write a timed essay to be reviewed and submit two teacher recommendations. A performance contract is signed by a parent and student. Students must have a minimum of an 86% and be proficient on the Keystone Literature Exam to consider this class.

Various texts as approved by The College Board
CREDIT: 1.00 GRADE: 12 (recommended) or 11 PREREQ: Recommended as Noted

C007 Career Communications

During the Career Communications semester, students explore the many facets of planning for their futures. Students use online tools to gain in-depth insight into the following topics: career exploration, budgeting, post-secondary exploration, and job skills. For each of the topics, students apply what they have learned in authentic, "real-life" ways. This course helps students develop an accurate view of life after high school. Students evaluate their dreams about their futures considering the reality of today's society, culture, and economy. Students set goals for their future and modify them based on what they learn throughout the course. Students create a five-year plan toward the end of the semester based on what they have learned about career communications and themselves. Students must take this ELA course in ninth grade.

7 Habits of Highly Effective Teens by Sean Covey
CREDIT: .50 GRADE: 9 PREREQ: None

English Language Arts

C004 ELL (English Language Learner) Communications

ELL Communications is a Communications course designed for students whose primary language is one other than English. Students taking this course are enrolled in the English as a Secondary Language program. Students participate in activities and are guided in lessons that are specifically designed to meet their English language needs in the domains of listening, speaking, reading, and writing. The focus of this course is a mix of grammar, language study, guided reading, and guided writing. The students in this course will complete the World-Class Instructional Design and Assessment (WIDA) when administered.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Administrative Assignment

C005 English Language Arts 9 NCAA Approved

English Language Arts 9 is designed to increase knowledge and appreciation for our literary heritage through a survey study of literature involving oral and written interpretation and evaluation. The areas of study are addressed thematically and by genre including authors from around the world during a variety of time periods. The survey includes fiction and non-fiction short prose, poetry, a play, and a novel. There is also an emphasis on improving writing skills including composing better sentences, paragraphs, and process essays through the creation of expository, persuasive, and literary analysis, as well as a research paper.

Prentice Hall Literature: Gold. Pearson Education, 2005
CREDIT: 1.00 GRADE: 9 PREREQ: None

C027 English Language Arts 11 NCAA Approved

This course is designed to increase appreciation, comprehension, and knowledge of literary heritage through a study of World Literature, involving oral and written interpretation and evaluation. The areas of study are addressed by continent through various authors and time periods. The survey of literature includes fiction, non-fiction, short prose, poetry, and two novels. There is a strong emphasis on improving writing skills, sentence composition, paragraph construction, and essays. Essays written throughout the course include expository, literary analysis, persuasive, and research. Additionally, there is a strong emphasis on critical analysis of present-day, non-fiction pieces.

Prentice Hall Literature: Platinum. Pearson Education, 2005
CREDIT: 1.00 GRADE: 11 PREREQ: None

C038 English Language Arts 12 NCAA Approved

This course is an intensive study of reading and writing practices to allow each student to continue to improve his or her skills. The course includes reading technical non-fiction, literary non-fiction and fiction from a variety of sources including British literature textbooks. There will also be four major process papers throughout the year. This course is assigned in collaboration with IEP case managers, classroom teachers, school counselors and administrators based on need shown through Keystone testing, Lexile levels, formative classroom assessments and other appropriate educational data. This class fulfills the 5th English credit required by School Board policy for students who remain in the High School their senior year.

CREDIT: 1.00 GRADE: 12 PREREQ: Administrative Approval

CO17 English Language Arts 10 NCAA Approved

This course is designed to increase knowledge and appreciation for our literary heritage through a study of American literature involving oral and written interpretation and evaluation. The areas of study begin with the first European settlers in North America and continue through modern times, focusing on a variety of American writers of both fiction and non-fiction short prose, poetry, and a novel. There is also an emphasis on improving writing skills including composing better sentences, paragraphs, and process essays through the creation of expository, persuasive, and literary analysis, and a research paper. Students are required to complete the Keystone Literature Exam in May.

Prentice Hall Literature: American Tradition. Pearson Education, 2005
CREDIT: 1.00 GRADE: 10 PREREQ: None

English Language Arts

C025 Honors American Literature NCAA Approved
CAREER PATHWAY: AC

This course is designed to develop reading strategies through a study of American literature involving oral and written interpretation and evaluation. The areas of study include both fiction and non-fiction short prose, poetry, and a novel. There is also an emphasis on improving writing skills including composing better sentences, paragraphs, and process essays through the creation of expository, persuasive, and literary analysis, and a research paper.
A minimum average of 86% in Honors English Language Arts or 90% in English Language Arts is required.

Prentice Hall Literature: The American Experience. Timeless Voices, Timeless Themes. Pearson Education, 2005
CREDIT: 1.00 GRADE: 10 PREREQ: Recommended as Noted
Courses with ten (10) or fewer students will not be scheduled without justification.

C037 Honors British Literature NCAA Approved
CAREER PATHWAY: AC

This course is designed to increase knowledge and appreciation for our literary heritage through a study of British literature, involving oral and written interpretation and evaluation. The areas of study begin with the Anglo-Saxons and continue through modern times, focusing on a variety of British writers of both fiction and non-fiction, a Shakespearean play, and a novel. There is also an emphasis on improving writing skills including composing better sentences, paragraphs, and process essays through the creation of expository, persuasive, and literary analysis, and a research paper.
A minimum average of 86% in Honors English Language Arts or 90% in English Language Arts is required to schedule this course. This course may be taken in the junior or senior year

Prentice Hall Literature: The British Tradition. Pearson Education, 2005
CREDIT: 1.00 GRADE: 11 or 12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

C003 Honors English Language Arts 9 NCAA Approved
CAREER PATHWAY: AC

In ninth grade, students focus on analysis of reading and analytical writing grounded in evidence from text. Focusing on deciphering perceptions of truth and reality, students determine and evaluate an author's ideas, arguments, specific claims, and counterclaims. Students examine reasoning, both others' and their own, for validity and relevant evidence. They also identify fallacious reasoning and false statements. Ninth graders analyze an author's use of rhetoric to advance a point of view or purpose. Students analyze how the author unfolds an analysis or series of ideas or arguments, including the order in which the points are made, how they are introduced and developed, as well as the connections made between them. Students acquire and use with independence academic and domain specific vocabulary at the college and career readiness level. This course has an Honors level rigor due to the pacing and depth of content as well as the complexity and sophistication of the texts read.
A minimum average of 86% in Communications 8 is required to schedule for this course.

Prentice Hall Literature: Gold. Pearson Education, 2005
CREDIT: 1.00 GRADE: 9 PREREQ: Recommended as Noted

C015 Honors World Literature NCAA Approved
CAREER PATHWAY: AC

This course is designed to accelerate knowledge in a vigorous fashion to increase comprehension and appreciation for our literary heritage through a study of World literature, involving oral and written interpretation and evaluation. The areas of study are addressed by continent, including authors from around the world during a variety of time periods. The survey includes fiction and non-fiction short prose, poetry, and two novels. There is also an emphasis on improving writing skills including composing better sentences, paragraphs, and process essays through the creation of expository, persuasive, and literary analysis, and a research paper.
A minimum average of 86% in Honors English Language Arts or 90% in English Language Arts is required to schedule this course.

Prentice Hall Literature: Platinum. Pearson Education, 2005
CREDIT: 1.00 GRADE: 11 or 12 PREREQ: Recommended as Noted
Courses with ten (10) or fewer students will not be scheduled without justification.

English Language Arts

C009 Research Writing and Public Speaking NCAA Approved

During the Research Writing and Public Speaking semester, students explore the many facets and types of public speaking. Public speaking is a fear many people have, yet it is an essential and vital life skill for college and career readiness. This course is designed to help students build essential skills and gain confidence in their ability to speak in front of others in a variety of contexts and for various purposes. The semester begins by introducing students to the nature and common characteristics of all types of public speaking, including historical philosophies of rhetoric. Students begin giving various speeches to the class starting with simple, less intimidating types and topics to more intensive, challenging types and topics**.** Students may take this ELA course in either ninth or tenth grade**.**

Teacher created lessons – no textbook
CREDIT: .50 GRADE: 9 or 10 PREREQ: None

C041 Asian-American Novel Study **CAREER PATHWAY: AC**

Literature is a place where immigrants and the children of immigrants can tell their stories. Some of these stories reveal the horrors of war-torn lands left behind. Others chronicle the experiences of those who live in America and who work to reconcile the cultures they grew up in with their adopted cultures. No two immigrant stories are the same, even if they reflect common experiences. What happens to a person's self when placed in a new setting is studied.

Course Created by Staff
Required Reading: American Born Chinese by Gene Luen Yang
The Namesake by Jhumpa Lahiri
The Joy Luck Club by Amy Tam

CREDIT: .50 GRADE: 11 or 12 PREREQ; 80% in an ELA course taken the previous school year
Courses with ten (10) or fewer students will not be scheduled without justification.

C042 Introduction to Creative Writing **CAREER PATHWAY: AC**

Introduction to Creative Writing is an elective half-credit course that provides interested students the opportunity to explore the elements and craft of various modes of creative writing. Students will read and write in the various genres of creative writing such as poetry, literary nonfiction, drama, and fiction. Throughout the semester, students will create a portfolio of their writing and will choose one piece (or several shorter pieces of the same genre) to focus on for their capstone project. The capstone project will be heavily revised through peer and teacher feedback and will be the culminating representation of students' skills and progress in the area of creative writing. Students will be encouraged to and supported in seeking out opportunities to submit for publication, specifically reputable places that accept and publish creative works written by high school students.

Course Created by Staff
CREDIT: .50 GRADE: 10, 11 or 12 PREREQ; 80% in an ELA course taken the previous school year
Courses with ten (10) or fewer students will not be scheduled without justification.

C043 Introduction to Women in Literature **CAREER PATHWAY: AC**

Introduction to Women in Literature is an elective half-credit course that begins by asking the question "What is Women's Literature?" and proceeds through a variety of readings to expose students to the gamut of women's lives and concerns as represented in literature. Over the course of this class, students will familiarize themselves with the writing of women from a variety of genres (poetry, fiction & nonfiction) and will examine how these works voice similar or differing concerns depending on the writers' race and class. This class will also examine the changing perspectives (or not) of women writers from the 19th century to the present day. To this end, students will be reading selections focused on a theme or idea represented in women's literature from different historical periods.

Course Created by Staff
Required Reading: Pride and Prejudice by Jane Austin
CREDIT: .50 GRADE: 11 and 12 PREREQ: 80% in ELA 10 or Honors ELA 10
Courses with ten (10) or fewer students will not be scheduled without justification.

World Languages

Faculty

- Mrs. Deegan
- Ms. Bower
- Mr. Prosseda

FL40 French I NCAA Approved **CAREER PATHWAYS: ALL**

French I is an introductory course in which students begin to listen to, speak, read, and write the language. Students become accustomed to the sounds of the language and correct pronunciation. French is spoken in the classroom as much as possible. Students learn vocabulary and basic grammar through oral and written drills and build their skills through a variety of activities including games, CD's, films, and conversation. They also learn about the culture of France and other French-speaking countries.

Various Resources Used

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: None

Courses with ten (10) or fewer students will not be scheduled without justification.

FL45 French II NCAA Approved **CAREER PATHWAYS: ALL**

French II continues for students to learn about the culture of French-speaking countries as well as new vocabulary. Students are encouraged to speak actively in the classroom. The reading passages are longer, and grammar becomes more complex. Students continue to increase proficiency in reading, writing, speaking, and listening through a variety of resources and activities.

Various Resources Used

CREDIT: 1.00 GRADE: 10,11,12 PREREQ: French I

Courses with ten (10) or fewer students will not be scheduled without justification.

FL52 French III NCAA Approved **CAREER PATHWAYS: ALL**

French III uses a variety of texts and activities to increase fluency in listening, speaking, reading, and writing the French language. Students are expected to speak French in the classroom whenever possible, including more class discussion and oral presentations. Vocabulary and grammar skills are increased through longer, more challenging reading and writing assignments. Students continue to learn about the culture of French-speaking countries and complete a unit on French cuisine. A minimum average of 86% in French II is required to schedule this course.

Various Resources Used

CREDIT: 1.00 GRADE: 11,12 PREREQ: French I, II

Courses with ten (10) or fewer students will not be scheduled without justification.

FL56 French IV NCAA Approved **CAREER PATHWAYS: ALL**

French IV provides students the opportunity to practice reading, writing, speaking, and listening to the French language through a variety of texts and activities. Students are expected to speak in French whenever possible, including class discussion and oral presentations. Grammar and vocabulary are reinforced through reading and writing assignments. Students continue to learn about the culture of French-speaking countries and research French history, including well-known historical figures. They also complete the Auto-Portrait or Self Portrait, which they present to the class. A minimum average of 86% in French III is required to schedule this course.

Various Resources Used

CREDIT: 1.00 GRADE: 12 PREREQ: French I, II, III

Courses with ten (10) or fewer students will not be scheduled without justification.

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World Languages

FL41 Spanish I NCAA Approved **CAREER PATHWAYS: ALL**

Spanish I is an introductory course with emphasis on learning the sounds and pronunciation of the Spanish language. This is accomplished by learning vocabulary, grammar and phrases that relate to the students themselves, their families and friends as well as telling time, talking about the weather, their school, their hobbies, and activities. Students are given the opportunity to listen to, speak, read, and write in Spanish by using tapes, participating in class, and completing frequent homework.

A Natural Approach to the Year. Hargaden, Tina; Slavic, CI Liftoff, 2018

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: None

Courses with ten (10) or fewer students will not be scheduled without justification.

FL47 Spanish II NCAA Approved **CAREER PATHWAYS: ALL**

Spanish II continues with an intense study of grammar and vocabulary. In addition to the text, students read two short books which reinforce the lessons being taught in the text. Students are encouraged to give more lengthy responses in answer to questions than just the cued responses from Spanish I. Students are introduced to some of the literature of Spain by watching Man of La Mancha and studying its author, Miquel Cervantes. Increased written and verbal expressions are stressed.

A Natural Approach to the Year. Hargaden, Tina; Slavic, CI Liftoff, 2018

CREDIT: 1.00 GRADE: 10,11,12 PREREQ: Spanish I

Courses with ten (10) or fewer students will not be scheduled without justification.

FL53 Spanish III NCAA Approved **CAREER PATHWAYS: ALL**

Spanish III includes a review of Spanish grammar and continues to refine rules learned previously. Two more short stories are read, giving the students an opportunity to speak and write to increase their fluency. A unit on the early history of Spain is also a part of the third year of study. Reinforcement of vocabulary and grammar as well as idiomatic expressions is stressed while incorporating new patterns. A minimum average of 86% in Spanish II is required to schedule this course.

Various Resources Used

CREDIT: 1.00 GRADE: 11,12 PREREQ: Spanish I, II

Courses with ten (10) or fewer students will not be scheduled without justification.

FL57 Spanish IV NCAA Approved **CAREER PATHWAYS: ALL**

Spanish IV provides students with the opportunity to read and discuss several literary pieces representing several Spanish speaking countries and various writing styles. Classroom discussion is practiced daily with students required to express themselves entirely in Spanish. Written assignments are used to study grammar and vocabulary. A journal is kept in Spanish giving students the opportunity to write daily in the language. A minimum average of 86% in Spanish III is required to schedule this course.

Various Resources Used

CREDIT: 1.00 GRADE: 12 PREREQ: Spanish I, II, III

Courses with ten (10) or fewer students will not be scheduled without justification.

Mathematics

Faculty

- Mr. Bailey
- Ms. Confair
- Mr. Dressler
- Mr. Fetterolf
- Mr. Kiss

2022-2023 Course Selection Guide

170 Advanced Math NCAA Approved **CAREER PATHWAYS: ASHS, EIT**

Advanced Math seeks to strengthen Algebra skills required for the study of more advanced mathematics such as Probabilities & Statistics and Calculus. Topics include axioms of the real numbers, analytic geometry, sketching algebraic functions, logarithms, sequences, series, and limits.

Course created by staff.
CREDIT: 1.00 GRADE: 10,11,12 PREREQ: Algebra I, II, Geometry, Trig

121 Algebra I NCAA Approved

Algebra 1 builds on the fundamental mathematical operations of real numbers. An emphasis is placed on solving and graphing linear equations and inequalities. Additionally, topics such as solving and graphing systems of linear equations and inequalities, solving and graphing quadratic equations, and topics of probability are explored. Students are required to complete the Keystone Algebra I exam in May.

Algebra 1. Glencoe McGraw-Hill, 2018
CREDIT: 1.00 GRADE: 9, 10 PREREQ: Pre-Algebra or satisfied Algebra I

130 Algebra II NCAA Approved

Algebra II is an extension of the topics studied in Algebra I, including solving and graphing linear equations and inequalities. An emphasis is placed on topics such as solving and graphing polynomial functions and solving and graphing rational functions.

Algebra 2 A Bridge to Success. Big Ideas Learning, Ron Larson and Laurie Boswel, 2019
CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Algebra I

165 AP Calculus AB NCAA Approved **CAREER PATHWAYS: ASH, EIT**

AP Calculus AB is an advanced placement course that is offered at the level of expectation necessary for a student to receive at least a 3 on the *College Board's Calculus AB* placement exam. Students should expect the amount of out-of-class work and comprehension to be similar to nearly a full-year of college calculus. Student grades are mostly awarded based on demonstrated mastery with respect to the *College Board's* goals and objectives for this course. Exams are timed and have calculator and non-calculator portions. In considering enrollment in the class, the College Board states that, *"Before studying calculus, students should complete four years of secondary mathematics designed for college-bound students: courses in which they study algebra, geometry, trigonometry, analytic geometry and elementary functions. These functions include those that are linear, polynomial, rational, exponential, logarithmic, trigonometric, inverse trigonometric and piecewise defined. In particular, before studying calculus, students must be familiar with the properties of functions, the algebras of functions, and the graphs of functions. Students must also understand the language of functions (domain and range, odd and even, periodic, symmetry, zeros, intercepts, and so on) and know the values of trigonometric functions of the numbers* 0, *and their multiples."*
A minimum average of 86% average in Honors Advanced Math and Honors Geometry/Trigonometry is required to schedule this course. Students must be proficient or advanced on the Algebra I Keystone Exam.

Calculus of a Single Variable. Cengage Learning. Ron Larson and Bruce Edwards, 2019 11th ed, AP
CREDIT: 1.00 GRADE: 11, 12 PREREQ: 86% or above in Honors Geometry/Trigonometry and Honors Advanced Math

Mathematics

166 AP Statistics NCAA Approved

CAREER PATHWAYS: ASHS, EIT

AP Statistics has a purpose to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. This course draws connections between all aspects of the statistical process, including design, analysis, and conclusions. Additionally, using the vocabulary of statistics in this course teaches students how to communicate statistical methods, results, and interpretations. Students learn how to use graphing calculators and read computer output to enhance the development of statistical understanding. Curriculum for this course follows the AP Statistics curriculum set by *The College Board* and is designed to prepare students for the AP Statistic exam. Students should expect the amount of out-of-class work and comprehension to be similar to nearly a full-year of college statistics. A minimum average of 86% average is required in previous math courses to schedule this course. An entrance exam may be used. Students must be proficient or advanced on the Algebra I Keystone Exam.

The Practice of Statistics. Freeman, Starnes. Yates, & Moore, 2012 (4th)

CREDIT: 1.00 GRADE: 11, 12 PREREQ: 86% or higher in Geometry or an Honors Math course

140 Geometry NCAA Approved

CAREER PATHWAYS: ASHS, EIT

Geometry investigates the properties of plane figures and introduces mathematics as a pure science. Topics include deductive and inductive reasoning, parallel lines, congruent and similar triangles, quadrilaterals, circles, and areas of plane figures.

Course created by staff.

CREDIT: 1.00 GRADE: 9, 10, 11, 12 PREREQ: Algebra I, II

124 Honors Algebra II NCAA Approved

CAREER PATHWAYS: ASHS, EIT

Honors Algebra II is a continuation of the material studied in Algebra I but on a more advanced level. Aside from the review of Algebra I concepts, the course covers such topics as radical and rational expressions and equations, and imaginary numbers. The main emphasis is placed on having the student recognize Algebra is a study of the structure of the complex numbers and be able to recognize the operations within Algebra as outgrowth from this structure. A minimum average of 86% in Algebra I is required to schedule this course.

Course created by staff.

CREDIT: 1.00 GRADE: 9,10 PREREQ: 86% or higher in Algebra I

125 Honors Geometry-Trigonometry NCAA Approved

CAREER PATHWAYS: ASHS, EIT

Honors Geometry-Trigonometry is designed as part of an Honors program**.** Specifically, it is a one-year course covering the important topics of Geometry and Trigonometry. The first semester focuses on points, lines, angles, parallel planes, congruent triangles, using congruent triangles, similar polygons, right triangles, circles, and areas of plane figures. As part of this study in Geometry, students are assigned independent work over the November and December vacations. The second semester focuses on basic properties of trigonometry, trigonometric functions, circular functions, sinusoidal variation, properties of trigonometric functions, and oblique triangles. In both portions of the course, students will not only be expected to know these concepts but are asked to apply them when solving problems. A minimum average of 86% in the Honors Algebra II course is required to schedule this course. Students must be proficient or advanced on the Algebra I Keystone Exam.

Course created by staff.

CREDIT: 1.00 GRADE: 9,10, 11 PREREQ: 86% or higher in Honors Algebra II

Mathematics

120 Pre-Algebra

Pre-Algebra is a course designed to strengthen basic math skills necessary for success in Algebra 1. The topics covered include Arithmetic properties, factors, and multiples, reading and interpreting data, measurement, fractions, decimals, negative numbers and the coordinate plane, ratio, rates and proportions, equations, expressions and inequalities, exponents, radicals, and scientific notation.

Course created by staff.
CREDIT: 1.00 GRADE: 9 PREREQ: None

145 Honors Advanced Math NCAA Approved

CAREER PATHWAYS: ASHS, EIT

Honors Advanced Math is designed to support the AP Calculus-AB course by developing a repertoire of pre-calculus skills through an in-depth and rigorous study of elementary functions, general principles, and problem-solving techniques. A minimum average of 86% in Honors Geometry-Trigonometry is required to schedule this course. Because of the additional laboratory time built into this course, it is weighted as an Honors course.

Course created by staff.
CREDIT: 1.00 GRADE: 10, 11, 12 PREREQ: Honors Algebra II and Honors Geometry/Trigonometry

172 Probability and Statistics NCAA Approved

CAREER PATHWAYS: ASHS, BFIT, EIT, HS

Probability and Statistics is highly recommended for students who are planning to seek a degree in the social sciences or who want to know how to correctly acquire data, how to analyze data, and determine if data suggests any significant relationships. In addition to being able to conduct quantitative research, the fundamentals of probability and the use of probability in making decisions is studied. Students who need to take calculus while in college should not take this course in lieu of Trigonometry. Geometry may be taken concurrently.

Elementary Statistics Picturing the World. Pearson/Prentice Hall, Larson & Farber, 2009
CREDIT: 1.00 GRADE: 11,12 PREREQ: Algebra I, II, Geometry

150 Trigonometry with Selected Topics NCAA Approved

CAREER PATHWAYS: EIT, HS

Trigonometry with Selected Topics can be divided into four areas of study: trigonometry, graphs, properties of common functions and probability. The areas of emphasis include solving right triangles, finding area of triangles, circular functions, transformations of functions, permutations, and combinations.

Course created by staff.
CREDIT: 1.00 GRADE: 10,11,12 PREREQ: Algebra I, II, Geometry

160 Calculus

CAREER PATHWAYS: ASHS, EIT

Calculus will cover nearly the same material as AP Calculus but not at the pace of an AP Calculus class.

Course created by staff.
CREDIT: 1.00 GRADE: 11 or 12 PREREQ: 86% or higher in Honors Advanced Math or Advanced Math

122 Applied Algebra

Applied Algebra is a course designed to provide students with basic math skills as an alternative to the more complex math courses. Students in this course will have major concepts reinforced such as percents, proportions, measuring, fractions, fraction operations, budgeting, taxes, loans, currency, financial planning, etc. This course is designed as an application course for students who do not want to take Algebra II after Algebra I.

Course Created by Staff
CREDIT: 1.00 GRADE: 11 or 12 PREREQ: Algebra
Courses with ten (10) or fewer students will not be scheduled without justification.

Science

Faculty

- Mrs. Bailey
- Mr. Kiss
- Mr. Maurer
- Mrs. Strohecker
- Mr. Welker
- Mr. Wells

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265 Anatomy and Physiology NCAA Approved

Anatomy and Physiology is a survey course on the structure and function of the organ systems that make up the human body. This course is recommended for students pursuing postsecondary work in the health or medical fields. Textbook required.

Essentials of Anatomy and Physiology. Elaine Marieb, Pearson, 2006
CREDIT: 1.00 GRADE: 11,12 PREREQ: Chemistry & Biology

254 AP Biology NCAA Approved **CAREER PATHWAY: ASHS**

Advanced Placement Biology provides interested students with an opportunity to participate in a college-level experience while in high school with the possibility of advanced placement and/or credits as they enter a college or university. Major biological themes include chemical basis of life, metabolism of cells, genetic continuity, homeostasis in animals and plants, and how populations evolve and are part of ecosystems. All students are strongly encouraged to take the AP exam offered in May.
A minimum average of an 86% in Biology or Honors Biology is required to schedule for this course. Students must be proficient or advanced on the Keystone Biology Exam. It is encouraged that students have taken or are currently enrolled in Probability & Statistics.

CREDIT: 1.00 GRADE: 11, 12 PREREQ: Biology and Chemistry

256 AP Chemistry NCAA Approved **CAREER PATHWAYS: ASHS, EIT**

AP Chemistry is designed to give students an equivalent experience to a full year of a college or university general chemistry course. This course explores the topics previously introduced in chemistry in more depth and at a faster pace. It also introduces several new topics in the second semester that are dependent on previously learned material. The components of the course and the laboratory are designed to mimic the breadth and depth of a typical first year college or university general chemistry course. An emphasis is placed on analytical laboratory experiments and problem-solving. Students are strongly encouraged to take the AP exam in May.
A minimum average of an 86% in Chemistry is required to schedule for this course. Textbook required.

Chemistry-The Central Science. 14th ed, Brown, Lamay, Burstein, Pearson, 2018
AP Chem Test Prep Series. Waterman, Pearson, 2018
CREDIT: 1.00 GRADE: 11 and 12 PREREQ: Chemistry

258 AP Physics NCAA Approved **CAREER PATHWAYS: ASHS, EIT**

AP Physics is designed for students considering careers in science, engineering, or mathematics. The course is comparable to a college level introductory physics course. Students learn the fundamental principles of physics and see how they apply to everyday experiences. Students also explore the mathematics that describe those principles and perform intense mathematical problem-solving. The course includes a lab component where students apply their knowledge of physics as they conduct laboratory experiments and analyze the results. Topics will include kinematics, forces, energy, momentum, rotation, oscillations, and gravity. At the end of the course, students are strongly encouraged to take the AP Physics C – Mechanics exam.
A minimum average of an 86% in Trigonometry and Physics is required to schedule for this course. Alternatively, a minimum average of an 80% in AP Chemistry can take the place of the Physics prerequisite. Textbook required.

Physics for Scientists & Engineers. 4th ed, Randall D. Knight, Pearson,
CREDIT: 1.00 GRADE: 12 PREREQ: Trigonometry and either Physics or AP Chemistry

Science

220 Biology NCAA Approved

Biology is a first-year biology course designed to give students a general introduction to the various facets of biology. Topics include biochemistry, energy, cells, variety and continuity and ecology. This course emphasizes the application biology skills to everyday living and includes a significant amount of laboratory work. Lab reports are required. Every attempt is made to show students that these biology skills are important and can be used during their entire lifetime. Students are required to complete the Keystone Biology exam in May.

Biology. Miller and Levine, Prentice Hall, 2008
CREDIT: 1.00 GRADE: 9, 10 PREREQ: None

211 Biology A

Biology A is devoted to the study of living things and their processes. Throughout the year, this course provides an opportunity for students to develop scientific process skills, laboratory techniques, and an understanding of the fundamental principles of living organisms. Students explore biological science as a process, cell structure and function, classification, diversity of living organisms and their ecological roles. Administrative approval is required. Textbook required.

Biology. Miller and Levine, Prentice Hall, 2008
CREDIT: 1.00 GRADE: 9 PREREQ: Administrative Approval

212 Biology B

Biology B is a continuation of the Biology A course, which is taught in 9th grade. Students continue to explore basic biological principles, the chemical basis for Life, bioenergetics, homeostasis and transport, cell growth and transport, genetics, the theory of evolution, and ecology. Students also develop an understanding of the fundamental principles of living organisms, continue to utilize scientific processes, and learn about the application of this information in their everyday lives. Students are required to complete the Keystone Biology exam in May.

Biology. Miller and Levine, Prentice Hall, 2008
CREDIT: 1.00 GRADE: 10 PREREQ: Biology A

230 Chemistry NCAA Approved

CAREER PATHWAYS: ASHS, EIT

Chemistry is a first-year chemistry course designed to introduce students to the science of chemistry. This course provides an understanding of how the world can be composed of so few components yet be so complex. The student may expect to learn about the nature of matter, its properties, composition, structure, and changes. The course gives students a solid foundation in chemistry in preparation for taking moderately rigorous science courses such as Anatomy & Physiology and Physics. This course is both theoretical and mathematical in nature and includes a significant amount of laboratory work. A degree of mathematical ability is assumed, and considerable emphasis is placed on problem-solving.

No textbook required.
CREDIT: 1.00 GRADE: 10, 11, 12 PREREQ: Algebra I and Biology

210 Earth Science NCAA Approved

CAREER PATHWAYS: ASHS, EIT, HS

Earth Science is a full year course that introduces and explores fundamental concepts of Geology, Astronomy, Meteorology, Oceanography and Environmental Science.

Earth Science. Borr & Hess, Glencoe Science, 2008
Earth Science. Eyline, Vogel, Simmons, Science Explorer, 2001
Earth Science. Spaulding & Namowitz, Heath, 1994
CREDIT: 1.00 GRADE: 10, 11,12 PREREQ: None

Science

215 Honors Biology NCAA Approved

CAREER PATHWAY: ASHS

Honors Biology is designed for the scientifically oriented student preparing to enter an institution of higher learning. A comprehensive survey of the basics of biology is presented within a molecular framework. Topics include biochemistry, energy, cells, variety and continuity and ecology. Most of the study is theoretical, but a significant amount of lab study is also included. Lab reports are required. The depth of content varies from the academic course, and three independent projects are required**.** A minimum average of 86% and teacher/administrative recommendations in 8th grade science is required to schedule this course.

Biology. Miller and Levine, Prentice Hall, 2008

CREDIT: 1.00 GRADE: 9 PREREQ: Recommended as Noted Above

231 Honors Chemistry

CAREER PATHWAYS: ASHS, EIT

Honors Chemistry is a first-year chemistry course designed to introduce students to the science of chemistry. This course provides an understanding of how the world can be composed of so few components yet be so complex. The student may expect to learn about the nature of matter, its properties, composition, structure, and changes. The course will give students a solid foundation in chemistry in preparation for taking more rigorous science courses such as AP Chemistry and AP Biology. This course is both theoretical and mathematical in nature and includes a significant amount of laboratory work. A degree of mathematical ability is assumed, and considerable emphasis is placed on problem solving.
A minimum average of 86% in Honors Biology is required to schedule this course.

CREDIT: 1.00 GRADE: 10,11 PREREQ: Algebra I and Honors Biology

250 Physical Science NCAA Approved

Physical Science is a survey course introducing fundamental concepts of Physics and Chemistry by exploring relationships between matter and energy. Students investigate forces and motion, energy, and the structure, properties, and interactions of matter. Such concepts are taught and reinforced using lectures, discussions, demonstrations, problem solving, and lab work.

Physical Science. Dobson, Holman, Robeak, Holt, 2013
Physical Science. Wysesson, Frank, Yancopoulos, Prentice Hall, 2009

CREDIT: 1.00 GRADE: 11,12 PREREQ: None

260 Physics NCAA Approved

CAREER PATHWAYS: ASHS, EIT

Physics is a survey course that introduces students to the major topics of physics. It is designed to build an understanding of a variety of physics concepts, show how they apply to everyday experience, and use them to solve problems. Topics include mechanics (kinematics, forces, momentum, and energy), waves (light and sound) and the fundamental forces of nature (gravity, electricity, magnetism, nuclear). The course includes demonstrations, projects, and a significant amount of laboratory work. A degree of mathematical ability is assumed, and considerable emphasis is placed on problem-solving. Knowledge of mathematical functions and trigonometry is helpful but not required. Because of the additional laboratory time built into this course, it is weighted as an Honors course.

The Physics of Everyday Phenomena. McGraw Hill, 2012

CREDIT: 1.00 GRADE: 11, 12 PREREQ: Algebra II and Chemistry

Social Studies

Faculty

- Mrs. Dressler
- Mr. Maneval
- Mr. Murray
- Mrs. Reitenbach
- Mr. Zimmerman

2022-2023 Course Selection Guide

300 American Cultures I NCAA Approved

American Cultures I is a full year course for students in ninth grade that combines the study of the United States from the writing of the Constitution through the Civil War/Reconstruction era. It emphasizes how background issues helped shape the system of government of the United States. Students study national, state, and local governmental systems. Students examine what it means to be a citizen from a historical perspective and gain an increased awareness of a citizen's responsibilities in today's democratic society.

American History. Educational Advisory Panel, HMH Social Studies. Houghton Mifflin Harcourt Publishing Company, 2018

CREDIT: 1.00 GRADE: 9 PREREQ: None

313 American Cultures II NCAA Approved

American Cultures II is the full year companion course to American Cultures I designed for students in tenth grade. Students examine America's experience from the post-Reconstruction/development of the Industrial Age to the present day. Utilizing a humanities-based approach, students research and complete formal writing assignments and projects.

American History. Educational Advisory Panel, HMH Social Studies, Houghton Mifflin Harcourt Publishing Company, 2018

CREDIT: 1.00 GRADE: 10 PREREQ: None

332 AP European History NCAA Approved **CAREER PATHWAY: HS**

AP European History is a college level survey course that introduces students to the major events, people, and themes of European History from 1350 to the present day. It is a part of a cooperative endeavor by high schools, colleges, and the College Board to provide motivated students the challenge and opportunity to earn college credits while in high school. Performance on the AP European History Exam determines a student's eligibility to earn college credit. This course's curriculum, materials, and expectations are designed to prepare students for success on the three-hour exam. The overall purpose of this course, however, extends beyond the opportunity for earning college credits by providing students the opportunity to develop life skills and knowledge that will form a foundation for their continuing educational endeavors. A minimum average of 86% in Honors American Cultures II or AP US History or 90% in American Cultures II is required to schedule this course. Students must be proficient or advanced on the Keystone Literature Exam.

Western Civilization. Jackson Spievogel, Ninth Edition, Cengage Learning, 2016

CREDIT: 1.00 GRADE: 11 PREREQ: Recommended as Noted

Social Studies

333 AP United States History NCAA Approved

CAREER PATHWAY: HS

AP United States History is a college level survey course that introduces students to the rich political, social, economic, and intellectual heritage of the United States. It is part of a cooperative endeavor by high schools, colleges, and the College Board to provide motivated students the challenge and opportunity to earn college credits during their high school years. Performance on the AP US History Exam determines a student's eligibility to earn college credit. The curriculum, material, and expectations for this course are designed to prepare students for success on the three-hour exam. The overall purpose of the course, however, extends beyond the possibility of earning college credit by providing students the opportunity to develop the life skills and knowledge that will form a foundation for their continuing educational endeavors. A minimum average of 86% in Honors American Cultures I or 90% in American Cultures I is required to schedule this course.

The American Pageant. David M. Kennedy & Lizabeth Cohen, 15th Edition, Cengage Learning, 2013
CREDIT: 1.00 GRADE 12 PREREQ: Recommended as Noted Above

344 AP Psychology NCAA Approved

CAREER PATHWAYS: ASHS, HS

AP Psychology is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. This course is taught at the college level with the focus on taking the AP Psychology Exam at the end of the year. The major difference between a high school and college course is the amount of reading and depth of focus. Students are required to cover material on their own. The AP curriculum stresses higher order thinking skills within a rigorous academic context. Students are required to frequently analyze, synthesize, and evaluate primary and secondary sources in addition to memorizing, comprehending, and applying facts.

Myers' Psychology for AP. David G. Myers, 2nd Edition, BFW/Worth Publisher, 2014/2011
CREDIT: 1.00 GRADE 12 PREREQ: None

330 Consumer Economics

Consumer Economics is a full-year course for students in eleventh grade designed to provide each student with an understanding of economics utilizing the basic money management and practical knowledge skills necessary to be a productive member in society. The study of economics includes the basic knowledge of the characteristics of economic systems, how markets establish prices, how scarcity and choice affect the allocation of resources, the global nature of economic interdependence. This course focuses on topics such as credit, savings and checking accounts, purchasing a car, renting an apartment or house, income taxes, insurances, local government operations, and contracts, warranties, and wills to infuse real-life situations into the economics topic. A variety of real-life activities will help each student reach the goals of this course.

Economic Education for Consumers. Roger LeRoy Miller and Alan D. Stafford, 3rd Edition, Thomson/Wadsworth, 2006
CREDIT: 1.00 GRADE: 11 PREREQ: None

320 Economics NCAA Approved

CAREER PATHWAY: BFIT

Economics is a full-year course for students in eleventh grade that focuses on the basic economic problem of scarcity and how society reacts to limited resources versus unlimited wants. Economics is concerned with the behavior of individuals and institutions engaged in the production, exchange, and consumption of goods and services. The study of economics includes the basic knowledge of the characteristics of economic systems, how markets establish prices, how scarcity and choice affect the allocation of resources, the global nature of economic interdependence and how work and earnings impact productivity. This course also focuses on how students can successfully enter the work world and make informed decisions about money, spending and investments. This course is recommended for students planning to go to college.

Economics: Principles in Action. O'Sullivan and Sheffrin, Prentice Hall/Pearson, 2007
CREDIT: 1.00 GRADE: 11 PREREQ: None

Social Studies

305 Honors American Cultures I NCAA Approved

CAREER PATHWAY: HS

Honors American Cultures I is a full year course for students in ninth grade that combines the study of the United States from the writing of the Constitution through the Civil War/Reconstruction era. It emphasizes how background issues helped shape the system of government of the United States and highlights national, state, and local governmental systems. Students examine what it means to be a citizen from an historical perspective and gains an increased awareness of a citizen's responsibilities in our democratic society today. This course offers a more in-depth approach with additional research and writing assignments. Students must be able to work independently and possess discipline study skills. A minimum average of 86% in the 8th grade social studies course is required to schedule this course.

American History. Educational Advisory Panel, HMH Social Studies, Houghton Mifflin Harcourt Publishing Company, 2018.
CREDIT: 1.00 GRADE: 9 PREREQ: Recommended as Noted

317 Honors American Cultures II NCAA Approved

CAREER PATHWAY: HS

Honors American Cultures II is a full year course for students in tenth grade. Students examine America's experiences from the post-Reconstruction/development of the Industrial Age to present day. Utilizing a humanities-based approach, students are given the opportunity to research and complete formal assignments, in-depth projects, and exercises involving the use of primary documents. Students must be able to work independently and possess disciplined study skills. A minimum average of 86% in Honors American Cultures I or 90% American Cultures I is required to schedule this course.

American History. Educational Advisory Panel, HMH Social Studies. Houghton Mifflin Harcourt Publishing Company, 2018.
CREDIT: 1.00 GRADE: 10 PREREQ: Recommended as Noted Above

337 Honors World Cultures

CAREER PATHWAY: HS

Honors World Cultures is a full-year course for students in eleventh grade. Students develop an awareness of and an appreciation for the various regions of the earth and the cultures that inhabit them. Special emphasis is placed on European interactions with the world since 1450 and how those interactions have helped to create today's international political, economic, and social systems. This course offers an in-depth study of world history with additional historical research and skills development. Students will improve their ability to synthesize information from both primary and secondary sources and develop their historical thinking skills by identifying cause and effect, continuities, and changes, and making comparisons across time and regions. Students must be able to work independently and possess disciplined study skills. A minimum average of 86% in Honors American Cultures II or 90% in American Cultures II is required to schedule this course.

World History. Educational Advisory Panel, Houghton Mifflin Harcourt Publishing Co., 2018
CREDIT: 1.00 GRADE: 11 PREREQ: None

340 Psychology/Government NCAA Approved

Psychology/Government is a full year course for students in twelfth grade. One semester of this course is an explanation of the basic workings of government from a federal, state, and local perspective where basic constitutional rights are also examined. This first semester allows students to prepare to be active participants in our governmental system. The second semester of this course centers on psychological theories and principles of human development and behavior. In applying these principles to realistic social interactions and hands-on activities, this part of the course provides a basis for students to build upon in future study of psychology at the post-secondary level.

American Government - A Complete Coursebook. Ethel Wood and Stephen Sansone, Houghton/Mifflin - Great Source, 2000
Magruder's American Government. William A. McClenaghan, Prentice Hall, 2006
Gateways to Mind and Behavior - Introduction to Psychology. Dennis Coon,10th Edition, Thomson Wadsworth, 2004
CREDIT: 1.00 GRADE: 12 PREREQ: None

Social Studies

335 World Cultures NCAA Approved

World Cultures is a full-year course for students in eleventh grade. Students develop an awareness of and an appreciation for the various regions of the earth and the cultures that inhabit them. Special emphasis is placed on European interactions with the world since 1450 and how those interactions have helped to create today's international political, economic, and social systems. Students develop their ability to synthesize information from both primary and secondary sources and develop their historical thinking skills by identifying cause and effect, continuities, and changes, and making comparisons across time and regions.

World History. Educational Advisory Panel, Houghton Mifflin Harcourt Publishing Co., 2018

CREDIT: 1.00 GRADE: 11 PREREQ: None

341 American History Through Film

CAREER PATHWAY: HS, AC

American History Through Film is a semester long course during which 7-9 historical American history films are viewed, each dedicated to an event, person, or era of American history. Prior to viewing the films, students learn about the geographic and historic factors used to create the historical topic of the film and use maps and primary and secondary source documents to create a framework for understanding the area and time period. After viewing the films, students participate in activities that require research, writing, and presentation skills to evaluate the film in comparison to actual events.

Parents will be notified at the beginning of the course of the possible films that may be used in this course.

CREDIT: .50 GRADE: 10, 11, 12 PREREQ: Minimum grade of 80% in American Cultures I or Honors American Cultures I

Courses with ten (10) or fewer students will not be scheduled without justification.

342 Holocaust & Genocide Studies

CAREER PATHWAY: HS

Holocaust and Genocide Studies is a semester long course designed to allow students to dig deeper into the history of genocide and gain a better understanding of the perpetrators, victims, bystanders, and "upstanders", as well as the factors that led to modern acts of genocide. Students examine the historical context, motivations, international responses, and the aftermath of various genocides. This course emphasizes research skills as well as primary and secondary source analysis.

CREDIT: .50 GRADE: 10, 11, 12 PREREQ: Minimum grade of 80% in American Cultures 1 or Honors American Cultures 1

Courses with ten (10) or fewer students will not be scheduled without justification.

Health, Safety, and Physical Education

Faculty

- Mr. Hetrick
- Mr. Langford
- Mrs. Specht

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Course Selection Guide

350 Grade 9 Health & Physical Education

Health is a required course for all Grade 9 students and any other students who have not had a high school level health education course. This course concentrates on students learning how to make responsible, healthy decisions. Decision-making is emphasized in the following units: Health and Wellness, Health and Your Body, Health and the Community, Drugs, Diseases & Disorders, and Advocating for Your Own Health.

Lifetime Health, Holt, Rinehart and Winston, Harcourt Education Company, 2007

· Physical Education is required by the Pennsylvania Department of Education for all students in Grade 9. It is the intent of the department to create a wholesome learning atmosphere, to stimulate participation in vigorous play, and to project knowledge of games, sports and other lifetime activities through skills and supervised practice.

CREDIT: .50 GRADE: 9 PREREQ: None

358 Grade 10 Driver Safety Education and Physical Education

Driver Safety Education is a course designed for sophomores. Students learn the skills and knowledge of safe and legal driving practices. Students examine the consequences and assess risk management as it could be applied to decision-making while behind the wheel. Students are introduced to Pennsylvania's driving laws and are prepared to take the permit or driver's licensing test. A basic introduction of a vehicle's operation is also introduced to the novice driver.

Students have the option to receive behind-the-wheel training through the CSIU.

Responsible Driving, American Automobile Assoc. Glencoe/McGraw-Hill,1997.
ADTSEA Curriculum PowerPoints. 3rd Edition, American Driver and Traffic Safety Education Association., 2012
CREDIT: .50 GRADE: 10 PREREQ: None

· Physical Education is required by the Pennsylvania Department of Education for all students in Grade 9. It is the intent of the department to create a wholesome learning atmosphere, to stimulate participation in vigorous play, and to project knowledge of games, sports and other lifetime activities through skills and supervised practice.

365 First Aid/CPR/AED Training with Current Issues in Health

CAREER PATHWAYS: HS, ASHS

People need to know what to do in an emergency situation before medical help arrives. It is important that everyone knows how to recognize an emergency and how to respond, as anyone may be faced with an emergency in their lifetime. First Aid/CPR/AED Training is intended to help people feel more confident in their ability to act appropriately in the event of an emergency. Students are offered the opportunity to be certified by the American Red Cross in Infant and Adult First Aid, CPR, and AED.

Current issues in health empowers students to advocate for a healthier community by researching current health trends and applying their skills and knowledge to inform others.

Lifetime Health, Holt, Rinehart and Winston, Harcourt Education Company, 2007
CREDIT: .50 GRADES: 10,11,12 PREREQ: Health

Health, Safety, and Physical Education

380 Mentor Physical Education

In this course, students work with the Lifelong Fitness Class to foster positive interactions and practice game play and skill development. Students work in a small group setting supervised by the Physical Education Teacher to guide their peers in exercise routines, skill development exercises, safety, and nutrition.

CREDIT: .50 GRADES: 11 and 12 PREREQ: Admin Approval

360 Physical Education 11-12

This course is required by the Pennsylvania Department of Education for all students in Grades 11 and 12. It is the intention of the department to create a wholesome learning atmosphere, to stimulate participation in vigorous play and to project knowledge of games, sports and other lifetime activities through skills and supervised practice.

CREDIT: .50 GRADES: 11 and 12 PREREQ: None

370 Weight Training I

CAREER PATHWAYS: ASH, HS

Weight Training I focuses primarily on weightlifting basics with an emphasis in proper form and sequence rather than strength development. Lessons include the benefits of weightlifting, proper lifting and spotting techniques, physiology of strength, muscle power, size, and endurance and how these are considered with respect to methods of achieving specific goals. Knowledge and application of these basic strategies will enhance the student's total fitness and strength.

CREDIT: .50 GRADES: 9,10,11,12 PREREQ: None

Courses with ten (10) or fewer students will not be scheduled without justification.

371 Weight Training II

CAREER PATHWAYS: ASHS, HS

Weight Training II is designed for the student interested in continuing their knowledge and application of principles related to strength, and basic human anatomy physiology principles as they apply to exercise. Students apply advanced techniques to a self-developed workout program targeting specific and realistic long-term fitness goals.

CREDIT: .50 GRADES: 10,11,12 PREREQ: Weight Training I

Courses with ten (10) or fewer students will not be scheduled without justification.

362 Contract Physical Education

This individualized physical education course is designed for students to complete their required physical education credit outside the traditional school day. This course is only available to students who are enrolled in e-Learning, an Alternate Senior Year Placement, or recommended by the Contract Physical Education Teacher, School Counselor, or High School Administrator.

CREDIT: .35 GRADES: 9-12 PREREQ: None

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Faculty

- Mrs. Koch
- Mr. Labar
- Mrs. Wagner

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Course Selection Guide

503 Advanced Painting — CAREER PATHWAY: AC

Advanced Painting is a fall semester course designed as a continuation of the Introduction to Painting course. Students experience watercolors, acrylic and oils and use more than 45 specific techniques. Other painting medium that may be explored, based upon availability and class size, may be caseins, gouache, mixed media approaches and the use of the air brush. Students research and paint from a variety of sources, including their own photography. It is strongly recommended that local artists, studios, and gallery shows be observed. Students are expected to mat, mount and or frame their work for portfolio presentations, displays and competition. Development of a personal style is encouraged. Students are required to use the "design process" inclusive of brainstorming, webbing, research and production of sketches and final works of art. Students read and analyze articles, reviews, and critiques from art publications. Class critiques are in the verbal and written format. Written self-reflection is a part of the grading criteria. Students are expected to show advanced skills, knowledge and creativity while implementing levels of higher-order thinking. A minimum average of 84% in Painting and Drawing is required to schedule this course.

CREDIT: .50 GRADE: 10, 11,12 PREREQ: Drawing, Painting
Courses with ten (10) or fewer students will not be scheduled without justification.

500 Advanced Pottery — CAREER PATHWAY: AC

Advanced Pottery is a spring semester course designed for the student who has already taken the introduction to pottery course, has shown strong motivation and good craftsmanship in pottery making and would like to further develop their skills to a higher degree. The processes of running the kiln and scientifically mixing glazes are addressed. Students are required to use the "design process" inclusive of brainstorming, webbing, research and production of sketches and final works of art. Students read and analyze articles, reviews, and critiques from art publications. Class critiques are in the verbal and written format. Written self-reflection is a part of the grading criteria. Participation in the annual arts festival is strongly encouraged. A minimum average of 84% in Pottery is required to schedule this course.

CREDIT: .50 GRADE: 10,11,12 PREREQ: Pottery
Courses with ten (10) or fewer students will not be scheduled without justification.

502 AP Studio Art 2-D — CAREER PATHWAY: AC

AP Studio Art 2-D is a full-year course available to students who are seriously interested in a career in the arts related field or attend a major university or prestigious art school. This is an intense 12-month course where 2-dimensional work is the focus. Students complete a summer program prior to the beginning of this course. The portfolio as directed by AP Central must include 12 pieces of work in the area of breadth and 12 pieces of work in the area of a concentration that students plan and create. A thorough sketchbook, the desire to research, and the willingness to experiment is necessary for the completion of this course. Self-evaluations, class critiques (both written and verbal), teacher critiques and evaluations are the basis for the grading system. Students are expected to compete on a local and state level and present their portfolio to the lower-level classes. Upon submission and approval by AP Central, three college credits can be earned. A minimum average of 90% in Drawing, Painting and Portfolio Art is required to schedule this course.

CREDIT: 1.00 GRADE: 12 PREREQ: Drawing, Painting and Portfolio Art
Permission from Instructor
Courses with ten (10) or fewer students will not be scheduled without justification.

525 Crafts
CAREER PATHWAY: AC

The Crafts course deals with the arts from an artisan/ craftsperson's perspective. Work will be both 2-dimensional and 3-dimensional. Projects have cultural and historical significance and are based on decorative and utilitarian arts. Examples include mosaics, fiber arts, jewelry, glass work, pottery, printmaking, etc. Proper use of all tools and equipment and materials along with good craftsmanship is strongly emphasized. Students are required to use the "design process" inclusive of brainstorming, webbing, research and production of sketches and final works of art. Self-reflection and critique are a part of the grading process.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

510 Drawing
CAREER PATHWAY: AC

Drawing is a fall semester course that explores the fundamentals of art and design through the elements and principles of drawing. Students develop drawing skills using techniques in a variety of media. Students are required to use the "design process" inclusive of brainstorming, webbing, research and production of sketches and final works of art. The units of study are based on the fundamentals of drawing the figure, still life, color theory and realism through shading. Art history, art criticism and written self-reflection are included in the process of art production. Out-of-class work consists of research and sketchbook assignments.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

513 Lettering & Design
CAREER PATHWAYS: AC, BFIT

Lettering and Design is a fall semester course that looks at the career world of graphic design and advertising. Students produce hand drawn projects with emphasis on lettering and typography. A wide range of materials is used in the production of students' work. The latter half of the course revolves around the use of the computer to generate items such as magazine covers, business cards, menus, and posters for a variety of purposes within the school and around the community. Layout and design are carefully stressed while improved skills are a major goal of this course. Students are required to use the "design process" inclusive of brainstorming, webbing, research and production of sketches and final works of art. Self-reflection and critique are a part of the grading process.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

515 Painting
CAREER PATHWAY: AC

Painting is a fall semester course. Students paint in a variety of mediums. The mediums are not limited to watercolor, acrylics, tempera, and oils in this course. Various techniques are explored and developed through practice and repetition. Development of a personal style is encouraged. Students are required to use the "design process" inclusive of brainstorming, webbing, research and production of sketches and final works of art. Students read and analyze articles, reviews, and critiques from art publications. Class critiques will be in the verbal and written format. Written self-reflection is a part of the grading criteria.

CREDIT: .50 GRADE: 9, 10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

518 Portfolio Art
CAREER PATHWAY: AC

Portfolio Art is designed to assist students in preparing a portfolio for entrance to an art school or art program at a higher educational level. Time is spent developing stronger technical skills and a higher-order level of thinking about the production of works of art. Development of a personal style is encouraged. Students are required to use the "design process" inclusive of brainstorming, webbing, research and production of sketches and final works of art. Proper mounting and framing procedures of work are required for portfolio presentation to art schools or an art related industry**.** A minimum average of 84% in Drawing and Painting is required to schedule this course.

CREDIT: .50 GRADE: 11,12 PREREQ: Drawing, Painting
Courses with ten (10) or fewer students will not be scheduled without justification.

520 Pottery **CAREER PATHWAY: AC**

Pottery is a spring semester course that offers the student the opportunity to create a variety of 3-dimensional items through hand-built methods of constructing clay forms including coiling, slab construction, draped forms, and combinations of such processes. Wheel throwing is also incorporated within this course. Design, balance, and appreciation of aesthetically pleasing functional forms is stressed. Reading and comprehension of written materials is a required segment of the course. Students are required to self-evaluate their work prior to the teacher's evaluation. Processes in kiln firing and glazing are researched, studied, and demonstrated through production.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

522 Sculpture **CAREER PATHWAY: AC**

Sculpture is a spring semester course that is offered to students who would like to work more 3-dimensionally. The students are required to work with a variety of materials to create original 3-D forms. The processes of bas-relief, armatures, assemblage, carving, and casting are explored. Proper use of all tools and equipment and materials along with good craftsmanship are strongly emphasized. Students are required to use the "design process" inclusive of brainstorming, webbing, research and production of sketches and final works of art. Self-reflection and critique are a part of the grading process. Art history and criticism is explored through is in the form of reading, writing, lectures and presentations.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

531 Beginning Guitar — CAREER PATHWAY: AC

Beginning Guitar is a one semester course in which students learn to play basic folk guitar. Included in this study of guitar are the following skills: reading notation for pitch and rhythm, reading chord tablature, picking, and strumming techniques, and chord progressions. Students develop listening skills related to intonation of pitch. Students also engage in reading articles related to the guitar. Instruments and books used by students are provided by the school.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

532 Advanced Guitar — CAREER PATHWAY: AC

Advanced Guitar is a continuation of Beginner Guitar. Students will follow the same framework but receive more in-depth and higher-level techniques. Emphasis will be comfort with barre chords, finger pricking, and scales. Students will take the knowledge from beginner guitar and start to transform it into the true skills of being a performer.

CREDIT: .50 GRADE: 9, 10,11,12 PREREQ: Beginning Guitar
Courses with ten (10) or fewer students will not be scheduled without justification.

538 Concert Band — CAREER PATHWAY: AC

Students in Concert Band participate in concert experiences with the option of marching band. During the marching season, members perform at varsity football games, field competitions, and parades. Students study solo, small ensemble, and standard concert band literature. Each student is required to participate in small-group lessons, called Instrumental Labs, once every 6-day cycle. These labs are designed to provide for the study of musical concepts and the development of individual instrumental skills used in solo and ensemble music performance. The course includes symbolic interpretation and the study of the mathematical and scientific components of music. Students also engage in reading and writing exercises related to instrumental music. Attendance is required at all scheduled band performances. Band members in marching band must participate in summer band rehearsals, band camp, and evening rehearsals.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Band Audition and Director Approval
Courses with ten (10) or fewer students will not be scheduled without justification.

536 Concert Band-Concert Choir — CAREER PATHWAYS: AC

Concert Band-Concert Choir is designed for students who wish to participate in both the band and choir. Students alternately attend band and choral rehearsal periods. See course descriptions for Concert Band and Concert Choir for more details.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Band and Choir Auditions
Courses with ten (10) or fewer students will not be scheduled without justification.

530 Concert Choir — CAREER PATHWAY: AC

Concert Choir is a music performance class for the singer. Students explore singing various types of music, literature, musical terminology, notation, and vocal technique as well as singing in various ensemble settings. Every student is required to participate in small-group lessons called Vocal Labs once every 6-day cycle. These labs are designed to provide for the development of individual vocal skills and musical concepts that are studied and used in solo and ensemble music. An audition for entrance into this ensemble is required for all students each year. Participation in the following events is required: Winter Concert, Pops Concert, Christkindl Market, Spring Concert, Baccalaureate and Commencement.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Audition
Courses with ten (10) or fewer students will not be scheduled without justification.

540 Music Appreciation
CAREER PATHWAY: AC

Music Appreciation is designed to enhance the experience of listening to music and increase awareness of the diversity of musical styles throughout music history. Students study a survey of music components, instrumental and vocal mediums, composers, compositional forms, music listening analysis, and cultural perspectives from the Medieval/Renaissance, Baroque, Classical, and Romantic, and popular 20th Century style periods.

CREDIT: .50 GRADE: 9, 10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

539 Music in Theater and Film
CAREER PATHWAY: AC

Music in Theater and Film is a semester course in which students learn about the history and development of musical theater including the Minstrel Era, Vaudeville and Broadway Shows. Students also study the music composed for motion pictures. In addition to significant composers associated with both musical theater and film, students gain an understanding of the components of music that contribute to and enhance the storyline and action. Students listen to film scores as well as motion pictures.

CREDIT: .50 GRADE: 9, 10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

542 Music Keyboarding I
CAREER PATHWAY: AC

Music Keyboarding I is an introduction to basic keyboard performance including basic musical skills, keyboard technique, and exploration of various types of keyboard literature. Further study for the advanced student will include harmonization and improvisation using acoustic and electronic keyboards. Students also explore keyboard literature, composers, and performers. Music Keyboarding I is recommended for students interested in pursuing a collegiate major in the field of music education or performance.

CREDIT: .50 GRADE: 9-12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

545 Music Keyboarding II
CAREER PATHWAY: AC

Music Keyboarding II is a continuation of Music Keyboarding I. Further study of keyboard performance musical skills, keyboard technique, and performance at a more intensive level is expected. Students continue to explore keyboard literature, composers, and performers. Music Keyboarding II is recommended for students interested in pursuing a collegiate major in the field of music education or performance.

CREDIT: .50 GRADE 9-12 PREREQ: Music Keyboarding I
Courses with ten (10) or fewer students will not be scheduled without justification.

550 Music Theory I
CAREER PATHWAY: AC

Music Theory I is a study of basic harmony, form, key signatures and melodic and harmonic analysis. The course includes a development of sight reading and ear training skills using solfeggio (sight singing) and melodic dictation. Students are required to read and write music in this class. The course includes symbolic interpretation and the study of the mathematical and scientific components of music. This course is highly recommended for students planning a career in music.

CREDIT: .50 GRADE: 11,12 PREREQ: Permission by the Instructor
Courses with ten (10) or fewer students will not be scheduled without justification.

551 Music Theory II
CAREER PATHWAY: AC

Music Theory II is an extension of Music Theory I and includes advanced study of harmony, form, and analysis. Students also study arranging utilizing the Finale software program. The course includes increased development of sight reading and ear training skills using solfeggio (sight singing) and melodic dictation. Students are required to read and write music in this class. The course includes symbolic interpretation and the study of the mathematical and scientific components of music. This course is highly recommended for students planning a career in music.

CREDIT: .50 GRADE: 11,12 PREREQ: Music Theory I and Instructor Permission
Courses with ten (10) or fewer students will not be scheduled without justification.

546 Orchestral Strings

CAREER PATHWAY: AC

Orchestral Strings is a music performance class for orchestral string players. Students learn the techniques and skills necessary to play violin, viola, cello, or string bass. No experience is necessary for this class. For beginners, the focus is on learning to read music and understanding the basics of their instrument. For more advanced players, ensemble and solo playing is emphasized. The group also prepares music for the Holiday and Spring concerts. To ensure fairness, instruments will be given on a first-come, first-serve order. A student in need of an instrument should speak with the Teacher.

CREDIT: 1.00 GRADE: 9, 10,11,12 PREREQ: Director Approval

Courses with ten (10) or fewer students will not be scheduled without justification.

534 Jazz and Popular Music

CAREER PATHWAY: AC

Jazz and Popular Music is a survey of popular music in the United States. The students examine and listen to Early Folk Music, Early Afro-American Music, Early Jazz, Contemporary Jazz, Country/Western, Early Rock 'n Roll, and recent Rock/Pop.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

Courses with ten (10) or fewer students will not be scheduled without justification.

Business & Technology Education — *Business Education*

Faculty

- Mrs. Hobbins
- Mr. Stenger
- Mr. Sunderland

2022-2023 Course Selection Guide

445 Accounting II — CAREER PATHWAY: BFIT

Students in Accounting II review basic accounting principles and practices learned in Accounting I and learn how to apply those principles to computerized accounting systems. There are requirements in reading, writing, speaking, and listening to allow students to express what they are learning.

Automated Accounting 8.0, Allen/Klooster, South-Western, 2003
CREDIT: 1.00 GRADE: 12 PREREQ: Introduction to Financial Accounting
Courses with ten (10) or fewer students will not be scheduled without justification.

420 Advanced Computer Applications — CAREER PATHWAY: BFIT

This course through Certiport's full pathway solution prepares students for the MOS certification in their choice of Microsoft Word, Excel, PowerPoint, or Access with tailored learning materials, practice tests, and a performance-based certification exam officially endorsed by Microsoft. The certification gives students the power to chart their own course, fulfill their ambition, and realize their potential. These qualifications give students the tools to build a brighter future and prepare for a successful career.

*G*Metrix Software*
CREDIT: .50 GRADE: 10,11,12 PREREQ: Computer Applications
Courses with ten (10) or fewer students will not be scheduled without justification.

426 Business Law — CAREER PATHWAY: BFIT

The Business Law course is designed to provide students with an overview of our legal system, including statutes and regulations that affect businesses, families, and individuals in a variety of ways. Knowledge of business law is particularly useful because all students eventually assume the role of citizen, worker, and consumer in society. There are requirements in reading, writing, speaking, and listening to allow students to express what they are learning

Business and Personal Law (Print/Digital).1st Ed., Brown/Sukys, McGraw Hill Education, 2016
CREDIT: .50 GRADE: 10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

415 Computer Applications — CAREER PATHWAY: BFIT

This first semester course is designed as an introduction to the Microsoft Office package with emphasis on Word, Excel, PowerPoint, and Publisher. Students learn Office basics along with select advanced features. Students will also demonstrate how to integrate Office documents.

Computer Concepts and Microsoft Office 2013,1st Ed.,
Parsons/Oja/Beskeen/Cram/Duffy/Friedrichsen/Reding. Cengage Learning, 2014
CREDIT: .50 GRADE: 9 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

485 Entrepreneurship — CAREER PATHWAYS: ASHS, BFIT

The Entrepreneurship course is designed to teach students basic economic principles, leadership skills, and decision-making skills related to business. The class runs the Junior Achievement Company Program and the Junior Achievement Titan Program. There are requirements in reading, writing, speaking, and listening to allow students to express what they are learning.

Various Reference Materials Used
CREDIT: .50 GRADE: 10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

430 Introduction to Business

CAREER PATHWAY: BFIT

Students are introduced to the role and purpose of business in our economic system with emphasis on what everyone should know to function effectively as a consumer, a worker, and a citizen. This course will also: (a) serve as a background for other business courses students may take in high school and college, (b) assist students with consumer decision making and many aspects of personal finance, c) prepare students for future employment, and (d) help students effectively perform their responsibilities as a citizen.

Principles of Business 9th Ed. Dlabay/Burrow/Kleindl South-Western 2017
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

443 Introduction to Financial Accounting

CAREER PATHWAY: BFIT

This course introduces students to the basic principles and applications of financial accounting. Preparation and interpretation of financial information are emphasized. Course work provides the accounting knowledge needed to succeed in more advanced accounting courses and business.

Century 21 Accounting Multicolumn Journal. 10th Ed., Gilbertson/Lehman/Gentene South-Western, 2014
CREDIT: 1.00 GRADE: 11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

433 Marketing

CAREER PATHWAYS: AC, BFIT

This course covers topics such as the functions of marketing, the marketing cycle, and the marketing mix. Each marketing function is incorporated throughout the curriculum and is highlighted to indicate how it is used in the marketing process. Topics such as promotion, personal selling, career opportunities, and legal issues in marketing will be discussed. There are requirements in reading, writing, speaking, and listening to allow students to express what they are learning.

Marketing Essentials (Print and Digital). 1st Ed., Farese/Kimbrell/Woloszyk, McGraw Hill Education, 2016
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

710 Advanced Architectural CAD **CAREER PATHWAY: EIT**

This is an advanced practice of Computer-Aided Drafting (CAD) techniques course. Students work independently on creating architectural drawings using AutoCAD software. The focus is on design, problem solving, and STEAM principals (Science, Technology, Engineering, Art, and Mathematics). Students develop the ability to use drawings and physical models to conceive, organize, and develop habitable, 3-D space. Students learn advanced techniques in technical skill, awareness of spatial conventions, and stimulate critical thinking and creativity within real-life constraints. This course may require a fee for students for project materials.

Various Supporting Materials Used
CREDIT: .50 GRADE: 10,11,12 PREREQ: 85% or better in Architectural CAD or Architectural CAD PC NOW
Courses with ten (10) or fewer students will not be scheduled without justification.

743 Advanced Communication Technology **CAREER PATHWAYS: AC, EIT**

This course is designed for students who have interests in technology, creativity, and communication. This class is designed for students who have the skills and knowledge necessary for success in a career in the design, editing, marketing, and production of communications. This elective focuses on independent studies in digital photography, videography, editing, production, web design, screen printing, typography, animation, and Adobe Software (Photoshop, InDesign, and Illustrator). This course may require a fee for students for project materials.

Various Supporting Materials Used
CREDIT: 0.50 GRADE: 10,11,12 PREREQ: 85% or better in Graphic Communications, Digital Media, OR Digital Imaging
Courses with ten (10) or fewer students will not be scheduled without justification.

739 Advanced Electronic Principles and Applications

The student will need a strong understanding of Electronics Principals and Applications to perform well in this course. This course continues with electronic kits made each marking period. A push to make a robotic kit is strongly suggested. These kits may be purchased by students though the school or on their own. Extensive time is spent on robotic programming, robotic construction, robotic applications, and digital electronics within our society. This course offers the ability to apply problem-solving skills to real-world tasks and problems. There are requirements in reading, writing, speaking, and listening to allow students to express what they are learning.

Various Supporting Materials Used
CREDIT: .50 GRADE: 10,11,12 PREREQ: Electronic Principles and Applications
Courses with ten (10) or fewer students will not be scheduled without justification.

720 Advanced Energy, Power & Transportation **CAREER PATHWAY: EIT**

This course is a more in-depth continuation of Energy, Power and Transportation. Through independent application, students are challenged to further understand technology associated with energy, power and transportation and issues with these types of technology. Students may be required to provide their own materials and/or equipment to work on. Materials and equipment remain the property of the student. There are requirements in reading, writing, speaking, and listening to allow students to express what they are learning. Some activities may require a fee.

Various Supporting Materials Used
CREDIT: .50 GRADE: 10,11,12 PREREQ: Energy, Power and Transportation and Algebra I
Courses with ten (10) or fewer students will not be scheduled without justification.

727 Advanced Engineering Design **CAREER PATHWAYS: AC, EIT**

This advanced course continues with 3D software materials, science concepts and applications. Extensive time is provided for students to work independently on advanced sketching, 2D and 3D designs and 3D printing. Such Advanced Computer Aided Design techniques would be assemblies, animations, threads, and mechanical movement. Some scale model or prototype construction may be required. There are science and math applications in a realistic menu. There are requirements in reading, writing, speaking, and listening to allow students to express what they are learning. Some activities may require a fee.

Various Supporting Materials Used
CREDIT: 0.50 GRADE: 10,11,12 PREREQ: Engineering Design #726, Algebra 1
Courses with ten (10) or fewer students will not be scheduled without justification.

748 Advanced Morning Video Production

CAREER PATHWAYS: AC, BFIT

This course presents advanced elements of video production and the incorporation of multimedia elements such as graphics, particularly computer-based graphics. Advanced elements are taught primarily through hands-on experience in the production of the daily, live, news-like announcements, as well as through the production of short and medium-length video subjects. Students receive academic training and practical experience in all aspects of video production while making a wide variety of short and medium-length videos, such as educational videos, commercials, public service announcements, and features. Students are responsible for producing and directing the daily morning announcements.

Various Supporting Materials Used
CREDIT: .50 GRADE: 10,11,12 PREREQ: Morning Video Production
Courses with ten (10) or fewer students will not be scheduled without justification.

725 Advanced Non-Metallic Materials

CAREER PATHWAY: EIT

This course is an elective dedicated to students interested in designing, manufacturing, and finishing an advanced woodworking project. Students have the option of building a course-required project or designing their own approved project. Students use the engineering design process to solve problems, use tools, and manipulate a variety of materials using technology. The course focuses on project-based learning. Students should have successfully completed Non-Metallic Materials with an 85% or above and have a project goal before signing up for the class. Students will be responsible for paying for the lumber and materials for their projects

Various Supporting Materials Used
CREDIT: .50 GRADE: 10,11,12 PREREQ: Non-Metallic Materials 85% or better
Courses with ten (10) or fewer students will not be scheduled without justification.

730 Architectural Computer Aided Drafting

CAREER PATHWAY: EIT

Introduction and practical application of Computer-Aided Drafting (CAD) techniques and standards used to create two-dimensional architectural drawings. Focus is on hardware and software components, operating systems, file management, CAD commands, system variables, drawing setup, creation of lines and shapes, and the editing, saving, and printing of drawings. Advanced topics include external references, layouts, paper space, attributes, dimensioning, text, and the creation of symbols library. Students who complete this course are encouraged to take Advanced Architectural CAD

Various Supporting Materials Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

731 Architectural Computer Aided Drafting Penn College NOW Course

CAREER PATHWAY: EIT

Three (3) Penn College NOW credits and course grades will appear on a Penn College transcript and may be applied toward specific Penn College degrees or transferred to other post-secondary institutions. Penn College requires passing their placement test to receive Penn College NOW credit.

ACH 135: Architectural Computer Aided Drafting.

Various Supporting Materials Used
CREDIT: .50 GRADE: 11,12 PREREQ: Upon Approval
Courses with ten (10) or fewer students will not be scheduled without justification.

734 Digital Imaging

CAREER PATHWAYS: EIT, AC

This course is designed for students who have an interest in computers, image manipulation, and animation. Students become proficient in Adobe Photoshop. Students learn how to process, manipulate, and export digital images. Students use a structured design process to create products such as a sneaker design, movie poster, and a comic book. Students learn how to create and maintain a portfolio of their work.

Students who are not interested in a career in the industry develop technology skills that can be used in many other classes and future applications. This course is not specifically an art, language, or math driven course, but utilizes many concepts of those fields throughout the course. Students who are interested in pursuing a career in digital imaging are encouraged to take Advanced Communication Technology to do independent study. This course may require a fee for students or may require students to provide their own project materials.

Various Supporting Materials Used
CREDIT: .50 GRADE: 9, 10, 11, 12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

736 Digital Media

CAREER PATHWAYS: AC, EIT

This course is designed for students who have an interest in Photography, Videography, and the computer software associated with producing quality digital photo and video files. The course involves the use of technology, creativity, and communication. The course emphasizes the fundamentals of photo and video production through hands-on experiences. Students study technology, basic equipment operation, composition, lighting, audio, graphics, planning and editing. Students work both individually and in teams to create productions using software such as Adobe Premiere Pro, Photoshop, After Effects, and Wondershare Filmora. Students create projects including a photography portfolio, an interview, and a 30-second commercial. Students who are interested in pursuing a career in digital media are encouraged to take Advanced Communication Technology to do an independent study. This course may require a fee for students for project materials.

Various Supporting Materials Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

738 Electronic Principles and Applications

CAREER PATHWAY: EIT

Electronic Principles and Applications start off with the assumption that each student has had no previous experience with electricity or electronics; however, each student is a consumer of electrical power. This hands-on course is an introduction to understanding that power source. It delivers an explanation and understanding of electrical terms, electrical applications, and electric production. Additionally, through the creation of simple circuits, a connection is made to more complex systems within electronics. Electronic kits are made each marking period. These kits may be purchased by students through the school or on their own. There will be guidance on safety and assembly of these kits. There will be requirements in reading, writing, speaking, and listening to allow students to express what they are learning.

Various Supporting Materials Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

740 Energy, Power and Transportation

CAREER PATHWAY: EIT

This is a beginning level hands-on course in the introduction to energy, power, and transportation. Extensive time will be spent in research, engineering, and development in the modes of transportation (land, space, air, water and intermodal). Some of the highlights in this course are the boomerang activity and the electric slot car. Planes, rockets, and boats are also produced and understood. This helps the student understand the capabilities of force, the prime mover, power applications in mechanical, fluid, thermal and electrical. There are requirements in reading, writing, speaking, and listening to allow students to express what they are learning. Some activities may require a fee.

Various Supporting Materials Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

726 Engineering Design

CAREER PATHWAYS: AC, EIT

This course is designed for beginners. In general, all students are encouraged to take this course because of the 3D applications that have become so useful in many careers. This course teaches engineering design concepts and 3D printing/laser cutting and engraving, material science applications in a practical way. Progression from sketching to 2D design and continues into 3D modeling technology. Extensive time is spent utilizing the 3D software to solve and create solutions to set problems. There is science and math applications in a realistic menu. Requirements in reading, writing, speaking, and listening to express what they are learning. Some activities may require a fee.

Various Supporting Materials Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

742 Graphic Communication and Design

CAREER PATHWAYS: AC, EIT

This course is designed for students who have interests in graphic design, desktop publishing, screen printing, and design creation. This course involves technology, creativity, and communication. The course teaches students how to use Adobe Illustrator, InDesign, and Photoshop. This course introduces students to the skills and knowledge necessary for success in a career in the design, editing, marketing, and printing of graphic communications. Students learn how to design and print T-shirts, logos, business cards, posters, infographics, and other advertising products. Students use a structured design process and their own creativity to utilize advanced technology to create their own products in visual communications. Students who are interested in pursuing a career in graphic communications are encouraged to take Advanced Communication Technology to do an independent study. Students who are not interested in a career in the industry may develop technology skills that can be used in many other classes and future applications. This course is not specifically an art, language, or math driven course, but utilizes many concepts of these fields throughout the course. This course may require a fee for students for project materials.

Various Supporting Materials Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

760 Innovation and Technology

CAREER PATHWAY: EIT

This course focuses on developing the use of technology and innovation within the school community and beyond. Students are expected to solve problems and communicate effectively, both face-to-face and through the use of technology. In this course, students are asked to support a help desk for teachers and students. An ideal candidate for this course will be able to accept feedback and grow from that feedback. Students are responsible for conducting independent research and maintaining an online presence. A background in technology is helpful but not necessary. Proficiency with Google apps and the Google Suite is preferred. The ability to think creatively and independently is essential. Instead of consuming content, students create applications and present ideas to other students and teachers.

Various Supporting Materials Used
CREDIT: .50 GRADE: 10, 11, 12 PREREQ: Computer Keyboarding Instructor Approval
Courses with ten (10) or fewer students will not be scheduled without justification.

728 Invention, Innovation and Product Development

CAREER PATHWAYS: ASHS, EIT

Invention, Innovation and Product Development is a Materials Science and Engineering course. The application of STEM (Science, Technology, Engineering, and Mathematics) concepts will spark the innovative spirit in students and prepare them for postsecondary options. This course includes hands-on applications with the biotechnology of Trout in the Classroom. Students focus on Polymers, Ceramics, Metals and Composites. There many are many hands-on activities/labs dealing with the scientific properties of these materials. By understanding the scientific properties, students better understand the application of these materials in the real world. Math application in measurement (English and Metric) of distances, weight, temperature, and volume is utilized daily. While working in groups of two or three students, students will define a problem, research solutions, design a product, test the solution, and communicate the results. Experience in Materials and Engineering Design courses are helpful but not required. Some activities may require a small fee.

Various Supporting Materials Used
CREDIT: 1.00 GRADE: 11th (If going to Sun Tech or ACE in Grade 12) PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

732 Manufacturing Enterprise

CAREER PATHWAYS: BFIT, EIT

This course is for larger manufacturing projects in groups. This course is meant to analyze physical technologies of product design, analysis and engineering, personnel relations, financial affairs, manufacturing production, marketing, research, and design solutions to real-world problems. The focus is using STEM and the technological design process to create useful projects. Students work with computers for initial concept design. Students use machines and tools to manufacture products individually or in groups. Project examples include cornhole boards, pergolas, taiko drums, baby blocks, and other manufactured products. Students demonstrate proper laboratory safety procedures, apply marketing and advertising concepts, and demonstrate successful sales techniques to earn a profit. There is a fee associated with this course.

Various Supporting Materials Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

715 Morning Video Production

CAREER PATHWAYS: AC, BFIT

This course presents the basic elements of video production and the incorporation of multimedia elements such as graphics, particularly computer-based graphics. The basic elements are taught primarily through hands-on experience in the production of the daily, live, news-like announcements and short video subjects, as well as through extensive study of technical vocabulary. Students receive both academic and practical training and experience in all aspects of video production while making a variety of short videos, such as educational videos, commercials, public service announcements, and features. Students in this course are responsible for producing the daily morning announcements.

Various Supporting Materials Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

756 Non-Metallic Materials

CAREER PATHWAY: EIT

This course introduces the basic operations used in working with non-metallic materials with a focus on wood technology. Students use the engineering design process to solve problems, use tools, and manipulate a variety of materials using technology safely. Most of the course will focus on project-based learning. All students develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world. Projects include Cutting Board, One Board Challenge, and Weapons of Class Destruction. There is a fee associated with this course of $25.
Students with an interest in this course are encouraged to take Advanced Non-Metallic Materials.

Various Supporting Materials Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

750 Past, Present and Future Technologies

CAREER PATHWAYS: ASHS, AC, EIT

Past, Present and Future Technologies is designed for the student who wants to take a technology education course but is confused about what may interest them. This course introduces many technology areas like Manufacturing, Energy/Power and Communication. However, considerable time is spent in the Biotechnology area. Activities in food preservation is experienced, such as butter making, food dehydration, sauerkraut fermentation, maple syrup production and candy making. An example of a nonfood experience is real soap production. Other areas of technology have a small project, activity and/or lab associated with it. Science and Math applications within each area are applied. A relationship based on human history is established for the development of these technologies in our past and present. Predictions occur for the future applications of these technologies. There are requirements in reading, writing, speaking, and listening to allow students to express what they are learning. Some activities may require a fee.

Various Supporting Materials Used
CREDIT: .50 GRADE: 9, 10, 11, 12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

751 Introduction to Yearbook - **Only Offered in Spring Semester*

CAREER PATHWAYS: AC, BFIT

This course is a half year elective to introduce students to journalistic skills while producing the annual yearbook. Students learn principles of journalism, marketing, design, and photography. Each student is given more responsibilities throughout the year and is expected to meet deadlines. Students develop skills in dependability, creativity, problem solving, cooperation, and collaboration. It is recommended to have an 84% or better in Communications classes.

Yearbook is a monetary business. Students need to be dedicated to working outside the classroom and after-school hours to shoot photos, sell yearbooks, design, advertise, and distribute yearbook materials.

Students who are interested in the yearbook are encouraged to apply for Intermediate Yearbook.

Various Supporting Materials Used
CREDIT: .50 GRADE: 9, 10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

752 Intermediate Yearbook

CAREER PATHWAYS: AC, BFIT

This course is a full year elective course designed to record the history of the school year. Students utilize sound journalistic skills while producing the annual yearbook. Students use principles of journalism, marketing, design, and photography. Students will learn principles of composition, design, layout, editing, advertising, sales, and leadership. This course requires a lot of responsibility in carrying out work assignments and meeting deadlines. Students develop skills in dependability, creativity, problem solving, cooperation, and collaboration.

Yearbook is a monetary business. Students must be dedicated to working outside the classroom and after-school hours to shoot photos, sell yearbooks, design, advertise, and distribute yearbook materials.

Students who are interested in the yearbook are encouraged to take Advanced Yearbook.

Various Supporting Materials Used
CREDIT: 1.00 GRADE: 10, 11,12 PREREQ: Introduction to Yearbook
Courses with ten (10) or fewer students will not be scheduled without justification.

753 Advanced Yearbook

CAREER PATHWAYS: AC, BFIT

This course is a full-year elective course designed to record the history of the school year. Students in Advanced Yearbook take a leadership position in Design, Marketing, Photography, Sports, Student Life, or Academics. Students help teach principles of journalism, marketing, design, photography to other students. Advanced students are responsible for assigning work, designing pages, taking photos, writing articles, and meeting deadlines. All students are required to collaborate with other yearbook staff and act in a professional manner in all places as a representative of Yearbook.

Yearbook is a monetary business. Students must be dedicated to working outside of the classroom and after-school hours to shoot photos, sell yearbooks, design, advertise, and distribute yearbook materials.

Students who are interested in a leadership role are encouraged to apply to become a Yearbook Executive.

Various Supporting Materials Used
CREDIT: 1.00 GRADE: 11, 12 PREREQ: Intermediate Yearbook
Courses with ten (10) or fewer students will not be scheduled without justification.

754 Yearbook Executives

CAREER PATHWAYS: AC, BFIT

This course is a full-year elective course designed for the yearbook editors. The Yearbook Executive(s) oversee the development and the overall contents and design of the book. Student(s) make budget decisions with the advisor, business manager and yearbook company representative. The executives manage staff assignments, deadlines, and structure. Executives give final approval on all stories, layouts, and pictures.

Yearbook is a monetary business. The executive(s) must be dedicated to working outside of the classroom and after-school hours to take photos, make decisions, submit work before deadlines, and be a leader for other students.

Various Supporting Materials Used
CREDIT: 1.00 GRADE: 11, 12 PREREQ: Advisor Approval
Courses with ten (10) or fewer students will not be scheduled without justification.

Family & Consumer Science

Faculty

- Mr. Godlewski
- Mrs. Jennifer Haines

570 Advanced Early Childhood Education — CAREER PATHWAYS: ASHS, HS

This course is for juniors or seniors who have completed Child Development and Early Childhood Education, especially for those planning to go into education. In Advanced Early Childhood Education students continue their exploration of how children learn and develop. There are observation opportunities at local childcare centers and elementary schools. This course is meant to be flexible to meet the students' needs. It is recommended for those who are self-motivated and work well independently.

Various Supporting Resources Used
CREDIT: .50 GRADE: 11, 12 PREREQ: Child Development and Early Childhood Educ
Courses with ten (10) or fewer students will not be scheduled without justification.

573 Advanced Fashion and Textiles Design — CAREER PATHWAY: AC

Students who have explored the world of fashion design from the first textiles to the latest designs to hit the runways learn advanced techniques. This course is a hands-on project-oriented class where students learn the basics of clothing and accessory construction. Students strengthen their reading, math, science, and social studies skills as they apply to fashion design and textiles. An emphasis on improving personal appearance through the practice of smart consumer skills, reducing, reusing, and recycling as well as textile care are included.

There is no fee for this course; however, students are required to provide materials for their personal projects.

Various Supporting Resources Used
CREDIT: .50 GRADE: 10,11,12 PREREQ: Course #572 Fashion Design and Textiles
Courses with ten (10) or fewer students will not be scheduled without justification.

566 Child Development — CAREER PATHWAYS: ASHS, HS

In this course, students explore the beginnings of human development by examining the development of infants and toddlers as well as their educational needs. Students compare and contrast many different options for early childhood care. Students observe infants and toddlers in day care settings and in the Family and Consumer Science classroom. This course helps students interested in becoming early childhood educators, childcare providers, and healthcare providers, as well as when they become parents themselves.

Various Supporting Resources Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

568 Early Childhood Education — CAREER PATHWAYS: ASHS, HS

In this course, students explore the development and education of the preschooler. Students learn the ins and outs of early childhood education by examining concepts in preschool and pre-k education. Students observe preschoolers in day care settings, preschool settings and in the Family and Consumer Science classroom. This course helps students who are interested in becoming early childhood educators, elementary teachers, childcare providers, and healthcare providers, as well as when they become parents themselves

Various Supporting Resources Used
CREDIT: .50 GRADE: 10,11,12 PREREQ: Either 566 Child Development or 565 Parenting
Courses with ten (10) or fewer students will not be scheduled without justification.

572 Fashion and Textiles Design — CAREER PATHWAY: AC

Students explore the world of fashion design from the first textiles to the latest designs to hit the runways. This course is a hands-on, project-oriented class where students learn the basics of clothing and accessory construction. Students strengthen their reading, math, science, and social studies skills as they apply to fashion design and textiles. An emphasis on improving personal appearance through the practice of smart consumer skills, reducing, reusing, and recycling as well as textile care is included.

There is no fee for this course, however, students are required to provide materials for their personal projects.

Various Supporting Resources Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

Family & Consumer Science

584 Foods For Life

CAREER PATHWAYS: ASHS, AC, HS

Foods for Life provides an opportunity for students to develop skills in food preparation through individual learning and hands-on activities. There is an emphasis on safety and sanitation from personal and food service perspectives. Topics covered include food decision-making, kitchen basics, food preparation for various categories of food, and food combinations. Each unit will address nutrition, selection, and healthy eating habits.

Various Supporting Resources Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

586 Global Foods

CAREER PATHWAYS: ASHS, AC, HS

Global Foods explores the multicultural aspects of food by preparing and sampling foods typical of selected major cuisines based on culture, geography, climate as well as the multicultural aspects of such food. Each continent is studied, but the choice of foods and countries may change.

Various Supporting Resources Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

595 Introduction to Nutrition

CAREER PATHWAYS: ASHS, HS

This course studies the relationship between food and nutrition to health. The six categories of nutrients, their characteristics, psychological functions, food sources, and interrelationship with the human body are covered, as well as the application for healthy food preparation, diet analysis, investigating eating disorders and exploring sports nutrition. Nutrition throughout the lifecycle (pregnancy, toddler, children, adolescents, and the elderly) is also studied in addition to global food management. Students learn to prepare healthy alternatives to popular foods, manage weight, and learn to modify one's diet for special needs.

Various Supporting Resources Used
CREDIT: .50 GRADE: 9, 10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

582 Introductory Baking

CAREER PATHWAYS: AC, HS

This course explores the fundamental principles and procedures used to prepare a variety of baking products and desserts. A study of ingredients and mixing methods for producing various baked goods is studied.

Various Supporting Resources Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

596 Advanced Foods for Life

CAREER PATHWAYS: ASHS, AC, HS

Advanced Foods for Life builds and expands on the knowledge and skills learned in Introduction to Nutrition and Foods for Life by giving the students opportunities to apply previously learned information to food preparation. Students develop advanced skills and presentation techniques while increasing their knowledge of nutrition. Students explore careers in the food industry such as food blogging and video demonstration.

Various Supporting Resources Used
CREDIT: .50 GRADE: 10,11, 12 PREREQ: Foods for Life
Courses with ten (10) or fewer students will not be scheduled without justification.

565 Parenting & Newborn Development

CAREER PATHWAYS: ASHS, HS

This course focuses on healthy relationships, conception through birth, parenting, and newborn development. Students use the Empathy Belly and Ready-or-Not simulators to experience what it feels like to be pregnant and care for an infant. This is an excellent elective for every teenager and teen parents. It will help those pursuing a career in the medical profession, educator, social worker, or counselor.

Various Supporting Resources Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

Family & Consumer Science

590 You're on Your Own **CAREER PATHWAYS: ASHS, BFIT, HS**

Ready to live on your own? This course helps students to build basic skills for independent living. Topics covered include the following: setting personal goals and values, setting personal financial goals, and understanding self-investment, employment, depository institutions, income and expenses, investing, insurance, credit – smart spending, rentals, homeownership, meal planning and furnishing living space.

Various Supporting Resources Used
CREDIT: .50 GRADE: 11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

Agriculture Education

Faculty

- Mr. Armstrong
- Mrs. Spurrier

627 Agricultural Biotechnology **CAREER PATHWAY: ASHS**

Students combine an interest in agriculture and technology to discover and explore new and expanding applications. Students conduct case study reviews and participate in debates over current issues. This course builds on knowledge of current agricultural practice, technologies, and sciences. All students are required to complete a Supervised Agriculture Experience within the classroom setting. Opportunities exist for students to expand their application through the Agriscience competition within the National FFA Organization. Areas of science, reading and speaking are applied within the class.

Various Supporting Resources Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

680 Agricultural Environmental Resources **CAREER PATHWAY: ASHS**

Students dig into units explaining our environment including current issues in forestry, soils, aquatics, wildlife, water, and air pollution. Students develop an understanding of the relationships between members of an ecosystem and the impacts our choices as humans can make on that connection. Hands-on activities and local field trips are common teaching practices for this
class. Students can expand their application by participating in the PA Envirothon and or the Natural Resources Career Development Event hosted through the National FFA Organization. Students learn leadership, public speaking skills and record keeping by being active in the National FFA Leadership Organization. All students are required to keep record books as part of the class curriculum. These project books are based on individual students' areas of interest.

This course is recommended for students interested in the outdoors and the science of our environment, college bound or not.

Various Supporting Resources Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

612 Agricultural Products and Services **CAREER PATHWAY: ASHS**

This course is designed to examine the many products and services offered within agriculture. Areas include dairy products, meat cuts and quality assurance, hydroponics, and raising alternative livestock including alpacas, llamas, bison, elk, and deer. Hands-on activities and field trips to local venues are common learning environments for this course. Students who wish to expand their application of knowledge may compete in the Meat Judging and or Dairy Foods Career Development Events hosted by the National FFA Organization. Students are responsible for keeping a Supervised Agriculture Experience. Areas of science, reading and speaking will be applied within this class.

Various Supporting Resources Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

631 Agriculture Fabrication, Design and Restoration 1

CAREER PATHWAYS: ASHS, EIT

This project-based course serves as a pathway for students interested in deeper studies of the introductory Agricultural Mechanics and/or Productions courses. Students identify, plan, and implement a STEM-based project in any combination of the areas of design, metal or construction fabrication, or restoration while consulting closely with the instructor. A student enrolled in this course must have demonstrated safe work habits, self-discipline, and an ability to, at times, work independently in his or her previous Agriculture courses. A digital artifact of the project's progression and a formal presentation are components of this course. Potential projects might include, but are not limited to, designing, and fabricating a farm implement or attachment, designing a CAD landscape project, designing and constructing a portable building, and restoring and/or rebuilding a tractor or implement.

Various Supporting Resources Used
CREDIT: .50 GRADE: 10 PREREQ: Currently enrolled in or completed:
Courses with ten (10) or fewer students will not be scheduled without justification. Introduction to Ag Welding and Introduction to Ag Construction

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Agriculture Education

632 Agriculture Fabrication, Design and Restoration 2 CAREER PATHWAYS: ASHS, EIT

This project-based course serves as a pathway for students interested in deeper studies of the introductory Agricultural Mechanics and/or Productions courses. Students identify, plan, and implement a STEM-based project in any combination of the areas of design, metal or construction fabrication, or restoration while consulting closely with the instructor. A student enrolled in this course must have demonstrated safe work habits, self-discipline, and an ability to, at times, work independently in his or her previous Agriculture courses. A digital artifact of the project's progression and a formal presentation are components of this course. Potential projects might include, but are not limited to, designing, and fabricating a farm implement or attachment, designing a CAD landscape project, designing and constructing a portable building, and restoring and/or rebuilding a tractor or implement.

Various Supporting Resources Used

CREDIT: .50 GRADE: 10 PREREQ: Currently enrolled in or completed: Introduction to Ag Welding and Introduction to Ag Construction

Courses with ten (10) or fewer students will not be scheduled without justification.

633 Agriculture Fabrication, Design and Restoration 3 CAREER PATHWAYS: ASHS, EIT

This project-based course serves as a pathway for students interested in deeper studies of the introductory Agricultural Mechanics and/or Productions courses. Students identify, plan, and implement a STEM-based project in any combination of the areas of design, metal or construction fabrication, or restoration while consulting closely with the instructor. A student enrolled in this course must have demonstrated safe work habits, self-discipline, and an ability to, at times, work independently in his or her previous Agriculture courses. A digital artifact of the project's progression and a formal presentation are components of this course. Potential projects might include, but are not limited to, designing, and fabricating a farm implement or attachment, designing a CAD landscape project, designing and constructing a portable building, and restoring and/or rebuilding a tractor or implement.

Various Supporting Resources Used

CREDIT: .50 GRADE: 10 PREREQ: Currently enrolled in or completed: Introduction to Ag Welding and Introduction to Ag Construction

Courses with ten (10) or fewer students will not be scheduled without justification.

634 Agriculture Fabrication, Design and Restoration 4 CAREER PATHWAYS: ASHS, EIT

This project-based course serves as a pathway for students interested in deeper studies of the introductory Agricultural Mechanics and/or Productions courses. Students identify, plan, and implement a STEM-based project in any combination of the areas of design, metal or construction fabrication, or restoration while consulting closely with the instructor. A student enrolled in this course must have demonstrated safe work habits, self-discipline, and an ability to, at times, work independently in his or her previous Agriculture courses. A digital artifact of the project's progression and a formal presentation are components of this course. Potential projects might include, but are not limited to, designing, and fabricating a farm implement or attachment, designing a CAD landscape project, designing and constructing a portable building, and restoring and/or rebuilding a tractor or implement.

Various Supporting Resources Used

CREDIT: .50 GRADE: 10 PREREQ: Currently enrolled in or completed: Introduction to Ag Welding and Introduction to Ag Construction

Courses with ten (10) or fewer students will not be scheduled without justification.

635 Agriculture Fabrication, Design and Restoration 5 CAREER PATHWAYS: ASHS, EIT

This project-based course serves as a pathway for students interested in deeper studies of the introductory Agricultural Mechanics and/or Productions courses. Students identify, plan, and implement a STEM-based project in any combination of the areas of design, metal or construction fabrication, or restoration while consulting closely with the instructor. A student enrolled in this course must have demonstrated safe work habits, self-discipline, and an ability to, at times, work independently in his or her previous Agriculture courses. A digital artifact of the project's progression and a formal presentation are components of this course. Potential projects might include, but are not limited to, designing, and fabricating a farm implement or attachment, designing a CAD landscape project, designing and constructing a portable building, and restoring and/or rebuilding a tractor or implement.

Various Supporting Resources Used

CREDIT: .50 GRADE: 10 PREREQ: Currently enrolled in or completed: Introduction to Ag Welding and Introduction to Ag Construction

Courses with ten (10) or fewer students will not be scheduled without justification.

Agriculture Education

650 Animal Science

CAREER PATHWAY: ASHS

Students learn about the many species of livestock including beef, dairy, swine, sheep, goats, and chickens. This class compares and contrasts different body systems, facilities, and best management practices for each species. Students apply their knowledge in hands-on labs and field trips to local facilities. All students are required to complete a Supervised Agriculture Experience. Opportunities exist for students to expand their knowledge through the National FFA Organizations Livestock Judging and Dairy Judging Career Development Events. Areas of science, reading and speaking are applied within the class.

Various Supporting Resources Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

694 Cooperative Supervised Ag Experience

CAREER PATHWAYS: ASHS, EIT

Cooperative Supervised Ag Experience provides specialized individual instruction to senior agriculture students meeting strict guidelines. All graduation requirements must be met. Additionally, approval must be secured from both departmental and administrative personnel. The student is required to complete specialized reports as part of the course work. This course allows the student to enter the work force in an agricultural area of study under the supervision of an agriculture teacher. Exploring agriculture through a supervised agricultural experience project is required.

Various Supporting Resources Used
CREDIT: 1.00 GRADE: 12 PREREQ: Administrative and Departmental Approval
Courses with ten (10) or fewer students will not be scheduled without justification.

670 Engines

CAREER PATHWAYS: ASHS, EIT

This course provides instruction in small 4-cycle, air-cooled gasoline engines. Students study theory behind the 2-cycle, 4-cycle gasoline and diesel engines. Students troubleshoot, disassemble, measure, and reassemble school-owned, air-cooled engines. Students must supply and work on their own small, air-cooled engine. If students exhibit the skills and interest, they may complete introductory work on school-owned diesel engines. Students must cover the costs of any repairs or parts to their engines. Students record skills as they complete shop work and explore the changing agriculture technologies. There are requirements in reading, writing, speaking, and listening to allow students to express what they are learning. Exploring agriculture through a supervised agricultural experience project is required.

Various Supporting Resources Used
CREDIT: .50 GRADE: 10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

665 Farm Management

CAREER PATHWAY: ASHS

Students learn the art of organizing and running a farming operation. Students learn about common farming practices, animals raised, crops produced and how to manage these entities. Students learn how to keep track of finances, complete taxes and analyze their end-of-the-year status. Students may expand their application for this class by attending the Farm Management Career Development Event hosted by the National FFA Organization. All students are required to complete a Supervised Agriculture Experience. Areas of science, math, reading and speaking will be applied within the class.

Various Supporting Resources Used
CREDIT: .50 GRADE: 10,11 or 12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

682 Horticulture

CAREER PATHWAY: ASHS

Students combine an interest in growing plants, flower arranging and business management in this course. Students design monthly arrangements to sell. Additionally, students help prepare designs for special school functions including Prom and Graduation. Focus is placed on plant knowledge and application of technical skills. All students are required to complete a Supervised Agriculture Experience. Opportunities exist for students to expand their application through the Floriculture competition within the National FFA Organization. Areas of science, reading and speaking are applied within the class.

Various Supporting Resources Used
CREDIT: .50 GRADE: 10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

Agriculture Education

605 Introduction to Agricultural Construction

CAREER PATHWAYS: ASHS, EIT

This course introduces the construction industry with an emphasis on framed buildings. Students study building design, carpentry, layout, and framing. Teams of students construct a model building to scale while learning the parts and determine bills of materials. Students also learn the principles of assembly line production with a class project to construct tables or similar items. A review of simple surveying practices needed for construction is included along with an introduction to landscaping and irrigation considerations at the construction site. Students record their skills and tasks performed as if it were an actual job site.

Various Supporting Resources Used
CREDIT: .50 GRADE: 10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

688 Introduction to Agricultural Electricity

CAREER PATHWAYS: ASHS, EIT

This course provides instruction in the areas of electricity. Students study theory, practice and demonstrate skills related to basic electrical wiring and circuits found in homes. Students record their learned skills as they explore the changing agriculture technologies. Students learn leadership, public speaking skills and record keeping by being active in the National FFA Leadership Organization. All students are required to keep record books as part of the class curriculum. These project books are based on students' areas of interest. This course is recommended for students interested in agricultural production as well as agricultural mechanics.

Various Supporting Resources Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

600 Introduction to Agriculture

CAREER PATHWAY: ASHS, EIT

This 9th grade course provides students with a buffet of agriculture productions, agriculture mechanics and a basic appreciation for FFA. Students work in the classroom learning about leadership, speaking, record keeping and a selection of either animal, plant, or environmental topics (based on student interests). Students also work in the shop learning safety, tool usage, tractor safety and career readiness. Additionally, students design and create a shop project using a variety of materials and assembly techniques. Students are required to complete a Supervised Agriculture Experience. Areas of science, math, reading, and speaking are applied within this class.

Various Supporting Resources Used
CREDIT: 1.00 GRADE: 9 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

687 Introduction to Welding and Metalworking

CAREER PATHWAYS: ASHS, EIT

This course provides instruction in the areas of metal arc, MIG, plastic, and gas welding. Students practice various welding exercises using arc, MIG, TIG, oxy/fuel and plastic welders and the CNC plasma cutter. Students complete welding exercises and project creation. Students record skills as they explore the changing agriculture technologies. Students learn leadership, public speaking skills and record keeping by being active in the National FFA Leadership Organization. All students are required to keep record books as part of the class curriculum. These project books are based on students' interests. This course is recommended for students interested in production and mechanics.

Various Supporting Resources Used
CREDIT: .50 GRADE: 10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

671 Landscaping

CAREER PATHWAY: ASHS

Students learn how to design, install, and maintain landscaped areas. Students learn about plant growth and reproduction. Focus is on flowering plants, trees, and shrub varieties. Students learn about soil structure, nutrients and how local surroundings are impacted based on the health of the soil. Students help to establish and maintain landscape projects throughout the community. Students learn to properly use landscaping equipment and materials. All students are required to complete a Supervised Agriculture Experience. Opportunities exist for students to expand their application by working in the greenhouse and the courtyard. Additionally, students may compete in the Landscape Design Career Development Event hosted by the National FFA Organization. Areas of science, math, reading, and speaking are applied within the class.

Various Supporting Resources Used
CREDIT: .50 GRADE: 10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

Agriculture Education

690 Plant and Soil Science
CAREER PATHWAY: ASHS

Students interested in the science of plants and soils may be interested in this course. In this course, students learn about plant growth and reproduction. Focus is on flowering plants, crops, trees, and shrub varieties. Students learn about soil structure, nutrients and how local surroundings are impacted based on the health of the soil. Greenhouse management and learning to run a business are large components of this class. All students are required to complete a Supervised Agriculture Experience. Opportunities exist for students to expand their application by working in the greenhouse and the courtyard. Areas of science, reading and speaking are applied within the class.

Various Supporting Resources Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

685 Plumbing and Masonry
CAREER PATHWAYS: ASHS, EIT

This course provides instruction in the areas of metal arc, MIG, plastic, and gas welding, plumbing, water systems and tool fitting. Students will practice various welding exercises using arc, MIG, oxy/fuel and plastic welders. Students complete plumbing exercises. Students record skills as they explore the changing agriculture technologies. Students learn plumbing and welding. Students also learn safe use of the tools, theory in each area, and skills from each area.

Various Supporting Resources Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

692 Supervised Ag Experience
CAREER PATHWAY: ASHS

Supervised Ag Experience provides specialized individual instruction to agriculture students. Students are required to complete PDE approved books as part of the course work. Students must be enrolled in other agriculture courses or electives. Exploring agriculture through a Supervised Agricultural Experience project is required.

Various Supporting Resources Used
CREDIT: .50 GRADE: 9,10,11,12 PREREQ: Presently taking an Agriculture Class
Courses with ten (10) or fewer students will not be scheduled without justification.

645 Sustainable Agriculture
CAREER PATHWAY: ASH

This course explores and provides instruction on sustainability as it relates to agriculture. Students study the history of agricultural practice and learn how it has evolved as knowledge of our ecosystems and technological capabilities has also evolved. Students engage in case studies and hear from local producers and leaders on this subject. Students record their learned skills as they explore the changing agriculture technologies. This course is offered as a rotational course and will not be offered each year.

Various Supporting Resources Used
CREDIT: .50 GRADE: 10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

655 Tech Elective Agriculture
CAREER PATHWAYS: ASHS, EIT

Tech Elective Agriculture provides instruction in the field of high school agriculture and preparation for the National Occupational Competency Testing Institute certification to students who are also attending SUN Area Technical Institute. Problem-solving & management opportunities are emphasized. Students complete advanced projects to expand in areas covered by the NOCTI exam. Students record skills as they explore the changing agriculture technologies. Exploring agriculture through a Supervised Agricultural Experience project is required.

Various Supporting Resources Used
CREDIT: 0.50 GRADE: 12 PREREQ: 5 credits of Previous Agriculture Classes
Courses with ten (10) or fewer students will not be scheduled without justification.

649 Veterinary Science and Small Animals
CAREER PATHWAY: ASHS

Students focus on small animals including dogs, cats, rabbits, and hamsters. Lessons focus on the body systems, common procedures performed by veterinary assistants and best management practices when working with animals and owners. Students can expand their application of this class by participating in the Veterinary Science Career Development Event hosted by the National FFA Organization. All students are required to complete a Supervised Agriculture Experience. Areas of science, math, reading, and speaking are applied within the class.

Various Supporting Resources Used
CREDIT: .50 GRADE: 10,11,12 PREREQ: None
Courses with ten (10) or fewer students will not be scheduled without justification.

Special Education

Faculty

- Ms. Bickel
- Mrs. Creasy
- Mrs. DiPasquale
- Mrs. Dunkelberger
- Mrs. Herrold

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8880 Career Education/Community Work Explorations (Grade 9)
8881 Career Education/Community Work Explorations (Grade 10)
8884 Career Education/Community Work Explorations (Grade 11)
8886 Career Education/Community Work Explorations (Grade 12)

Through school and community-based work sites, the students taking this course develop and refine work habits and job skills. Jobs and work sites are assigned based on the students' interests and skills.

CREDIT: 1.00 GRADE: 9-12 PREREQ: Administrative Approval

7890 English Language Arts Fundamentals (Grade 9)
7892 English Language Arts Fundamentals (Grade 10)
7894 English Language Arts Fundamentals (Grade 11)
7896 English Language Arts Fundamentals (Grade 12)

In this course students develop and strengthen foundational skills in the areas of reading, listening, and speaking. Students progress along a continuum from matching objects and pictures to acquiring a reading vocabulary and demonstrating comprehension of reading selections including real-life materials (signs, survival words, etc.). Students demonstrate the ability to respond to fiction and nonfiction material by orally answering questions, describing, sequencing, and predicting. Students refine interactive communication skills in school and community settings.

CREDIT: 1.00 GRADE: 9-12 PREREQ: Administrative Approval

8930 English Language Arts Applications (Grade 9)
8932 English Language Arts Applications (Grade 10)
8934 English Language Arts Applications (Grade 11)
8936 English Language Arts Applications (Grade 12)

In this course, students develop and improve their reading and writing skills Students develop reading skills at their own pace and demonstrate comprehension of reading selections including real life materials. Students demonstrate the ability to respond to both fiction and nonfiction material by answering questions, describing, sequencing, and predicting. Students develop and improve writing skills by participating in supported writing activities using conventional formats. Students taking this course will work at their own pace based on their own needs.

Unique Learning System
CREDIT: 1.00 GRADE: 9-12 PREREQ: Administrative Approval

7820 Fundamental Consumer Skills (Grade 9)
7822 Fundamental Consumer Skills (Grade 10)
7824 Fundamental Consumer Skills (Grade 11)
7825 Fundamental Consumer Skills (Grade 12)

This course focuses on the fundamental skills needed to actively participate in a variety of school and community settings. Emphasis is placed on safety, orientation and mobility, money skills, time, domestic living, social skills, and access to community resources.

CREDIT: 1.00 GRADE: 9-12 PREREQ: Administrative Approval

Special Education

7881 Mathematics Fundamentals (Grade 9)
7883 Mathematics Fundamentals (Grade 10)
7885 Mathematics Fundamentals (Grade 11)
7887 Mathematics Fundamentals (Grade 12)

In this course, students acquire number concepts, numeration and computation, estimation, and measurement skills. The students move along a continuum from orienting toward concrete materials, scanning, and matching to identifying numbers, counting, and problem-solving in everyday life situations. Students develop the concepts of pattern replication, money exchange, time/calendar, dry, liquid, linear measurements, and schedules.

CREDIT: 1.00 GRADE 9-12 PREREQ: Administrative Approval

8920 Math Applications (Grade 9)
8922 Math Applications (Grade 10)
8924 Math Applications (Grade 11)
8926 Math Applications (Grade 12)

In this course, students develop and improve their functional math skills. Students develop the concepts of adding, subtracting, multiplying, dividing, fractions, measurements, time, and money. Students in this course work at their own pace based on their own needs.

Unique Learning System
CREDIT: 1.00 GRADE 9-12 PREREQ: Administrative Approval

7860 Science Fundamentals (Grade 9)
7862 Science Fundamentals (Grade 10)
7864 Science Fundamentals (Grade 11)
7866 Science Fundamentals (Grade 12)

In this course, students learn about the natural world of studying animals, plants, weather, land formations and environmental issues. Students participate in simple scientific experiments and explore ways to organize information visually.

CREDIT: 1.00 GRADE 9-12 PREREQ: Administrative Approval

8850 Science Applications (Grade 9)
8852 Science Applications (Grade 10)
8854 Science Applications (Grade 11)
8856 Science Applications (Grade 12)

In this course, students explore and develop inquiry methods related to the science fields. Students develop skills in measurements, investigative techniques and understanding the scientific method. Students taking this course work at their own pace based on their own needs.

Unique Learning System
CREDIT: 1.00 GRADE 9-12 PREREQ: Administrative Approval

Special Education

7850 Social Studies Fundamentals (Grade 9)
7852 Social Studies Fundamentals (Grade 10)
7854 Social Studies Fundamentals (Grade 11)
7856 Social Studies Fundamentals (Grade 12)

In this course, students develop and strengthen their knowledge in social studies, civics/government, culture, economics, geography, history, and student interpersonal skills.

CREDIT: 1.00 GRADE 9-12 PREREQ: Administrative Approval

8860 American Civics and Government Applications (Grade 9)
8862 American Civics and Government Applications (Grade 10)
8864 American Civics and Government Applications (Grade 11)
8866 American Civics and Government Applications (Grade 12

In this course, students develop an understanding about how the American people govern themselves and how they are governed at the national, state, and local levels of government. Students also learn about government structures, institutions, and process of how decisions are made for the United States. This course examines how the United States government interacts with the economy to meet the needs of its citizens. Students taking this course work at their own pace based on their own needs.

Unique Learning System
CREDIT: 1.00 GRADE: 9-12 PREREQ: Administrative Approval

7840 Vocational Skills Fundamentals (Grade 9)
7842 Vocational Skills Fundamentals (Grade 10)
7844 Vocational Skills Fundamentals (Grade 11)
7846 Vocational Skills Fundamentals (Grade 12)

In this course, the community is used as an extension of the classroom. Each student participates in a variety of activities in various locations in the community. Examples of activities and places that might be used are mailing items at the post office, shopping for groceries, dining out at restaurants, shopping for personal items or classroom supplies, and selecting a card for a relative's birthday. Each student who takes this course works at a personalized level.

CREDIT: 0.50 GRADE: 9-12 PREREQ: Administrative Approval

375 Lifelong Fitness
All students should have the opportunity to participate in physical education learning experiences. Through competent leadership, students are provided a diversified program of developmental activities, games, sports, exercises, and rhythms suited to the interests, capacities, and limitations of students with physical impairments and disabilities who may not safely or successfully engage in unrestricted vigorous activities of the general physical education program.

CREDIT: Varied GRADE: 9,10,11,12 PREREQ: Administrative Approval

8887 High School Seminar (Grade 9)
8888 High School Seminar (Grade 10)
8889 High School Seminar (Grade 11)
This course is designed to meet student needs regarding a variety of topics including, but not limited to, self-advocacy, tools for academic success, 21st Century skills, money-management, and vocation/transition. The course is taught by a special education teacher and includes IEP goal interventions and addresses individual needs.

Course Created by Staff
CREDIT: .50 GRADE: 9, 10, 11 PREREQ: None

Special Education

835 Pre-Algebra Studies 9

Students cover the following topics:

· Properties of real numbers

· Basic operations using whole numbers, integers, fractions, and decimals

· Graphing on the coordinate plane

· Linear functions

· Interpreting graphs and data tables

· Mean, median, and mode

CREDIT: 1.00 GRADE: 9 PREREQ: Administrative Approval

838 Pre-Algebra Studies 10

Students cover the following topics:

· Review basic operations using whole numbers, integers, fractions, and decimals

· Use basic problem-solving skills to solve one and two-step equations that include only whole numbers and integers

· Find slope and y-intercepts of linear equations

· Graph equations

· Calculate measures of central tendency.

CREDIT: 1.00 GRADE: 10 PREREQ: Administrative Approval

841 Algebra Studies 11

Students cover the following topics:

· Review basic operations using whole numbers, integers, fractions, and decimals

· Use basic problem-solving skills to solve one-step and two-step equations which include whole numbers, integers, and fractions

· Locate slope and y-intercept in a linear equation that is in the slope-intercept format

· Calculate slope given two points or given a coordinate and an equation

· Use basic problem-solving skills to solve linear equations including calculating slope and find the equation of a line.

· Add, subtract, and multiply polynomials

· Basic geometry concepts

CREDIT: 1.00 GRADE: 11 PREREQ: Administrative Approval

843 Algebra Studies 12

Students cover the following topics:

- Review of Measurement
- Review of Money
- Basic formulas for Cylinders, cones, and spheres
- Congruence and similarity of geometric shapes
- Right angles and the Pythagorean Theorem
- Basic formulas for Trigonometry

· Basic formulas for Circles

CREDIT: 1.00 GRADE: 12 PREREQ: Administrative Approval

Miscellaneous

Faculty

- These courses are taught by various faculty members.

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195 Working Wildcats Practicum

Work Experience – Students in this program work at least fifteen hours at a local business or manufacturing company. They are paid an hourly wage and perform duties of an employee. Through this experience, students gain practical knowledge in their field of interest. Students may schedule up to three academic or elective classes along with the Cooperative Education experience. Work hours are determined based on their schedule, and students must provide a copy of their time sheet each pay period. The Program Coordinator and the worksite supervisor work together to help the student achieve the competencies set forth in the Training Agreement. Students must provide their own transportation to the job site. Evaluations from Worksite Supervisor count for 50% of the course grade.

Classroom - Students participating in the Working Wildcats Practicum must also take a one-credit course which focuses on acquiring and retaining a job and consumer skills. Students receive classroom instruction covering the following topics: Orientation, Career Development & Planning, Employment Acquisition, Human Relations, Health & Safety, Employment Retention, Communications Development, Legal Awareness, Youth Organizations, Consumer Skills, Credit, Taxes, Insurance, Consumer Protection, Wages, Fringe Benefits, Economics, Future Planning, and Technical Related Instruction. A NOCTI test is given in May. Completion of classwork counts for 50% of course grade.

CREDIT: 2-6 GRADE: 12 PREREQ: Counselor Approval
Courses with ten (10) or fewer students will not be scheduled without justification.

AP82 Advanced Project

Advanced Project is designed for students who wish to pursue an individual project or area which is beyond the scope of a particular course or curricular area. It is generally an elective course that is offered to students who are advanced beyond the scope of the course.
CREDIT: .50 GRADE: 11, 12 PREREQ: Principals' Approval
Courses with ten (10) or fewer students will not be scheduled without justification.

180 Computer Programming **CAREER PATHWAYS: BFIT**

Emphasis on this course is placed on developing a vocabulary in the BASIC programming language and using deductive reasoning and problem-solving skills to develop top-down and modular computer programs. Tasks include forming text and graphic screens, sorting alphabetic and numeric information, and emulating simple games. Students taking this course should be those who, having previously taken an introductory course in computer application, have developed a sincere interest in learning more about the computer, computer hardware, and processes.

CREDIT: .50 GRADE: 9, 10, 11, 12 PREREQ: Computer Applications
Courses with ten (10) or fewer students will not be scheduled without justification.

185 Independent Programming I **CAREER PATHWAY: BFIT**

This is an advanced course in computer programming and should be taken only by those who have developed a wide vocabulary in the Visual Basic programming language. Advanced features of Visual Basic will be discussed, such as file management, data management, Active X controls, and Visual Basic programming for the Internet. Students will work independently. Books, software, and reference web sites are provided for the student. Personal assistance from the instructor is available by appointment.

CREDIT: .50 GRADE: 11,12 PREREQ: Computer Programming
Courses with ten (10) or fewer students will not be scheduled without justification.

Miscellaneous

190 Independent Programming II

CAREER PATHWAY: BFIT

This is an advanced course in computer programming and should be taken only by those who have developed a wide vocabulary in the Visual Basic programming language. This course focuses on making students productive with Visual C++. Students will work independently. Books, software, and reference web sites are provided for the student. Personal assistance from the instructor is available by appointment.

CREDIT: .50 GRADE: 11,12 PREREQ: Independent Programming I

Courses with ten (10) or fewer students will not be scheduled without justification.

192 MPower NCAA Approved

CAREER PATHWAYS: AC, BFIT, EIT, HS, ASHS

MPower is a full-year course for students in Grade 12. Students will earn one credit each in Math and English Language Arts. This is a project-based class in which student teams will tackle real-world problems, develop solutions to those problems, and present their solutions to an authentic audience. Students will develop their communication, collaboration, time management, and problem-solving skills as they work together on multiple projects throughout the year.

CREDIT: 2.0 GRADE: 12 PREREQ: None

Courses with ten (10) or fewer students will not be scheduled without justification.

231 Science Technician

CAREER PATHWAYS: ASHS, EIT

The chosen student(s) for this elective will earn 0.35 credits by performing tasks within the science department (Biology, Chemistry, and Physics). These tasks may include lab set up, lab tear down, mixing solutions, assisting with lab, trying a new lab, figuring better uses for the probe ware and the accompanying of software. Students would be expected to keep a journal/record of the tasks performed. Students must apply to the science department chair and be selected by the science department. This would take the place of the two-day study hall.

CREDIT: .35 GRADE: 12 PREREQ: Biology and Chemistry

Courses with ten (10) or fewer students will not be scheduled without justification.

164 SAT Math Prep

SAT Math Prep has a twofold emphasis. First, students will become familiar with the format of the math portion of the SAT and learn test taking strategies. Second, class time will also be devoted to reviewing major mathematically concepts that are assessed on the exam. Students who elect this class should have already completed Algebra II and Geometry or have completed Algebra II and concurrently taking Geometry with this class.

CREDIT: .50 GRADE: 10,11,12 PREREQ: Recommended as Noted Above

Courses with ten (10) or fewer students will not be scheduled without justification.

064 SAT Verbal Prep

SAT Verbal Prep takes an extensive look at the Scholastic Aptitude Test, its construction, and its scoring. Highlights are reviews of vocabulary and mathematics included on the test. Students review strategies for taking the various sections of the test and work with actual sample SATs. College readiness students especially will benefit from this course.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

Courses with ten (10) or fewer students will not be scheduled without justification.

College Coursework/Dual Enrollment Opportunities

Bloomsburg University

Mifflinburg Area High School participates in a program at Bloomsburg University that allows students to take college courses at reduced tuition rates. The Advanced College Experience (ACE) Program allows qualified seniors to take one or more college courses in addition to, or in lieu of, courses at Mifflinburg Area High School. More information about this program can be found at: www.bloomu.edu/ace.

Bucknell University

Students who have demonstrated superior academic aptitude and achievement have the opportunity to enroll in courses at Bucknell University. This program is open to eligible juniors and seniors who are in the top 20% of their graduating class. Mifflinburg Area High School's cooperative agreement with Bucknell University allows students to enroll in one tuition-free course each semester or summer term. Students may matriculate in day or evening classes during regular semesters.

Pennsylvania College of Technology

Penn College NOW is a program that allows students to take college classes while in high school. The courses are taught at the high school by Penn College approved high school instructors. Penn College requires students to pass their placement test to receive Penn College NOW credit. Both junior and seniors are eligible to participate in this program.
The following Penn College NOW Course is currently offered at Mifflinburg Area High School:

731 - Architectural Computer Aided Drafting

Susquehanna University

Susquehanna University provides limited tuition-free, college level courses for academically talented juniors and seniors. Up to 16 credits (four courses) may be taken.

Any student interested in taking advantage of any of these College Coursework/Dual Enrollment Opportunities must meet specific district and program qualifications. Participation is also subject to approval by the district. For more information regarding the requirements, please contact a School Counselor.

SUN Area Technical Institute

SUN Area Technical Institute— (6 credits each)

MAHS students who are interested in pursuing a technical career may plan to attend SUN Area Technical Institute during their senior year. The following programs are offered:

ADVERTISING ART & DESIGN Course No. **930**

Description: The program emphasizes students' creative growth through instruction in art principles as well as technology skills through computer-based projects. Students will gain a working knowledge of color, typography, layout, and printing while mastering Adobe software on a Mac and PC. Students may find employment in graphic design, advertising, publishing, web page design, illustration, or photography.

AUTO TECHNOLOGY Course No. ***925***

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

CARPENTRY Course No. ***928***

Description: SUN TECH carpentry students 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, and exterior and interior finish. Emphasis is placed on developing the skills you will need for your future as a contractor. Emphasis is placed on developing the skills students will need for their future as a contractor.

COLLISION REPAIR TECHNOLOGY Course No. **920**

Description: The Collision Repair Technology course at SUN Tech has been evaluated by the "National Automotive Technicians Education Foundation, Inc." (NATEF) and 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. Students will be evaluated on practical hands-on application skills and through ASE type-written examinations. Students may be eligible for a one-year service credit toward applying for ASE certification in any or all 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 Course No. **940**

Description: SUN Tech Computer and Networking Technology students will learn a wide range of skills that will enable them to get an entry level job, skills to give a head start on college, and make good money while going to college! Students will learn to do the following:

- Build, upgrade and repair computers
- Set up and configure routers, switches, firewalls, and servers
- Design web pages and flash animations
- Administer a computer network, set up user accounts, servers, etc.
- Become Certified in copper and fiber optic network cabling
- Use cutting edge technology to be prepared for the workforce
- Build laptop computers that to be used throughout the year

COSMETOLOGY Course No. **935**

Description: The Cosmetology course at SUN Tech includes the following: theoretical studies and the application of all aspects of hair, skin, and nail care; including 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, chemical texture services, braiding, skin care, massage, makeup, hair removal, nail care, artificial nails, male hair cutting and styling and product knowledge. To acquire the 1250 hours of supervised instruction required for the PA State Board of Cosmetology licensing examination, students will attend a 300-hour summer program at SUN Tech prior to their senior year at SUN Tech.

CRIMINAL JUSTICE Course No. **972**

Description: 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 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.

SUN Area Technical Institute

CULINARY ARTS Course No. **999**

Description: The SUN Tech Culinary Arts Program provides students with the skills and experience needed to prepare for an entry-level position in the Culinary industry. The skills students learn include basic operation of a restaurant; food preparation; safety and sanitation; operation and maintenance of restaurant tools and equipment; creating and planning menus for restaurant and catering functions; cooking and baking; and customer service including hosting serving, and bussing.

DENTAL HEALTH TECHNOLOGY Course No. **945**

Description: Students learn to prepare patients for treatment, sterilize instruments, practice infection control, prepare materials, and make study models from impressions. Students are exposed to digital x-ray technology and are provided chairside assisting experience with a local dentist to gain clinical experience.

DIESEL & TRUCK TECHNOLOGY Course No. **950**

Description: The Diesel and Truck Technology course at SUN Tech prepares students 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. Students can secure employment as a technician working on trucks, buses, agricultural and construction equipment. Students will be given the opportunity to attain a Pennsylvania Vehicle Safety Inspection license and prepare to take the Automotive Service Excellence (ASE) tests.

ELECTRICAL SYSTEMS TECHNOLOGY Course No. **955**

Description: The Electrical Systems Technology class provides training through a combination of classroom instruction and practical, hands-on assignments. Projects, both within and outside the school, provide hands-on experience in a safe, supervised environment. Students 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 making students highly employable.

HEALTH PROFESSIONALS & RELATED SCIENCES Course No. **965**

Description: The Health Professions Program at SUN Tech helps students learn the theory and practical skills required to be prepared for a career in the health field. Students learn the duties of a Certified Nurse Aide and perform skills learned while delivering quality resident care at clinical affiliations with local long-term care facilities and local community hospitals. Students 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.

HVAC & PLUMBING TECHNOLOGY Course No. **970**

Description: HVAC & Plumbing Technology students at SUN Tech learn through classroom instruction and practical shop assignments. Students 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. Please visit the www.sun-tech.org for more information.

MASONRY Course No. **985**

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

PRECISION METALWORKING Course No. **980**

Description: A machinist doesn't think of metal as something hard and unchangeable because they can change it into anything they want. Students set up 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 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 by local employers and have one of the highest job placement rates in the school. Many students pursue careers in engineering.

SUN Area Technical Institute

WELDING Course No. **995**

Description: The SUN Tech Welding Program provides students with hands-on training in all positions and theoretical backgrounds required for an entry-level position in the field of welding. Students may take a certification test (D1.1 or D1.5) at the end of the school year.

Students will learn:

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

WOOD DESIGN & TECHNOLOGY Course No. **990**

Description: Wood Design & Technology (WDT) students can be trained to be a quality machine operator, production worker, finisher, or technician. Students learn to have a strong emphasis on quality and professionalism. Wood products manufacturing remains one of the top career fields locally and throughout the state. WDT is a State Approved Program of Study.