

## Mifflin County School District

 Program of Studies 2024-2025 You school system of choice.www.mcsdk12.org

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## A Letter from the Principal...

Dear Students and Parents:
The Mifflin County School District, with the cooperation of parents and community, has prepared a Strategic Plan to lead the district forward with the goal of challenging all students to reach their potential and to develop the skills necessary to become responsible, contributing members of society.

Beginning with the freshman class in high school, all students will select courses to lead toward the attainment of a high school diploma. Graduation requirements are explained in this course booklet. All students will be expected to demonstrate the following: communication, interpersonal, decision making, and problem solving skills as well as the principles of good citizenship.

This booklet contains descriptions of various courses and programs of study. The information provided should help both students and parents in the selection of courses most appropriate to meet the needs and interests of the student.

As you select courses, please give thought to the student's career goals and/or educational plans. The signature on the printed copy of students' selected courses indicates to us that you participated in the selection process and are in agreement with the courses selected. The school guidance counselors of our schools are prepared to assist you in making this important decision.

Please take the time to carefully plan now, for it is difficult to make changes after the course selection form is returned. For more information regarding schedule changes after the 20242025 school year begins, please see the information addressing schedule change requests.

Best wishes as you work to make decisions to prepare for the future. Please know that we will do our best to provide the best possible education for your student.

Sincerely,

Kelly Campagna
Principal

## Introduction

Throughout a student's high school career, the proper choice of courses is a vital part of success. This program of studies is designed to assist students in choosing courses that will help them satisfy graduation requirements and prepare them to be successful in the next phase of life. When choosing courses, both students and parents should be involved in the process. Studying the information in this program of studies is encouraged so that parents and students make appropriate, informed decisions about future courses. As courses are selected, students are asked to consider the following: graduation requirements, future career and educational goals, interests, and abilities.

## The Role of the School Counselor

The school counselors throughout Mifflin County School District work to address the academic, career, and personal/social development of all students. School counselors are student advocates who provide support to maximize their students' personal growth, potential, and academic achievements.
Along with the parents and students, school counselors play an intricate role in the course registration process. School counselors are available to discuss with students and parents the options available to students with regards to course selection. All matters concerning course selection, electives, report cards, grades, scholastic progress, college guidance, and career planning will be handled by the school counselors. Students and parents are encouraged to consult with them at any time. Parents of eighth grade students should feel free to consult with the junior high school counselors concerning course selections for their children for their ninth grade year.

## Course Registration Process

The course registration process begins in January when classroom teachers in the core subject areas (English, math, science, and social studies) make recommendations for students for next school year. Students are encouraged to discuss with their teachers not only their interest in specific future courses but also their career and education goals. In late February, the school counselors will sponsor a Course Registration Night where students in grades 8-11 and their parents/guardians are invited to the high school to learn about the academic opportunities available to students for the upcoming school year. During the end of February/beginning of March, the school counselors meet with students in their social studies classes to discuss their course options. In March, counselors review students' selected and recommended courses and meet with students as needed to discuss the selections. Once schedules are complete over the summer, the school counselors contact students whose schedules have conflicts. Throughout this process, students and parents are encouraged to meet with school counselors to discuss any questions or concerns they may have.

## Academic Course Load and Drop/Add Period

Students at Mifflin County School District must carry between 6.0 and 7.0 credits ( 5.0 credits for seniors) to be considered full-time students. Seniors have various options from which to choose that may take them below that requirement (i.e. cooperative education, etc.). Students have the option to change courses for the upcoming school year until July $1^{\text {st }}$. After that date, there is no guarantee students will be permitted to change courses until the beginning of the school year. Course change requests must be submitted in writing by completing a course change request form (with parent signature) from the Guidance Office and returning it to the student's school counselor. Yearlong courses may be changed within the first six day cycle of the school year-changes of core courses (i.e. English, social studies, science, and math) may require additional signatures and discussion. Semester courses may be changed within the first six day cycle of each semester. When considering a course change, students are encouraged to talk with their parents, counselors, and teachers before making a final decision. If students are dissatisfied with their schedules and would like to make a change, they may do so within the following limitations:

1. If there is a distinct educational reason for a schedule change, such changes will be considered only during the first six day cycle of the school year for yearlong classes and of the semester for semester classes. Schedule changes beyond the first six day cycle will be considered on an individual basis.
2. Any request for a change should be discussed with the student's school counselor, who may discuss the request with the principal/teacher involved.
3. Each case will be evaluated on an individual basis and a decision will be rendered according to the academic/education reasons for the change.
4. To request a schedule change for a yearlong course, students will need to fill out a form from the school guidance office within the first six day cycle of the school year explaining the change and the reason for the change. To request a schedule change for a semester long course, students will need to fill out a form from the school guidance office within the first six day cycle of the semester. A parent signature is required for a change to be made.

## Graduation Requirements

To earn a Mifflin County High School diploma, students must satisfy all graduation requirements within at least a four year period. Students can begin to take courses to satisfy these requirements in grade 8 and must work with their school counselors to be certain they are taking the appropriate courses that satisfy core course requirements. The following criteria must be met to earn a diploma from Mifflin County School District:
A. A student must accumulate a total of at least 21.5 credits to meet graduation requirements.
B. A student must successfully complete the following required courses to meet graduation requirements:
a. English 4.0 credits
b. Social Studies 3.0 credits
c. Science
2.0 credits
d. Biology
e. Mathematics
1.0 credit
f. Computer
4.0 credits
g. Health
0.5 credit
h. Physical Education
0.5 credit
1.0 credit

Total core course requirements
16.0 credits
i. General Electives
5.5 credits

TOTAL
21.5 credits
*Students will be able to attend the Mifflin County Academy of Science and Technology beginning with the sophomore year for three periods and will earn three elective credits per year for successful completion of those credits. Cooperative Education through the Academy is an option for students in grade 12 who have successfully completed two years of a program at the Academy.
C. Students who plan to attend the Academy should complete a computer course, one physical education course, and a health course during the freshman year.
D. Seniors must satisfy the Keystone Pathway to Graduation Requirement in addition to completing their coursework at Mifflin County High School. Students should work with their school counselors to determine the pathway that they can use to satisfy this requirement.

## Special Notes

1. A one credit class meets one period every day all year or two periods a day for one semester.
2. All $9^{\text {th }}$ grade students will register for a minimum of 6.5 credits; all $10^{\text {th }}-11^{\text {th }}$ grade students will register for a minimum of 6.0 credits; all $12^{\text {th }}$ grade students will register for a minimum of 5.0 credits.
3. Students who successfully complete a full year of study at the Academy will be awarded a total of 3.0 credits for each of their $10^{\text {th }}, 11^{\text {th }}$, and $12^{\text {th }}$ grade years.
4. Credits earned, not chronological age or number of years in school, will determine whether a student is promoted to the next grade level though students are required to complete four years of high school before they are allowed to graduate. Students are promoted to the next grade based on credits earned toward graduation as follows:

$$
\begin{aligned}
& 10^{\text {th }} \text { Grade }-2.5 \text { credits } \\
& 11^{\text {th }} \text { Grade }-9.0 \text { credits } \\
& 12^{\text {th }} \text { Grade }-14.5 \text { credits for a Traditional Senior } \\
& \quad 13.5 \text { credits and } 3 \text { completed years of high school for a } \\
& \quad \text { Non-Traditional Senior* }
\end{aligned}
$$

*Non-Traditional seniors may need to complete a blended learning approach to courses to meet graduation requirements. The school guidance counselor will help students to establish what courses are needed and how those courses can be completed.
5. All course requests must be printed off Skyward after they have been chosen and submitted, signed by the parent or guardian, and returned to the Guidance Office.
6. If courses are not chosen and submitted by the set deadline, courses will be chosen by the school counselors.
7. Any student graduating with a cumulative GPA of $93.000 \%$ or higher (without rounding the decimal numbers) will be considered an Honor Graduate for graduation. This will be determined at the end of the third marking period of the senior year once all grades for that marking period are finalized. Honor Graduates will be announced during a senior class meeting after all third marking period grades are finalized and transcripts are updated. Honor Graduates will NOT be announced before this meeting.
8. All students are eligible to retake Keystone Exams to better their scores. Students should speak with a principal or counselor if they are interested in retaking a Keystone Exam.

## Graduation Pathways

Students will be required to meet one of the five graduation pathways developed by the PA Department of Education to earn a high school diploma. School counselors will be working with students to make sure they meet one of those requirements. For additional information, please see the PA Department of Education website.


## Mifflin County Academy of Science and Technology

## SOAR Program: Students Occupationally and Academically Ready

SOAR programs of study are career and technical programs that prepare students for challenging careers as well as post-secondary education in technical fields of study. These programs of study include rigorous academic and technical content that is aligned with Pennsylvania's academic standards

Benefits include the following:

- Transferring credits from high school to college
- Saving money on college tuition
- Shortening time spent in college
- Entering the job market prepared to work in your chosen field
- Obtaining a seamless flow from high school to college

SOAR programs of study are offered at the Mifflin County Academy of Science and Technology. Academy SOAR Programs of Study are as follows:

- Automotive Technology
- Automotive Collision Repair
- Construction Trades
- Culinary Arts
- Early Childhood Education
- Electrical Installation
- Mechatronics
- Health Professions
- Precision Machining

Students who successfully complete a program of study at the Academy can earn articulated credits through participating colleges such as the following:

- Pennsylvania College of Technology
- Thaddeus Stevens College of Technology
- Harrisburg Area Community College
- Mercyhurst College
- Mount Aloysius College
- Harcum College
- Pierce College

Additional post-secondary schools can be viewed at www.collegetransfer.net.
**Any questions about programs of study and/or college credits available through articulation agreements should be directed to the Academy at 717-248-3933.

## Mifflin County Academy of Science and Technology

## Penn College Dual Enrollment

The Penn College Dual Enrollment program allows students to earn credits from the Pennsylvania College of Technology while in high school. Penn College Dual Enrollment courses are actually Penn College courses taught in the high school or career and technical center by high school or career and technical center teachers. Most importantly, these courses are offered at no tuition cost to students and their families.

Students who successfully complete Penn College Dual Enrollment courses earn Pennsylvania College of Technology credits and graduate high school with those credits indicated on an official Penn College transcript. Every Penn College Dual Enrollment credit earned in high school is like a $\$ 587$ scholarship to Penn College. In 2021-2022, high school students across Pennsylvania earned over $\$ 3$ million in tuition-free college credits through Penn College Dual Enrollment.

Penn College Dual Enrollment courses benefit students in the following ways:

- Students save money-The more Penn College Dual Enrollment courses taken (at no tuition cost), the less money spent once the time comes to earn a degree after high school.
- Students save time-Students spend less time earning a degree at Penn College if they have already completed some of the coursework through Penn College Dual Enrollment. Courses can also transfer to additional postsecondary institutions.
- Students are pushed to excel in a variety of challenging courses-Students can take and succeed at college coursework in their high school/CTC environment, where they feel comfortable and supported.
- Students are connected to "the college experience"-Through Penn College Dual Enrollment, students have chances to visit our campus, see our facilities, and meet our college faculty.
- Students build confidence in their abilities regardless of strengths-Regardless of their post-graduation plans, students who have shown success in college courses will be more competitive in both the job market and college admissions process. Success in challenging coursework builds confidence as well as skills.
- Students increase their odds of success in college-Despite the type of degree or major students pursue, students who have been successful in college courses and who are familiar with a college campus before entering as a freshman are more likely to remain in college and more likely to complete their chosen degree.


## Current Penn College Dual Enrollment Courses offered at the Mifflin County Academy:

- Mechatronics-12 credits
- Automotive Technology-6 credits
- Health Professions- 8 credits
- Electrical Installation-5 credits
- Collision Repair-5 credits
- Precision Machining-8 credits
- Building Trades-10 credits
- Agriculture Science-1 credit
- Culinary Arts/Hospitality-4 credits
- Welding Technology-18 credits


## Mifflin County School District ALPHA Program

ALPHA is a blended learning environment from Mifflin County School District for students in grades 7-12. All class/credit requirements of Mifflin County High School are adhered to in this program. Students in the ALPHA Program are active students in the Mifflin County School District and are afforded all the responsibilities, rights, and privileges of traditional students.

Blended learning can consist of the following options:

- $100 \%$ online learning schedule
- $100 \%$ online learning with support at ALPHA Program
- Hybrid learning schedule with classes available for direct instruction in MCHS or MCJHS
- Hybrid learning schedule with the Academy
- Hybrid learning schedule with Cooperative Education (1.0-3.0 elective credits)

In addition to all courses offered at Mifflin County Junior High School and Mifflin County High School, ALPHA has courses that are available to individual students. This allows for personalized educational opportunities.

Through the blended learning environment used in the ALPHA Program, students are required to complete 21.5 credits in four years ( $9^{\text {th }}-12^{\text {th }}$ grades). Students may not move up in grade levels through the ALPHA Program unless they are recovering lost credits to return them to their graduating class cohort (beginning with the year the students entered grade 9). Seniors are eligible to take only the classes they need to reach 21.5 credits to graduate as outlined in the Mifflin County School District graduation requirements. Students' course selections and schedules will be based on a team decision with the student, parent, and ALPHA staff.

Students graduating from the ALPHA Program are Mifflin County High School graduates. Students who successfully complete their graduation requirements participate in graduation ceremonies and receive a Mifflin County High School diploma.

Any questions regarding the ALPHA Program can be directed to the ALPHA office at 717-447-2655.

## Mifflin County High School Flexible Release Program

Mifflin County High School's Flexible Release Program offers seniors the opportunity to come to school late or leave early if certain conditions are met. These conditions are outlined below. Please note that students must choose one option or the other (not both) and consideration to change will only occur at the semester break. The following conditions must be met to be eligible for the program:

1. Students must maintain a cumulative GPA of $77 \%$ or higher.
2. Students may not miss more than $10 \%$ of days in a quarter unless approved.
3. Students must have completed 16.5 credits in order to be eligible for the program.

Grade eligibility and attendance will be monitored for those students who choose to participate in the Flexible Release Program. This program's privileges may be revoked at any time as a result of discipline issues, the previously stated requirements not being met, or any other reason for which administration sees fit.

## Early Release Program

Students who meet the above requirements and have study hall seventh period, or sixth and seventh period, may be eligible to leave the building prior to those periods. If a student has study hall seventh period only, he/she must sign out of the building by the time seventh period begins at 2:19 PM. A student who has study hall both sixth period and seventh period must sign out of the building before sixth period begins at 1:24 PM. Students who are part of the early release program may not re-enter the building until after 3:10 PM, unless special arrangements have been approved by administration.

## Late Arrival Program

Students who meet the above requirements and have study hall first period, or first and second period, may be eligible to begin their school day after those periods occur. If a student has study hall first period only, he/she must sign into the building by 9:10 AM in order to make it to second period by the start of class at 9:14 AM. A student who has study hall both first and second periods, must sign into the building by 10:05 AM in order to make it to third period by the start of class at 10:09 AM. Students who arrive prior to 9:10 AM or 10:05 AM must remain in the office until the 9:10 AM or 10:05 AM bell rings. At that time, the students may proceed to second or third periods.

On occasion, school may be delayed or dismissed early for the entire student body. These situations could include, but are not limited to, Act 80 days, 2-hour delays, 3-hour delays, or other previously scheduled early dismissals which may/may not be weather dependent. In these particular cases, students will be required to attend the periods they would attend on a normal day. In other words, students will attend the periods they would normally attend no matter what time they occur.

Students and parents must sign a permission form agreeing to the terms of this program before the students will be considered for eligibility.

## NCAA Eligibility Center

Any student athlete interested in continuing to play a sport at a Division I or Division II college or university will need to be eligible to register with the NCAA Eligibility Center (www.eligibilitycenter.org) beginning at the end of their sophomore year of high school. In order to participate in practices and games at the collegiate level, students must qualify through academics as well as amateurism. For a complete listing of the NCAA Eligibility Center approved courses offered at Mifflin County High School, please consult the Program of Studies.

To be academically eligible, students must meet the following requirements:

## Division I*

English: 4 years (Level II English or higher)
Math: 3 years (Algebra I or higher)
Natural/Physical Science: 2 years (one year of lab science)
Extra credit from above subjects: 1 year
Social Science: 2 years
Extra courses from above or foreign language: 4 years
*Division I student athletes will be required to complete 16 core courses ( 10 of which must be completed before the seventh semester and seven must be in English, math, or science), maintain a minimum 2.3 GPA in the core courses, and graduate from high school if they want to be full qualifiers.

| Division II* |
| :--- |
| English: 3 years (Level II English or higher) |
| Math: 2 years (Algebra I or higher) |
| Natural/Physical Science: 2 years (one year of lab science) |
| Extra credit from above subjects: 3 years |
| Social Science: 2 years |
| Extra courses from above or foreign language: 4 years |
| *Division II student athletes must complete 16 core courses, earn a core course GPA of at |
| least 2.2, and graduate from high school if they want to be full qualifiers. |

Student athletes interested in continuing playing sports at a Division I or Division II school are encouraged to work closely with their school counselor to be certain they are taking NCAA Eligibility Center approved courses.

## Advanced Placement Courses

Mifflin County School District offers several Advanced Placement (AP) courses. AP courses follow the college-level curriculum suggested by the College Board in order to give the student the opportunity of successfully completing the AP exam (which is required of any student who takes the course). Students taking AP courses are responsible for any cost associated with the cost of the AP examination. In addition, if students score well on the exam, they may earn college credit from the institution they attend. AP classes are offered in a traditional classroom setting as well as an online option. The final grade earned in an AP class is multiplied by 1.08 when the course is averaged in with the student's cumulative grade average.

The school counselors can assist students and parents in making the decision of whether to take an AP course or not. Teachers are asked to recommend students who they feel are prepared for the challenge of AP courses. Typically, the students who are most successful exhibit the following characteristics: creativity, flexibility, innovation, motivation, selfdiscipline, good work habits, long attention span, and open mindedness.
> **Students are responsible for any cost associated with the AP exam. There will be a reduction in cost for the students who qualify for free or reduced lunch.

Students who earn scores of 3 or higher on AP exams will have the opportunity to request reimbursement for the Exams in which they earned the required score. Reimbursement applications will be provided to the students during the AP exam testing window in May.

During the 2024-2025 school year, the following AP level courses will be offered at Mifflin County High School:

## AP Biology

AP Calculus AB

AP Calculus BC
AP Chemistry
AP Computer Science Principles
AP English Language and Composition

AP English Literature and Composition
AP Government

AP Physics C: Mechanics
AP Psychology
AP Statistics

AP Studio Art

## Honors Courses

Mifflin County School District offers several Honors courses. These courses are designed for students who plan to attend a 4 year college or university and who wish to work at a more intense pace. Honors courses typically cover the same curriculum as their non-honors counterparts, but they involve higher level thinking skills and go more in depth in the subject area. Students are recommended by teachers to take these courses. The final grade earned in an Honors Level course is multiplied by 1.04 when the course is averaged in with the student's cumulative grade average.

During the 2024-2025 school year, the following Honors Level courses will be offered:

Advanced Algebra II Honors<br>American Cultures Honors<br>Anatomy and Physiology Honors<br>Chemistry I Honors<br>Democracy in Action Honors<br>Dystopian Literature Honors<br>English 9 Honors<br>English 10 Honors<br>English 11 Honors<br>English 12 Honors<br>Film as Literature Honors<br>Geometry Honors<br>Gothic Literature Honors

Honors Biology<br>Humor/Satire Literature Honors<br>Outdoor/Naturalist Literature Honors<br>Physics I Honors<br>Physics II Honors<br>Precalculus Honors<br>Prestatistics Honors<br>Science Fiction/Fantasy Literature Honors<br>Sports Literature Honors<br>Survival Stories Honors<br>War Literature Honors<br>World History Honors<br>Young Adult Literature Honors

## Dual Enrollment Courses

Mifflin County School District supports students who enter into Dual Enrollment courses. Dual Enrollment courses offer high school students the opportunity to start earning college credits during their junior and senior years. Qualified students can experience the workload of a college class while earning college credit. Various entities offer Dual Enrollment as online courses available to our students. Registration and payment is the responsibility of the student and family. A student may earn credit toward high school graduation for coursework successfully completed through an approved dual enrollment program.

Students interested in additional information regarding dual enrollment options should make a note on their course registration papers indicating this interest. School counselors will give that information when it is available.

## Early College Courses

Students have the opportunity to take college level classes instructed by a Mifflin County School District faculty member. This opportunity will be offered through Luzerne County Community College (LCCC). LCCC's Early College program is an opportunity for students to earn college credit, prepare for post-secondary learning, and increase academic success and retention. The responsibility of payment of the course will be on the student and his or her parent/guardian. For the 2024-2025 school year, students will be able to take History 201: American History to 1865, History 202: American History 1865 to Present, and Introduction to Biological Sciences and have the chance to earn up to 3 college credits for each course. Students are encouraged to make sure these credits will transfer to the college/university they plan to attend upon graduation. College level courses instructed or evaluated by Mifflin County School District personnel will count for graduation credits on the student's transcript and the course will be weighted using a multiplier of $1.08 \%$. Because these courses will allow the student to receive high school graduation credits, his or her final average will be figured into the students' overall cumulative grade average.

## Weighting System

The National Association of Secondary School Principals recommends that class rank be computed on a system of academic weighting. These weighted values are assigned to courses designated as Advanced Placement courses, Early College courses, and Honors courses; they are used only for the determination of class rank, eligibility for National Honor Society, Honor Roll, and Distinguished Honor Roll.

The report cards of students taking these types of courses will reflect the percentage earned in a class each marking period up to and including a $100 \%$ (bonus points of over $100 \%$ will not be reflected on a report card). The weight assigned to the course will not be evident until the marking period GPA is computed. If a student is taking AP courses and/or Early College Courses and earned at least a $77 \%$, the multiplier will be 1.08 . In an Honors class the multiplier is 1.04 for a $77 \%$ final grade or higher. It should be noted that a minimum percentage average of $68 \%$ is required to successfully pass each course.

## Example:

| Course Name | Classification | Percentage <br> Earned | Credit <br> Value | Percentage <br> Averaged for <br> Ranking | Appropriate <br> Multiplier | Weighting <br> Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| English 11-II | Regular | 90 | 1.0 | 90.0 | 1.00 | 90.00 |
| AP Government | AP | 92 | 1.0 | 92.0 | 1.08 | 99.36 |
| PreCalculus H | Honors | 85 | 1.0 | 85.0 | 1.04 | 88.40 |
| Chemistry I | Regular | 88 | 1.0 | 88.0 | 1.00 | 88.00 |
| Spanish III | Regular | 83 | 1.0 | 83.0 | 1.00 | 83.00 |
| Geography | Regular | 94 | 0.5 | 47.0 | 1.00 | 47.00 |
| Psychology | Regular | 85 | 0.5 | 42.5 | 1.00 | 42.50 |
| Physical Educ | Regular | 96 | 0.5 | 48.0 | 1.00 | 48.00 |
| Totals |  |  | 6.5 |  |  | 586.26 |


| Formula: | Total Weighted Averages  <br> Total Credit Value  <br>  $=\quad$ Numerical Grade Average (NGA) <br>  $\frac{586.26}{6.5}$$\quad 90.194$ Overall NGA |
| ---: | :--- | ---: | :--- |

The numerical grade average is used to rank students according to academic achievement. Class rank positions will be determined by averages carried out to the third decimal place. Students in a given grade are included in determining rank-in-class. The exact rank is computed at the end of each semester beginning with the end of the freshman year, at the end of the third marking period of the senior year, and at the end of the senior year. The third marking period ranking during the senior year is used for the honoring of students at commencement. When the ranking procedure ties-even after the results are carried out to three (3) decimal places-students who are tied will be given the same rank number.

The percentage grades students earn in Early College classes are the grades that are used on the students' transcripts.

## Course Offerings 2024-2025

Please note that italicized courses are only offered at Mifflin County Junior High School.
The following course listing should be used as a guide for class registration. Courses are categorized alphabetically and by department, and credit values of each course are noted. Course descriptions are printed on the following pages.

| Course Name | Department | Credit Value |
| :---: | :---: | :---: |
| AP Studio Art | ART | 1.0 |
| Advanced Art | ART | 1.0 |
| Drawing and Painting I | ART | 0.5 |
| Drawing and Painting II | ART | 0.5 |
| Ceramics I | ART | 0.5 |
| Ceramics II | ART | 0.5 |
| Foundations of Art | ART | 1.0 |
| Introduction to Digital Art | ART | 0.5 |
| Portfolio Development | ART | 0.5 |
| Wearable Art | ART | 0.5 |
|  | BUSINESS | 1.0 |
| Accounting I | BUSINESS | 1.0 |
| Accounting II | BUSINESS | 0.5 |
| Adulting 101 | BUSINESS | 1.0 |
| Business English | BUSINESS | 0.5 |
| Business and Personal Law | BUSINESS | 0.5 |
| Entrepreneurship I | BUSINESS | 0.5 |
| Entrepreneurship II | BUSINESS | 0.5 |
| Investing 101 | BUSINESS | 0.5 |
| Legal/Medical Terminology | BUSINESS | 0.5 |
| Personal Financial Management |  | 0.5 |
| Sports and Entertainment | Marketing |  |
| AP Computer Science Principles | COMPUTER SCIENCE | 1.0 |
| Exploring Computer | COMPUTER SCIENCE | 0.5 |
| Applications | COMPUTER SCIENCE | 0.5 |
| Intro to Programming | COMPUTER SCIENCE | 0.5 |
| Microsoft Applications I | Programming I | COMPUTER SCIENCE |


| AP English Language | ENGLISH | 1.0 |
| :---: | :---: | :---: |
| AP English Literature | ENGLISH | 1.0 |
| Business English | ENGLISH | 1.0 |
| English 9 II, III | ENGLISH | 0.5 |
| English 9 Honors | ENGLISH | 0.5 |
| English 10 II, III | ENGLISH | 0.5 |
| English 10 Honors | ENGLISH | 0.5 |
| English 11 II, III | ENGLISH | 0.5 |
| English 11 Honors | ENGLISH | 0.5 |
| English 12 II, III | ENGLISH | 0.5 |
| English 12 Honors | ENGLISH | 0.5 |
| Dramatic Arts | ENGLISH | 1.0 |
| Dystopian Literature | ENGLISH | 0.5 |
| Dystopian Literature Honors | ENGLISH | 0.5 |
| Elements of Debate | ENGLISH | 0.5 |
| Exploring Young Adult Literature | ENGLISH | 0.5 |
| Film as Literature | ENGLISH | 0.5 |
| Film as Literature Honors | ENGLISH | 0.5 |
| Gothic Literature | ENGLISH | 0.5 |
| Gothic Literature Honors | ENGLISH | 0.5 |
| Humor and Satire Literature | ENGLISH | 0.5 |
| Humor and Satire Literature Honors | ENGLISH | 0.5 |
| Journalism I | ENGLISH | 0.5 |
| Journalism II | ENGLISH | 0.5 |
| Journalism III | ENGLISH | 0.5/1.0 |
| Media I | ENGLISH | 0.5 |
| Media II | ENGLISH | 0.5 |
| Media III | ENGLISH | 1.0 |
| Murder Mysteries and True Crime Literature | ENGLISH | 0.5 |
| Outdoor/Naturalist Literature | ENGLISH | 0.5 |
| Outdoor/Naturalist Literature Honors | ENGLISH | 0.5 |
| Science Fiction/Fantasy Literature | ENGLISH | 0.5 |
| Science Fiction/Fantasy Literature Honors | ENGLISH | 0.5 |
| Speech Communications | ENGLISH | 0.5 |
| Sports Literature | ENGLISH | 0.5 |
| Sports Literature Honors | ENGLISH | 0.5 |
| Stephen King Literature | ENGLISH | 0.5 |
| Survival Stories | ENGLISH | 0.5 |
| Survival Stories Honors | ENGLISH | 0.5 |
| War Literature | ENGLISH | 0.5 |
| War Literature Honors | ENGLISH | 0.5 |
| Written Communications | ENGLISH | 0.5 |


| Young Adult Literature | ENGLISH | 0.5 |
| :---: | :---: | :---: |
| Young Adult Literature Honors | ENGLISH | 0.5 |
|  |  |  |
| Child Development I | FAMILY \& CONSUMER SCIENCE | 0.5 |
| Culinary Arts I | FAMILY \& CONSUMER SCIENCE | 0.5 |
| Culinary Arts II | FAMILY \& CONSUMER SCIENCE | 0.5 |
| Nutrition \& Wellness | FAMILY \& CONSUMER SCIENCE | 0.5 |
|  |  |  |
| AP Calculus AB | MATHEMATICS | 1.0 |
| AP Calculus BC | MATHEMATICS | 1.0 |
| AP Statistics | MATHEMATICS | 1.0 |
| Advanced Algebra II Honors | MATHEMATICS | 1.0 |
| Algebra I | MATHEMATICS | 1.0 |
| Algebra IA | MATHEMATICS | 1.0 |
| Algebra IB | MATHEMATICS | 1.0 |
| Algebra II | MATHEMATICS | 1.0 |
| Algebra III | MATHEMATICS | 0.5 |
| Applied Geometry | MATHEMATICS | 1.0 |
| Calculus Concepts | MATHEMATICS | 1.0 |
| Career Math | MATHEMATICS | 1.0 |
| Consumer Mathematics | MATHEMATICS | 1.0 |
| Consumer Mathematics II | MATHEMATICS | 1.0 |
| Geometry | MATHEMATICS | 1.0 |
| Geometry Honors | MATHEMATICS | 1.0 |
| Math 9 | MATHEMATICS | 1.0 |
| PreCalculus Honors | MATHEMATICS | 1.0 |
| Prestatistics Honors | MATHEMATICS | 1.0 |
| Probability \& Statistics I | MATHEMATICS | 0.5 |
| Probability \& Statistics II | MATHEMATICS | 0.5 |
| Trigonometry | MATHEMATICS | 0.5 |
|  |  |  |
| Concert Band | MUSIC | 0.5 |
| Concert Choir | MUSIC | 0.5 |
|  |  |  |
| Maintaining Fitness | PHYSICAL EDUCATION \& HEALTH | 0.5 |
| Health | PHYSICAL EDUCATION \& HEALTH | 0.5 |
| Strength \& Conditioning | PHYSICAL EDUCATION \& HEALTH | 0.5 |
|  |  |  |
| AP Biology | SCIENCE | 1.0 |
| AP Chemistry | SCIENCE | 1.0 |
| AP Physics C: Mechanics | SCIENCE | 1.0 |
| Anatomy \& Physiology Honors | SCIENCE | 1.0 |
| Biology I | SCIENCE | 1.0 |
| Honors Biology | SCIENCE | 1.0 |
| Chemistry I | SCIENCE | 1.0 |
| Chemistry I Honors | SCIENCE | 1.0 |
| Ecology of Mifflin County | SCIENCE | 0.5 |
| Forensic Science | SCIENCE | 0.5 |


| Global Environmental Science | SCIENCE | 0.5 |
| :---: | :---: | :---: |
| Microbiology | SCIENCE | 0.5 |
| Biology 101: Introduction to Biological Science | SCIENCE | 1.0 |
| Physics I | SCIENCE | 1.0 |
| Physics I Honors | SCIENCE | 1.0 |
| Physics II Honors | SCIENCE | 1.0 |
| Survival Science | SCIENCE | 0.5 |
| Wildlife and Fisheries Science | SCIENCE | 0.5 |
|  |  |  |
| AP United States Government | SOCIAL STUDIES | 1.0 |
| AP Psychology | SOCIAL STUDIES | 1.0 |
| American Cultures | SOCIAL STUDIES | 1.0 |
| American Cultures Honors | SOCIAL STUDIES | 1.0 |
| History 201: American History to 1865 | SOCIAL STUDIES | 0.5 |
| History 202: American History 1865 to Present | SOCIAL STUDIES | 0.5 |
| Democracy in Action | SOCIAL STUDIES | 1.0 |
| Democracy in Action Honors | SOCIAL STUDIES | 1.0 |
| Famous Trials in American History | SOCIAL STUDIES | 0.5 |
| Geography | SOCIAL STUDIES | 0.5 |
| Psychology | SOCIAL STUDIES | 0.5 |
| World History | SOCIAL STUDIES | 1.0 |
| World History Honors | SOCIAL STUDIES | 1.0 |
|  |  |  |
| STEM Studio | STEM | 0.5-1.0 |
| STEM Internship | STEM | 0.5-1.0 |
|  |  |  |
| 2D Engineering Design | TECHNOLOGY | 0.5 |
| 3D Engineering Design | TECHNOLOGY | 0.5 |
| Advanced Print Media Production | TECHNOLOGY | 1.0 |
| Architectural Design | TECHNOLOGY | 0.5 |
| Digital Electronics | TECHNOLOGY | 0.5 |
| Engineering \& Innovations | TECHNOLOGY | 0.5 |
| Exploring Drafting | TECHNOLOGY | 0.5 |
| Exploring Technology | TECHNOLOGY | 0.5 |
| Exploring Visual Communications | TECHNOLOGY | 0.5 |
| Introduction to Print Media Production A | TECHNOLOGY | 0.5 |
| Introduction to Print Media Production B | TECHNOLOGY | 0.5 |
| Introduction to Product Development A | TECHNOLOGY | 0.5 |


| Introduction to Product Development B | TECHNOLOGY | 0.5 |
| :---: | :---: | :---: |
| Print Media Production Assistant: Independent Study | TECHNOLOGY | 0.5-1.0 |
| Product Design and Development | TECHNOLOGY | 1.0 |
| Robotics and Engineering | TECHNOLOGY | 0.5 |
| Stage Craft | TECHNOLOGY | 0.5 |
| Underwater Robotics | TECHNOLOGY | 0.5 |
|  |  |  |
| Spanish I | WORLD LANGUAGE | 1.0 |
| Spanish II | WORLD LANGUAGE | 1.0 |
| Spanish III | WORLD LANGUAGE | 1.0 |
| Spanish IV Honors | WORLD LANGUAGE | 1.0 |
|  |  |  |
| Arabic I \& II* | WORLD LANGUAGE | 1.0 |
| Chinese-Mandarin I \& II* | WORLD LANGUAGE | 1.0 |
| French I \& II* | WORLD LANGUAGE | 1.0 |
| German I \& II* | WORLD LANGUAGE | 1.0 |
| Japanese I \& II* | WORLD LANGUAGE | 1.0 |
| Latin I \& II* | WORLD LANGUAGE | 1.0 |
|  |  |  |
| Agriculture Science I-III | ACADEMY** | 3.0 |
| Automotive Technology I-III | ACADEMY** | 3.0 |
| Building Trades and Construction I-III | ACADEMY** | 3.0 |
| Collision Repair I-III | ACADEMY** | 3.0 |
| Cosmetology I-III | ACADEMY** | 3.0 |
| Culinary Arts/Hospitality I-III | ACADEMY** | 3.0 |
| Early Childhood Education I-III | ACADEMY** | 3.0 |
| Electrical Installation I-III | ACADEMY** | 3.0 |
| Emergency Services/Fire Safety/Law Enforcement | ACADEMY** | 3.0 |
| Health Professions I-III | ACADEMY** | 3.0 |
| Mechatronics, Robotics, \& Automation I-III | ACADEMY** | 3.0 |
| Precision Machining I-III | ACADEMY** | 3.0 |
| Welding Technology I-III | ACADEMY | 3.0 |
|  |  |  |
| *These World Language courses are offered in an online format with a live teacher. |  |  |
| **These Mifflin County Academy of Science and Technology Course Descriptions are also in the Academy Handbook which can be found at www.theacademy.net. |  |  |

## Course Descriptions

On the following pages is a list of the course descriptions for all the courses offered at Mifflin County High School and Mifflin County Junior High School. Students are encouraged to read each description carefully as well as the prerequisites and credit values. Students are encouraged to choose electives that will prepare them for their post-secondary plans. Prerequisites are indicated for courses where applicable-to take these particular courses, the prerequisites must be met. NCAA Eligibility Center approved courses are also indicated; if a course is in the process of being approved by the Eligibility Center, it is labeled as "Pending". Students must pay close attention to credit values as well as which courses will satisfy graduation requirements. It is the responsibility of the student to keep up with graduation requirement satisfaction. The school counselors can help students determine what courses they still need to take to satisfy all graduation requirements.

Parents/guardians are encouraged to talk to their students about courses offered and courses chosen. Past coursework, academic ability, interest, and future goals should be considered when helping students choose courses to take for the upcoming school year. A parent/guardian signature is required on students' course selection paper. Parents/guardians and students are encouraged to meet with the school counselors to map out a plan for course selection.

## Art Department Course Descriptions

## 26AP_AP Studio Art

Credit: 1.0
Grades: 11-12
Graduation Credit: Elective
Prerequisite: Teacher Recommendation, Foundations of Art, AND two credits of art electives with a minimum grade of $78 \%$
This course has been developed to accommodate students who have expressed an interest in completing either the AP Drawing Portfolio Exam or the AP 2-D and 3-D Design Portfolio. Therefore, all content meets the requirements as stated in the AP Portfolio website. Through direct teacher instruction, emphasis will be placed on the production of a volume of quality pieces of artwork. Students will be challenged to develop their own personal work. Students will develop mastery of concept, composition, and execution of their personal ideas and themes. Students will also understand that art making is an ongoing process that uses informed and critical decision making to determine outcomes to problems. Students will be expected to develop a comprehensive portfolio that addresses each of these issues in a personal way. Formulaic solutions to problems are discouraged. This course is for those looking to attend a post-secondary education program in art or design or those who are building their portfolio for gallery representation. Therefore, the student must have prior approval. The College Board Advanced Placement Exam will be required of those who take this course. Any cost related to the AP exam will be the responsibility of the student.

## 2601-Advanced Arts (formerly Art IV)

Credit: 1.0
Grades: 11-12
Graduation Credit: Elective
Prerequisites: Foundations of Art AND four 0.5 credit art electives with a minimum grade of 78\% AND teacher recommendation
This is an advanced course that explores different advanced techniques with both 2-D and 3-D media (drawing, paint, clay, glass, batik, sculpture materials, etc...) highlighting the students' strengths in the media of their choice. Students will have more opportunity to choose their own path in visual arts with the assignment constraints. This course is for those advanced-level artists who are excited to further develop their portfolio, hone their skills and work independently with a solid understanding of the elements and principles of art and design.

## 0615-Drawing and Painting I

## Credit: 0.5 <br> Grades: 9-12 <br> Graduation Credit: Elective

This class is an introductory class in drawing and painting. The focus is to help students develop the confidence to draw, paint, and understand design according to their own tastes and preferences. Students will use a variety of media from graphite and charcoal, acrylic paint and pastel to drawing on digital tablets. This course is good for any student interested in art and design, illustration, cartooning, animation, fashion, fine art painting, industrial design as well as digital design in multiple fields.

## 0616-Drawing and Painting II

Credit: 0.5 Grades 10-12 Graduation Credit: Elective
Prerequisite: Teacher Recommendation and Drawing and Painting I with a minimum grade of 78\%
This class develops design and drawing skills according to your own tastes and preferences. Students will use a variety of media from graphite and charcoal, acrylic paint and pastel drawing. This visual training is preparation in art and design, publishing, architecture and engineering, illustration, cartooning, animation, fashion, industrial design as well as digital design in multiple fields. This course is for those who want to develop a portfolio of works demonstrating proficiency with media, observation skills, creating a range of expressive use of value, color, and composition.

## 0625-Ceramics I

Credit: $0.5 \quad$ Grades: 9-12 Graduation Credit: Elective
In this introduction to ceramic materials and processes, students will design and create works using hand-building processes and throwing at the potter's wheel. Students will also complete the glazing process on a ceramic form. This course is designed for those who are interested in ceramics and pottery, learning the wheel-thrown and hand-built pottery process from start to finish.

## 0626-Ceramics II

Credit: 0.5
Grades: 10-12
Graduation Credit: Elective
Prerequisite: Teacher recommendation and Ceramics I with a minimum grade of 78\%
This is a second year course. Students will be given a general concept in which to develop a design. They will choose to either use the hand-building or wheel throwing process to create form. They will also explore higher level throwing skills through concepts such as altered forms. This course is designed for those who would like to further develop their wheelthrown and hand-built pottery skills. Surface design and materials become a focus at the advanced level. Possible career paths include the following: Ceramicist, Ceramic Science and Engineering, Industrial Ceramics and Manufacturing, Product Design, Glaze Calculations Technician, Ceramics Art Therapy, Art Education, Art Curation, Art Restoration, and Archaeology.

## 9601-Foundations of Art

Credit: 1.0
Grades: 9-12
Graduation Credit: Elective
Foundations of Art is a lively, inviting, comprehensive course written for beginning level artists. This course includes interactive activities and multicultural studio projects representing a wide variety of cultures, artistic styles, and art media. This course is designed to enrich the lives of its participants through discovery and creative problem solving. It provides students with a broader perception of their environment and cultural perspectives. The course was designed around the following key concepts:

- Meaningful, hands-on learning experiences that allow for personal growth and creative expression
- Integration of aesthetics, art criticism, art history, and studio production
- Sequentially planned experiences that build on concepts and provide learning opportunities that incorporate a variety of media, artistic styles and historical periods Students will learn traditional and contemporary techniques in drawing, painting, clay, collage, and sculpture. In addition, students will self-examine completed works in an effort to foster a sense of accomplishment and commitment to high standards of art production. This course is designed for the student who is a beginner in art or who wants to learn multiple media relating to the visual arts including drawing, paint, clay, sculpture, glass, etc...


## 0635-Introduction to Digital Arts

## Credit: $0.5 \quad$ Grades: 10-12 Graduation Credit: Elective

Introduction to Digital Arts is a digital art class where students will learn the powerful software tools used to create digital art for print such as Adobe Photoshop and Illustrator. You will learn to edit and adjust photographs, create original photo manipulations, original illustrations, and commercial art. This will include the study of art theory concepts such as the elements of art, principles of design, typography, composition, and color theory. Students will use photography and image manipulation in this project-based class. Because of the project-based nature of the class, students will be able to create meaningful pieces to add to their portfolios. Projects may include the following: movie poster design, vector illustration, logo design, advertisements, digital painting, typographic designs, and photo compositing. This course is designed for students who are interested in developing art from a digital perspective, or who are interested in graphic design or digital animation.

## 2605-Portfolio Development

Credit: $0.5 \quad$ Grades: 11-12 Graduation Credit: Elective
Prerequisite: Teacher Recommendation and at least 2.0 credits of art classes completed
This is a high level course for those art students interested in either pursuing a career in the arts at the post-secondary education level or starting their own small art business. Students will take time to hone their skills while learning basic business and marketing skills. This course is designed for the advanced art students who want to develop a portfolio of works for post-secondary education or small business. In addition, it is meant for the student that may not be able to fit a traditional art class in their schedule. This course is suitable for students who have a firm grasp of art and design concepts and have demonstrated the ability to work independently on their projects guided by the teacher.

## 0645-Wearable Arts

Credit 0.5
Grade: 10-12
Graduation Credit: Elective
This is a unique art class that combines design, function, and art. Students will have the opportunity to design and create wearable pieces of artwork. Principles of Design will be taught in addition to the importance of form and function. Students will be responsible for providing some materials to alter/modify as part of the course. Projects may include the following: jewelry-making, fashion design, upcycling existing denim/jackets/shoes, etc... This course is for those who are interested in designing, creating and producing artworks that can be worn as fashion or accessories.

# Business Department Course Descriptions 

## 1500-Accounting I

Credit: 1.0
Grades: 10-12
Graduation Credit: Math
Accounting I has been designed to teach students how to prepare, read, and interpret simple business reports and financial statements. Students will master the techniques necessary to keep a set of books for a sole proprietorship and partnership. The course is highly recommended for the college bound student preparing for a business career. Accounting I does count as a math credit for MCHS students.

## 2500-Accounting II

Credit: 1.0
Grades: 11-12
Graduation Credit: Elective
Accounting Il will develop skills essential to accounting practice, to recognize and apply proper principles to any system of keeping records for business transactions, and to gain a knowledge and understanding of business papers pertaining to the principles of partnership and corporate accounting.

## 9510-Adulting 101*

Credit: $0.5 \quad$ Grade: $9 \quad$ Graduation Credit: Elective
Adulting 101 will focus on two topics of study: Career Preparation and Personal Finance Management. Exploring one's personal interests and abilities at the high school level is an excellent way to start preparing for future employment. This course will focus on interview techniques, work ethics, and skills necessary to become a Total Quality Worker. In addition to preparing for future employment, students will also develop skills regarding personal finances. Topics could include maintaining a checking and savings account, preparing and importance of credit and the impact that it can have on one's financial situation. These are topics that every person will face as they enter adulthood.
*Adulting 101 will only be offered at Mifflin County Junior High School.

## 2140-Business English

Credit: 1.0
Grade: 12
Graduation Credit: English
Business English, taken instead of English 12, can be elected by seniors who are specializing in business education, anticipating a business career, and/or planning to attend a business, trade, or technical school. This course stresses a variety of communication skills; listening, speaking, all-purpose and technical writing, researching, evaluating, and proofreading, and editing. A research paper or a simulation project will be completed under the direction of the Business English teacher.

## 1560-Business and Personal Law

Credit: 0.5 Grades: 10-12 Graduation Credit: Elective
Business and Personal Law addresses statutes and regulations affecting businesses, families, and individuals in their related roles. Knowledge of business law is useful for all students because all students eventually assume roles as citizens, workers, and consumers in their communities and in society at large. The course will include an introduction to criminal law, civil law, and contract law. The student will learn about problems in society, classifications of crimes, trial procedures, the law of negligence, marriage and divorce, and other consumer and family issues related to the law.

## 0550-Entrepreneurship I

Credit: 0.5
Grades: 10-12
Graduation Credit: Elective
This course will increase the students' knowledge of creating, owning, and operating a business. Students will select a business, research and determine the need for it, and develop the business by building a "Business Plan." The "Business Plan" will be developed at various stages through class lectures, assignments, and projects. As each project is completed, the "Business Plan" will be created. The course will look at the following aspects of entrepreneurship: creating, researching, managing, marketing, and advertising. Students will use basic accounting principles, general business information, and computer skills to develop their business.

## 0552-Entrepreneurship II

Credit: 0.5 Grades: 10-12

## Graduation Credit: Elective

Prerequisite: Entrepreneurship I
Entrepreneurship II is an advanced course in which students will be exposed to a wide array of practical business functions they will need when operating a business. The functions will include marketing impacts on society and economics, competition, E-commerce, developing new products and services, promotions and advertising, and identifying effective communication within the business and in public relations. This course will build upon knowledge gained from Entrepreneurship I.

## 1510-Investing 101

Credit: 0.5
Grades: 11-12
Graduation Credit: Elective
Investing 101 is designed to introduce the student to a wide array of investment opportunities in today's world. The course will stress saving for college, managing debt, and a variety of personal investing options including savings accounts, stocks, bonds, mutual funds, real estate and IRAs-both Traditional and Roth. The course will also include a real life simulation for stock investing in a game format from www.marketwatch.com. Students will learn how to evaluate stocks and use these evaluations to buy stocks in a competitive format. Planning finances for future endeavors such as retirement will also be covered.

## 9540-Legal and Medical Terminology

Credit: 0.5 Grades: 10-12
Graduation Credit: Elective
Students will be exposed to the vocabulary of legal and medical professions by working with root words and variations. Students will be given an extremely large amount of vocabulary in a very short amount of time. One marking period will be dedicated to medical vocabulary, while the other will be dedicated to legal vocabulary.

## 0510-Personal Financial Management

Credit: $0.5 \quad$ Grades: 10-12 Graduation Credit: Elective
In Personal Financial Management, students learn how to prepare a wide range of financial records for personal use, and they become familiar with the procedures related to personal money management. Although Personal Financial Management is an elective course offered through the Business Department, it is a fundamental course that helps all students deal with their personal finances. Students learn how to maintain checking and savings accounts, how to prepare personal budgets, how to keep track of money received and spent, and where to protect their personal ownership records. In addition, Personal Financial Management provides students with many valuable consumer skills. Students learn about the importance of using credit wisely, the expense of using credit, and the effective management of credit.

## 0542-Sports and Entertainment Marketing

Credit: 0.5
Grades: 10-12
Graduation Credit: Elective
Students will take a journey through the world of marketing and learn how marketing functions are applied to sports and entertainment. Students will participate in engaging, hands-on projects in the topics of product mix, target markets, promotion, advertising, sales, pricing, and social media marketing. Crucial topics like the channels of distribution, customer service, and economic principles make direct connections to real-life businesses, famous athletes, and celebrities. Students work in teams to build an expansive marketing portfolio as they apply marketing functions to real-world scenarios and strategies from awards show nominations, to analyzing super bowl ads, and to planning successful product endorsements. This class is for students with an interest in sports, entertainment, or marketing at a post-secondary institution or through a career.

# Computer Science Course Descriptions 

## 04AP—AP Computer Science Principles

Credit: $1.0 \quad$ Grades: 10-12 Graduation Credit: Computer
Prerequisite: Teacher Recommendation and Programming I
AP Computer Science Principles introduces students to the fundamentals of computer science and navigates the effects of computing and technology on our world. This course focuses on problem solving skills, how to work with data, cybersecurity, and programming. Students are able to explore topics of computing using their own ideas and creativity, using the power of computing to create pieces of personal value, and developing an interest and broader understanding of computer science that will encourage further exploration of various ventures in the field. The College Board Advanced Placement Exam will be required of those who take this course. Any cost related to the AP exam will be the responsibility of the student.

## 9569-Exploring Computer Applications*

Credit: $0.5 \quad$ Grade: $9 \quad$ Graduation Credit: Computer
In Exploring Computer Applications, students will dive deeper into the basic understanding of Microsoft programs as well as focus on other multimedia applications and digital tools. Students will use various programs to construct knowledge, produce creative presentations, communicate thoughts and ideas, and make meaningful learning experiences.
*Exploring Computer Applications will only be offered at Mifflin County Junior High School.

## 9571-Intro to Programming

Credit: $0.5 \quad$ Grade: $9 \quad$ Graduation Credit: Computer
Intro to Programming will introduce students to basic computer programming skills. This hands-on course will focus on aspects of project development including analysis, design, coding, and testing. Students will develop problem solving and computational thinking skills while gaining a basic knowledge of programming languages.
*Intro to Programming will only be offered at Mifflin County Junior High School.

## 9562-Microsoft Applications I

## Credit: 0.5 <br> Grades: 10-12 <br> Graduation Credit: Computer

Microsoft Applications will explore the software programs of Word, Excel, and PowerPoint. Students will use simulation software that mimics the features of the aforementioned applications of Microsoft Office. These learned skills can aid in achieving certification in Microsoft Office. Microsoft Applications will prepare students for entry-level jobs and entrylevel college courses.

## 0490-Programming I

Credit: 0.5
Students interested in developing computer programming skills are urged to register for this course. This course focuses on all aspects of a project life cycle for typical programming assignments including analysis, design, coding, and testing. The concept of variable and logical thinking skills developed in Algebra I provide a foundation for writing computer programs.

## 1490-Programming II

Credit: 0.5
Grades: 10-12
Graduation Credit: Computer
Prerequisite: Programming I
This course builds upon the foundation learned in Programming I. Students interested in advancing their programming skills and learning more about various coding languages and other object oriented programming languages are encouraged to register for this course. Topics covered in this class include everything from Programming I and more advanced concepts such as class design, structures, constructors, recursion, exposure to the .NET framework, advanced functions, inheritance, and more. This course is designed to prepare students for college level computer classes and requires some self-motivation and independent learning by the students.

## 9568-Tech Tools for Life*

Credit: 0.5
Grade: 9
Graduation Credit: Computer
Tech Tools for Life will focus on basic computer skills that are necessary to function in the real world. This class will be centered around typing skills that will improve speed and accuracy, folder/file management and organization, and simple processing skills to aid in research papers and basic communications.
*Tech Tools for Life will only be offered at Mifflin County Junior High School.

## 0480-Web Page Development

Credit: $0.5 \quad G r a d e s: 10-12$
Graduation Credit: Computer
Students interested in learning about Web design, understanding the principles for creating webpages, and making websites should take this course. This is a project based course about webpage and website development using HTML and CSS languages. Students will create their own homepage to serve as a portfolio of their creations. Students are also introduced to interactive databases, discussion groups, and writing scripting codes to supplement their sites. Students must use a variety of debugging techniques to solve problems and find alternative solutions.

# Cooperative Education Course Descriptions 

## Cooperative Education

Credit: 1.0-3.0
Grade: 12

## Graduation Credit: Elective

Seniors who meet existing criteria may apply to participate in the Mifflin County School District's Cooperative Education Program. The Cooperative Education Program provides students the opportunity to gain a greater understanding of their desired career and apply these objectives to real life work experiences within the students' career interest area.

Through Cooperative Education, students with specific career objectives are matched with a related employment experience. They will attend career-oriented planned periods of related classroom instruction. Planned periods are limited so most instruction will be gained through the work environment.

An application must be obtained and completed before students may sign up for this course of study. It is the students' responsibility to have a potential job lead in order to be considered for the program. Students must be employed within an area that pertains to their career interest. Students who are allowed to participate in the Cooperative Education Program will meet with their guidance counselor to develop schedules that allow the student to complete courses needed for graduation at times that coincide with their work schedule. A waiting list will be kept for prospective students. Students will be required to submit hours worked and details about skills learned while on the job.

## 2910-Internship

Credit: 1.0

## Grade: 12

Graduation Credit: Elective
The intent of the Internship Program is to supplement the formal classroom instruction by connecting classroom learning with workplace application and skills. Internship placement should enhance a student's workplace skills and aid in career planning. As such, internship placements should be made in conjunction with a student's career interests.

## 2552-Student Business Internship at MCHS

Credit: 1.0-3.0
Grade: 12
Graduation Credit: Elective
Seniors who meet existing criteria may apply to participate in the Mifflin County High School Student Business Internship. The Business Internship is intended to provide students the opportunity to gain a greater understanding of retail operations with work experience in the MCHS School Store. After school hours will be required and be part of the overall grade. A student's schedule must allow for two or three periods throughout the school day to participate in the Business Internship.

An application must be obtained and completed before students may register for this course. Student Business Internships at MCHS are supervised by faculty within the business department. There is no compensation for the hours of work, but students will receive academic credit based on the total time assigned to the work area.

# English Department Course Descriptions 


#### Abstract

11AP—AP English Language and Composition Credit: 1.0 Grades: 11-12 Graduation Credit: English Prerequisite: Teacher Recommendation and B or higher in English 10 NCAA Eligibility Center Approved Course Advanced Placement (AP) English Language and Composition is a weighted course that engages students in becoming skilled readers of prose written in a variety of rhetorical contexts and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purpose, audience expectations, and subjects, as well as the way genre conventions and the resources of language contribute to effectiveness in writing. AP English Language and Composition will emphasize expository, analytical and argumentative writing in both academic and professional communication while fostering critical thinking. The College Board Advanced Placement Exam will be required of those who take this course. Any cost related to the AP exam will be the responsibility of the student.


## 21AP—AP English Literature and Composition

## Credit: 1.0 <br> Grade: 12 <br> Graduation Credit: English

Prerequisite: Teacher Recommendation and B or higher in English 11 or AP Language NCAA Eligibility Center Approved Course
AP English Literature and Composition is a weighted course in which the richness and complexity of language are explored in areas such as syntax, imagery, direction, and tone. While focusing on exploration, planning writing, editing, rewriting, and polishing text, students will enhance their own composition style and process. Students will also engage in intensive work in both critical reading and thematic organization of world literature selections, with emphasis on English language works, primarily novels, plays, and poems. A discussion-based class, AP English Literature and composition fosters critical thinking. Students will complete a research project under the direction of their senior English teacher. The College Board Advanced Placement Exam will be required of those who take this course. Any cost related to the AP exam will be the responsibility of the student.

## 2140-Business English

Credit: 1.0
Grade: 12
Graduation Credit: English
Business English, taken instead of English 12, can be elected by seniors who are specializing in business education, anticipating a business career, and/or planning to attend a business, trade, or technical school. This course stresses a variety of communication skills: listening, speaking, all-purpose and technical writing, researching, evaluating, proofreading, and editing. A research project or a simulation project will be required and completed under the direction of the Business English teacher.

## 9153, 9154-English 9-II/III

## Credit: 0.5

Grade: 9
Graduation Credit: English
English 9-II (course number 9153) is a NCAA Eligibility Center Approved Course
English 9 is an introduction to various types of literature: prose, poetry, and drama. Students will engage in an in-depth study of the elements of literature and compare the elements to see which are particular to each type and which are common among the types of literature. Writing in response to literature is a focus of this course as students will write to inform, persuade, and narrate. Students will formulate ideas and views in response to the literature and its characters. Elements of style in writing will be addressed through both a formal and an informal study of grammar and mechanics. Students will compete a research project under the direction of their freshman English teacher.

## English 9 will only be offered at Mifflin County Junior High School.

## 915H—English 9 Honors

## Credit: 0.5

Grade: 9

## Graduation Credit: English

Prerequisite: Teacher Recommendation
NCAA Eligibility Center Approved Course
English 9 Honors is a weighted course for upper level students who not only possess the desire and potential to attend college but also wish to be challenged and pushed academically. This course emphasizes interpretation of literature, essay writing, vocabulary building, and grammar usage. Several types of literature are read including short stories, novels, plays, and poetry. The basic structure of each is examined and analyzed. Each type of literature also creates the writing prompts and essay topics used within the class. This course requires students to give speeches or deliver oral presentations to the class. Students will complete a research project under the direction of their freshman English teacher. English 9 Honors will only be offered at Mifflin County Junior High School.

## 0125, 0135-English 10 II/III

Credit: 0.5 Grade: $10 \quad$ Graduation Credit: English
English 10-II (course number 0125) is a NCAA Eligibility Center Approved Course
In English 10, the student is expected to learn to analyze, to interpret, to write, to speak, and to listen more effectively. The student, college-bound or not, will study vocabulary, usage, and grammar as needed. A survey of world literature is studied to emphasize point-of-view with its effect on time, subject, and theme. An understanding of irony and satire becomes necessary in the study of world literature which includes such forms as the short story, the novel, the essay, the play, and the poem. The course will provide activities to enhance oral and written communication skills and to improve thinking skills. Certain assignments will require the use of research skills. Students will complete a research project under the direction of their sophomore English teacher.

Prerequisite: C or above in English 9 Honors; B or above in English 9 II \& Teacher

## Recommendation

## NCAA Eligibility Center Approved Course

English 10 Honors is a weighted course designed to accommodate the needs of the highly motivated, college-bound students. The course provides extensive work in usage of sophisticated language, critical analytical skills, divergent thinking, discourse, and works to build students independent work habits. A high proficiency of grammar is necessary to be successful in this course. A survey of world literature is studied to build empathy for unique experiences. Individual and group reports, as well as seminars and presentations, are required. Research becomes an integral part of the students' learning. Long-range assignments encourage students in the course to work independently. Students will complete a research project at the culmination of the course.

## 1152, 1153-English 11-II/LII

## Credit: 0.5 <br> Grade: 11 <br> Graduation Credit: English English 11-II (course number 1152) is a NCAA Eligibility Center Approved Course

 Emphasis is placed upon American Literature, vocabulary building, composition, reading comprehension and interpretation, and the use of Standard English in all forms of communication in English 11. Critical thinking skills are improved through various activities. Students will complete a research project under the direction of their junior English teacher.
## 115H—English 11 Honors

Credit: 0.5
Grade: 11
Graduation Credit: English
Prerequisite: C or above in English 10 Honors; B or above in English 10-II; Teacher Recommendation
NCAA Eligibility Center Approved Course
English 11 Honors is a weighted course designed to accommodate the needs of the most capable college-bound students. The course is primarily a study of challenging American literature in its various forms. This course enables students to increase their vocabulary, improve their critical thinking skills, observe and evaluate various values systems, examine themselves, use their imagination, and extend their exposure to the finer points of formal English. Throughout the course, students are involved in various activities to enhance their oral and written communication skills, as well as their research skills. Students will complete a research project under the direction of their junior English teacher.

# 2158.2159—English 12-II/III 

Credit: $0.5 \quad$ Grade: $12 \quad$ Graduation Credit: English
English 12-II (course number 2158) is a NCAA Eligibility Center Approved Course
English 12 is designed to accommodate the needs of the student who may or may not be collegebound. The study of literature, some of which is British, provides the student with the opportunity to increase his/her awareness of the worth and dignity of man and thereby to achieve a broader understanding of human emotions, motives, and relationships. Emphasis is placed upon vocabulary growth as well as improved oral and written communication skills. Various activities require the use of creative and critical thinking skills. Students will complete a research project under the direction of their senior English teacher.

## 215H-English 12 Honors

Credit: $0.5 \quad$ Grade: $12 \quad$ Graduation Credit: English
Prerequisite: C or above in English 11 Honors; B or above in English 11-II; Teacher Recommendation

## NCAA Eligibility Center Approved Course

English 12 Honors is a weighted course designed for students who have outstanding abilities and extensive experiences in reading and writing. Although the literature studied is chiefly British, the course also includes certain classical Greek and/or Roman plays. In addition to specific course requirements in literature, students must read, analyze, and interpret several literary works independently. Composition correlate closely with the literature; however, there is adequate opportunity for creative writing. Language usage problems and other writing problems are corrected individually, primarily through the correction of composition. Language skills are also emphasized in oral work. While a study of the history of the English language is included in this course, the main purpose of the course is to improve critical thinking skills and to enhance students' abilities to analyze literary works in order to increase their awareness of the worth of relationships. The students in this course will further develop their research skills in preparation of a research project. In addition students will complete a research project under the direction of the English teacher.

## 1140—Dramatic Arts

## Credit: 1.0

Grades: 11-12

## Graduation Credit: Elective

## Prerequisite: English 10

Dramatic Arts is an English elective whose major emphasis is placed upon improvisation, role playing, acting, writing, enacting scenes and skits, and method of delivery to an audience. Students learn how to use their acting ability and/or talent in practical situations. Interpretation of and involvement with various types of drama develops within students an appreciation of the theater and everyday life. Emphasis on the need for creative thinking and the requirements of dramatic presentation develop self-confidence and poise within the student. Group and partnered work fosters an acceptance and understanding of others who have very different backgrounds and interests. Since the elements of the course are extremely diversified, Dramatic Arts provides the availability of success to all students, yet challenges each student at his/her own level. Technical aspects of theatre such as stage management, lighting, and sound, round out the scope of production, while at the same time illuminate paths available in the job market.

## 1141-Dystopian Literature/114H-Dystopian Literature Honors

## Credit: 0.5 Grades: 11-12 Graduation Credit: English

Prerequisite: English 10
NCAA Eligibility Center Approved Course
Dystopian Literature allows students to explore how various authors answer the question, "The world as we know it is ending-how do we survive?" While studying Dystopian Literature students will learn how authors use elements such as strict governments, underground revolutions, and people thrown into situations beyond their control to scrutinize this central question and how various authors have answered it.

## 1135-Elements of Debate

Credit: $0.5 \quad$ Grades: 11-12

## Graduation Credit: Elective

Prerequisite: English 10
NCAA Eligibility Center Approved Course
This course will focus on argumentation and debate and will emphasize logical argument techniques in varied debate formats. Students pursuing careers in law, communications, public relations, or other areas where oral communication and persuasion are beneficial should take this course.

## 9111, 9112-Exploring Young Adult Literature <br> Credit: 0.5 <br> Grades: 9 <br> Graduation Credit: English <br> Pending NCAA Eligibility Center Approval

Teenagers face a variety of challenges. This course examines fictional and nonfictional texts that represent many of the struggles teens face. Students will make connections between the themes, characters, and plots of the text with the various struggles young people deal with today (hunger, depression, substance abuse, making healthy decisions), discussing real life resources and alternatives to the issues in the texts.
Exploring Young Adult Literature will only be offered at Mifflin County Junior High School.

## 1003-Film as Literature/1H03-Film as Literature Honors <br> Credit: $0.5 \quad$ Grades: 11-12 Graduation Credit: English

Prerequisite: English 10
NCAA Eligibility Center Approval
This course is designed to show students how film can be studied as a form of literature, with emphasis on analysis of motifs, symbols, metaphors, themes, characterization, and other literary elements as they relate to both film and literature. Students will also examine elements specific to film, such as directing, producing, lighting, cinematography, acting, special effects, etc. Films will be viewed, analyzed, and critiqued through class discussion, writing, projects, and presentations. Students will read film study texts, film review, and excerpts from novels and short stories that have been adapted for film. Students will be required to watch films outside of class that they will analyze and review.

## 1013-Gothic Literature/1H13-Gothic Literature Honors

## Credit: 0.5

Prerequisite: English 9
NCAA Eligibility Center Approved Course
In this semester English course, students will explore the various forms of Gothic storytelling, analyze what makes a piece of work truly Gothic, and question why authors choose this genre as a means to express their ideas. Students will read the works of influential Gothic writers including Sylvia Plath, Edgar Allan Poe, Mary Shelley, Shirley Jackson, and many more. To demonstrate their understanding of the genre, students will create their own Gothic work, analyze the various forms of Gothic storytelling, and ultimately engage with their classmates in a Book Club style while reading a Gothic book of their choice. This course will take students on journeys of people living with mental health issues, struggling to find themselves in society, and experiencing paranormal activity. The Gothic genre, unlike Horror, is not just a means of entertainment, but a method for someone to share their perspective on a society in crisis.

## 1111-Humor and Satire Literature/111H-Humor and Satire Literature Honors Credit: $0.5 \quad$ Grades 11-12 Graduation Credit: English

Prerequisite: English 10
NCAA Eligibility Center Approved Course
This course is designed to develop the skills necessary to appreciate and evaluate deeper messages about life and human nature created by humorists. Students will improve their own writing by analyzing and recreating the styles of various pieces of humorous and satirical work to strengthen their own voice.

## 1155-Iournalism I

Credit: 0.5
Grades: 10-12
Graduation Credit: Elective
Prerequisite: $B$ or better in current English class
This course is a study of the history, evolution, and role of journalism in a free U.S. society. Students will trace U.S. journalism from its earliest roots through the modern day including but not limited to the following: earliest newspapers, First Amendment rights, evolving news coverage and delivery, objectivity, laws/lawsuits related to journalism, the impact of technological advancements on news coverage and delivery, along with the news, events, stories, and journalists who have made significant contributions to and impact on various aspects of American society. They will learn to differentiate between the various types of journalistic writing: editorial, hard news, features, etc., and the purpose of each. This course also prepares students to take on the role of journalists for their school community: creating work for the MCHS newspaper, The Tyrian. Students will be required to use effective communication skills in their interviews, their writings, and in working with others on the staff. They will also conduct research as background for preparing their stories. Students will write articles that will be revised to publication quality. Students who are most successful in this class are creative, flexible, motivated, intellectually curious, socially aware, deadline-oriented, and conscientious.

## 2155-Journalism II

Credit: 0.5
Grades: 10-12
Graduation Credit: Elective
Prerequisite: Teacher recommendation and " $B$ " or higher in Journalism I
In this course, students will monitor news from various media outlets, analyzing their audience, purpose, and effectiveness. As part of this process, they will analyze the relevance of these stories to their own lives and that of the school community as they create their own product. In addition, this course will prepare students to function in the roles of writers, page editors and copy editors, page designers, cartoonists, columnists, photographers, etc. for The Tyrian, the school newspaper which is a broadsheet newspaper published at The Sentinel. They will learn and employ the process professional news media use in production, a real-world application of their classroom work. Students also learn how to paginate the newspaper using InDesign. Those enrolled in Journalism II will serve as editors for the MCHS newspaper as well as be expected to manage assignments and deadlines independently.

## 2163/2165-Journalism III

Credit: 0.5/1.0 Grades 11-12 Graduation Credit: Elective
Prerequisite: Teacher Recommendation and " $B$ " or higher in Journalism II
Journalism III will continue to build the reporting, producing, and social media skills students have developed in Journalism I and II. Those enrolled in the course will focus on strengthening their professional knowledge and talents by interviewing, writing, and editing in real-world scenarios. These activities will culminate in the production of the MCSD newsletter - a print publication produced for the community that highlights the events, achievements, and news of all of the district's schools. Those enrolled in the course will be expected to demonstrate a high level of skill, knowledge, and professionalism in their work with the public as well as the ability to manage assignments and deadlines independently.

## 1190-Media I

Credit: 0.5
Grades: 10-12
Graduation Credit: Elective
Prerequisite: C or better in English 9
Students will examine how media messages are designed, created, and targeted for their audiences. Students will be proficient in the operation of portable and studio cameras, and be introduced to Adobe Premiere, Adobe Audition, Adobe Encore, and Adobe Photoshop to enhance their video productions. Students will also be introduced to "live production" and the basic operation of an audio board, teleprompter, video streaming, and video graphic display. The history of the radio and television industry will also be examined, as well as the basics of video news production, storyboarding, and script writing.

## 2190-Media II

Credit: 0.5
Grades: 10-12
Graduation Credit: Elective
Prerequisite: $C$ or better in Media I
Students will continue to a more advanced and in-depth level in the operation of portable and studio cameras, and advanced functions on Adobe Premiere, Adobe Audition, Adobe Photoshop, and Adobe Encore to enhance their video productions. Adobe After Effects and V-Mix streaming software will also be introduced at this level to aid in the enhancement of student productions. The history of the motion picture industry will be examined, from the silent film era through the golden age of Hollywood and into the modern age of cinema and streaming. A variety of film-making techniques from the $20^{\text {th }}$ Century (Alfred Hitchcock) and modern day (Tim Burton \& Rob Reiner) will also be presented. In addition, students will produce music videos, documentaries, and explore the world of film critiquing.

## 2191-Media III

Credit: 1.0
Grades: 11-12
Graduation Credit: Elective
Prerequisite: Teacher Recommendation; C or better in Media I (only offered $1^{\text {st }}$ period)
Students will demonstrate their mastery of graphic display and video and audio production techniques that were learned in Media I and Media II. The students' works will be put on display in the daily operation of MCTV and the MCTV Morning Show. MCTV is a government/educational cable TV station available on Comcast and Zito cable TV systems as well as being streamed at www.mctvonline.org. These students will be responsible for pre-production, live production, and post-production of the channel. In addition to daily assignments for channel operation, they will also be required to video out of school material such as Mifflin County Commissioner Meetings, Mifflin County School Board Meetings, Lewistown Borough Council Meetings, and other local activities relevant to our government/educational channel status. Other in-school projects will also include productions such as the annual Senior Video, the annual Husky Club Awards videos, and various school-related events.

## 9113, 9114-Murder Mysteries and True Crime Literature

Credit: 0.5
Grades: 9
Graduation Credit: English
NCAA Eligibility Center Approved Course
Who-done-it and true crime stories directly engage readers on an analytical level. Using direct and indirect information from the author, primary, and secondary resources, readers will try to uncover the mysteries surrounding a story. This course allows students to analyze and infer information throughout the text to draw conclusions and solve a mystery.
Murder Mysteries and True Crime Literature will only be offered at Mifflin County Junior High School.

## 1131-Outdoor/Naturalist Literature/113H-Outdoor/Naturalist Literature Honors

Credit: 0.5
Grades: 11-12
Graduation Credit: English
Prerequisite: English 10
NCAA Eligibility Center Approved Course
From climbing the highest mountain in the world to living in the wilderness, this course explores fiction and non-fiction writings that examine varied adventures and experiences in the outdoors and nature.

## 1121-Science Fiction \& Fantasy Literature/112H-Science Fiction \& Fantasy Literature Honors <br> Credit: 0.5 <br> Grades: 11-12 <br> Graduation Credit: English

Prerequisite: English 10
NCAA Eligibility Center Approved Course
In this course, students will explore worlds beyond the one we know through the imaginations of writers who were brave enough to create places where everything is different. Through Science Fiction and Fantasy Literature, students will study characters who travel through time, go where rules no longer apply, and change the course of history.

## 9115, 9116-Stephen King Literature

Credit: $0.5 \quad$ Grades: 9

## Graduation Credit: English

NCAA Eligibility Center Approved Course
Stephen King tells a good story. Students who are looking for an alternative to "traditional" texts can immerse themselves in the creative worlds of Stephen King whil still exploring the literary elements of theme, character, plot, and setting.
Stephen King Literature will only be offered at Mifflin County Junior High School.

## 1008-Survival Stories/1H08-Survival Stories Honors

Credit: 0.5 Grades: $10 \quad$ Graduation Credit: English
Prerequisite: English 9
NCAA Eligibility Center Approved Course
In this course, students will grapple with questions such as "What does it take to survive? What are we willing to risk? How do the hardships we face strengthen our character and define who we become? Survival Stories will include a mix of fiction and nonfiction readings with most texts written from the perspective of teenagers and young adults. Units are based on two focus areas: global and introspective. The global focus will include contemporary social conflicts such as refugee crises, natural disasters, and modern warfare. The introspective focus will include current social issues experienced by some American teens today such as poverty, homelessness, trauma, and defining one's identity. Through these topics, students will discuss, write, create, and reflect on the conflicts mankind must overcome and what may await us in the future.

## 2150-Speech Communication

Credit: 0.5
Grades: 11-12
Graduation Credit: Elective
Prerequisite: English 10
NCAA Eligibility Center Approved Course
This speech course stresses the development of effective oral communication skills. It contains a variety of speech presentations using diverse methods of delivery. Both major classifications of speeches-informative and persuasive-will be addressed through varying projects. Other important facets of the course are impromptu speaking, critical listening, interviews, group problem-solving, panel discussions, voice improvement and research skills.

## 1010-Sports Literature/1H10—Sports Literature Honors <br> Credit: 0.5 <br> Grades: 11-12 <br> Graduation Credit: English

Prerequisite: English 10
NCAA Eligibility Center Approved Course
Sports play a vital role in society as they shape our views and values. This English elective course is designed to explore the cultural themes found in sports through a variety of contemporary sports articles, nonfiction, and fiction texts. Students will analyze themes, such as identity, heroism, pride, disappointment, and cheating.

## 1017-War Literature/1H17-War Literature Honors

Credit: 0.5
Grades: 11-12
Graduation Credit: English
Prerequisite: English 10
NCAA Eligibility Center Approved Course
While man and his weapons of warfare have advanced from the Bronze Age through the Industrial Revolution to the present, the effects of war have remained relatively constant. This course will explore stories of war as told by those who experienced it and how their books, poetry, and films help shape the legacy of war.

## 2160—Written Communication

Credit: 0.5 Grades: 11-12 Graduation Credit: Elective
Prerequisite: English 10
NCAA Eligibility Center Approved Course
This English elective helps students to increase their effectiveness in various types of writing: mass media, technical, poetry, short story, and drama. Furthermore, this course will strengthen students' organization and proofreading when writing.


#### Abstract

1006-Young Adult Literature/1H06-Young Adult Literature Honors Credit: 0.5 Grades: 10 Graduation Credit: English Prerequisite: English 9 NCAA Eligibility Center Approved Course In this course, students will critically read and analyze texts that reflect the young adult experience. Students will focus on literary narratives written for young adults, describe the coming-of-age process, or that discuss what it means to be a teenager. We will embark on class discussions in which we analyze the social, cultural, and media influences on these texts, as well as discuss how the teenage experience has changed over time due to these influences. Students will read, write, watch, and create with the goal of further understanding what it means to come of age and be a young adult in today's society.


# Family and Consumer Science Department Course Descriptions 

## 9730—Child Development I*

Credit: 0.5
Grade: 9
Graduation Credit: Elective

Child Development I is designed to explore the basic principles of development for understanding children from birth through preschool. This course offers a look at personal readiness to become a parent as well as parenting roles and responsibilities. Child Development I covers topics such as responsible parenting, parenting skills, adapting to parenthood, types of development as well as the various child developmental stages. Various child developmental theories are investigated, along with guidance and discipline techniques and the value of play. This course is recommended for any student interested in children, whether that includes becoming a parent one day or choosing a career with children.
*Child Development I will only be offered at Mifflin County Junior High School.

## 9750-Culinary Arts I

Credit: 0.5
Grades: 9-12
Graduation Credit: Elective
Culinary Arts I is a basic food preparation course. This course reviews cooking terms, kitchen tools and equipment, recipe format and measuring techniques. Students will identify means to apply nutrition and the dietary guidelines into their everyday lives. Topics include knowledge about and techniques for preparation of fruits, quick and yeast breads, cookies, pies, salads, eggs, milk, and cheese products. Students should enjoy eating a variety of foods and be willing to taste what is created. The course is recommended for those who want to learn an independent living skill.

## 9760-Culinary Arts II

Credit: 0.5
Grades: 10-12
Graduation Credit: Elective
Prerequisite: Culinary Arts I
Culinary Arts II emphasizes meal planning and management. Topics include food safety and sanitation, shopping skills, and dining etiquette. This course will cover breakfast foods, casseroles, cakes and outdoor cooking as well as a cross cultural study of food preparation, culture, and traditions. This is an advanced course for students who enjoy cooking and desire accelerated skills.

## 9830-Nutrition \& Wellness

Credit: $0.5 \quad$ Grades: 11-12 Graduation Credit: Elective
Prerequisite: Culinary Arts I
Nutrition and Wellness is a semester-long course designed to teach science skills as they apply to food preparation and human nutrition. This course provides students with an overview of good nutrition principles that are necessary for physical and mental wellness and a long, healthy live. Topics that will be included in this course focus on specific nutrients; including carbohydrates, fats, protein, vitamins, minerals, recipes/food sources that feature each, the absorption and digestion of foods, and activities to improve your overall well-being. Wellness activities, demonstrations, hands-on food labs, guided instruction and cooperative learning are used throughout the course. Ultimately, students will be given the opportunity to have the necessary skills to plan, purchase and prepare nourishing meals and to evaluate and improve their day-to-day food choices and overall health.

# Mathematics Department Course Descriptions 

## 24AP—Advanced Placement Calculus AB

Credit: 1.0<br>Grade: 11-12<br>Graduation Credit: Math<br>Prerequisite: Teacher Recommendation and Precalculus Honors<br>NCAA Eligibility Center Approved Course

A GRAPHING CALCULATOR IS REQUIRED. This weighted course consists of a full high school year of work comparable to a one semester calculus course in colleges and universities. Topics of study include differential and integral calculus, and discussions and exercises that emphasize a multi-representational approach in which concepts, results, and problems are expressed graphically, numerically, analytically, and verbally. Students will be required to take the AP exam and are expected to seek college credit at higher institutions. Student is responsible for the entire cost of the exam fee.

## 24BC-Advanced Placement Calculus BC

## Credit: $1.0 \quad$ Grade: $12 \quad$ Graduation Credit: Math

Prerequisite: Teacher Recommendation and AP Calculus $A B$
Pending NCAA Eligibility Center Approval
A GRAPHING CALCULATOR IS REQUIRED. This weighted course consists of a full high school year of work comparable to a full year of college-level calculus. It includes the topics covered in Calculus AB (please read the description for $A P C$ Calc $A B$ ) as well as parametric functions, polar functions, vector functions and analysis of series. Students will be required to take the AP exam and are expected to seek college credit at higher institutions. Student is responsible for the entire cost of the exam fee.

## 14AP—Advanced Placement Statistics

Credit: $1.0 \quad$ Grades: 11-12 Graduation Credit: Math
Prerequisite: Teacher Recommendation and Algebra II or Advanced Algebra II Honors NCAA Eligibility Center Approved Course
A GRAPHING CALCULATOR IS REQUIRED. This weighted course consists of a full high school year of work comparable to statistics courses in colleges and universities. Topics of study include exploring data, sampling and experimentation, probability, and statistical inference. The College Board Advanced Placement Exam will be required of those who take this course. Any cost related to the AP exam will be the responsibility of the student.

## 144H—Advanced Algebra II Honors

Credit: 1.0
Grades: 10-12
Graduation Credit: Math
Prerequisite: Teacher Recommendation and Geometry or Geometry Honors
NCAA Eligibility Center Approved Course

A GRAPHING CALCULATOR IS RECOMMENDED. This is a second course in Algebra designed to meet the needs of the advanced student in mathematics. It emphasizes the structure of mathematics through algebraic properties and reasoning. Topics covered are those of the regular Algebra courses, but they are covered in greater depth and with more rigor.

## 9440-Algebra I

Credit: 1.0
Grades: 9-12
Graduation Credit: Math
NCAA Eligibility Center Approved Course
A SCIENTIFIC OR GRAPHING CALCULATOR IS RECOMMENDED. This course will study the language, concepts, and techniques of algebra that will prepare students to approach and solve problems within the constraints of the algebraic properties. Topics covered in this course include problem-solving, operations with real numbers and expressions, linear equations, systems of equations, coordinate geometry, data analysis, and probability and functions.

## 9442-Algebra IA

Credit: 1.0
Grade: 9

## Graduation Credit: Math

## Prerequisite: Teacher Recommendation

A SCIENTIFIC OR GRAPHING CALCULATOR IS RECOMMENDED. This course introduces the student to algebraic reasoning as applied to number sets, expressions, and equations with an emphasis on real life applications. The students will see the applications of algebraic topics through the use of manipulatives and technology. Topics covered in this course include problem-solving, operations with real numbers and expressions, linear equations, and data analysis and probability. STUDENTS WHO HAVE PASSED ALGEBRA I WILL NOT BE ALLOWED TO TAKE THIS COURSE.

## 9443-Algebra IB

Credit: 1.0
Grades: 10-12
Graduation Credit: Math
Prerequisite: Teacher Recommendation and Algebra IA
A SCIENTIFIC OR GRAPHING CALCULATOR IS RECOMMENDED. This course continues the effort to bridge mathematical skills and concepts with real-life situations. The students will see applications of math topics through the use of math labs, projects, problem solving and cooperative learning activities. Topics covered in this course include functions, coordinate geometry, systems of linear equations, and quadratic functions. STUDENTS WHO HAVE PASSED ALGEBRA I WILL NOT BE ALLOWED TO TAKE THIS COURSE.

## 1440-Algebra II

Credit: 1.0
Grades: 10-12
Graduation Credit: Math
Prerequisite: Geometry or Geometry Honors
NCAA Eligibility Center Approved Course
A GRAPHING CALCULATOR IS RECOMMENDED. This course will apply the basic algebraic properties from Algebra I to new number systems and non-linear expressions and equations. Topics covered in this course include problem solving; operations with complex number; analyzing, graphing, modeling and solving non-linear functions, equations and inequalities; data analysis and probability.

## 2440—Algebra III

Credit: 0.5
Grades 11-12
Graduation Credit: Math
Prerequisite: Algebra II or Advanced Algebra II Honors
NCAA Eligibility Center Approved Course
A GRAPHING CALCULATOR IS RECOMMENDED. In this semester course students will analyze, graph, solve, and model non-linear functions and higher degree equations; simplify rational expressions; and complete operations with matrices. The topics in this course will prepare students for upper level math and science courses in high school and college.

## 0462-Applied Geometry

## Credit: 1.0

Grades: 11-12

## Graduation Credit: Math

Prerequisite: Teacher Recommendation and Algebra IB
This course involves the study of two and three dimensional figures. Students will discover, explore, and apply the basic geometric theorems and postulates with an emphasis on those applying to triangles, quadrilaterals, and circles. The students will be introduced to inductive, deductive and logical reasoning as they apply to the derivation of theorems. Students will see applications of math topics through the use of math labs, projects, problem solving and cooperative learning activities. STUDENTS WHO HAVE PASSED ALGEBRA I WILL NOT BE ALLOWED TO TAKE THIS COURSE.

## 2450-Calculus Concepts

Credit: 1.0
Grade: 12
Graduation Credit: Math
Prerequisite: Trigonometry and Algebra III or Precalculus Honors
NCAA Eligibility Center Approved Course
A GRAPHING CALCULATOR IS REQUIRED. This course solidifies the foundation established by previous math courses and introduces methods for solving two large classes of problems: finding the rate at which a variable quantity is changing and finding a function when its rate of change is given. Real-life applications to business, economics, social and life sciences with real data will be explored. Calculus Concepts is designed for the student who wants to learn some basic calculus and prepare for college mathematics.

## 2420-Career Math

Credit: 1.0
Grade: 12
Graduation Credit: Math
Career Math is a textbook free, project-oriented course in which students will be given the opportunity to explore the mathematics necessary for various careers. This course will focus less on the abstract mathematical theory that is typically found in high school math and more on the principles needed for practical application in the labor market. Career Math contains a series of diverse projects that will require students to research and gain a deeper understanding of the mathematics necessary in the $21^{\text {st }}$ century workplace. All projects will conclude with a student presentation in which the necessary mathematics will be described and explained. The course itself will focus on the PA Core Mathematical Practice Standards as they are encountered throughout the required projects.

## 1410-Consumer Mathematics

Credit: $1.0 \quad$ Grade: 11-12 Graduation Credit: Math
In this course the students review the basic skills they were taught in previous math courses and then apply those skills to practical applications. The students are placed in simulated life situations where they must use these math skills to solve the problems. STUDENTS WHO HAVE SUCCESSFULLY COMPLETED ALGEBRA I OR A HIGHER LEVEL OF MATH ARE NOT ALLOWED TO TAKE THIS COURSE.

## 2411-Consumer Mathematics II

Credit: $1.0 \quad$ Grade: 12

## Graduation Credit: Math

Prerequisite: Consumer Mathematics
Consumer Mathematics II is a continuation of the current consumer mathematics course. Concepts covered will include some introduced in the current Consumer Math class as well as new concepts. Students will continue to learn about loans, a topic introduced in the current Consumer Math class, including single payment loans, installment loans, and determining APR. Consumer Math II will cover new topics such as vehicle transportation, housing costs, insurance premiums/benefits/term life/other types, and types of investments. Problem solving skills will continue to be developed as part of the focus of the course.

## 0460-Geometry

Credit: 1.0

## Grades: 10-12

## Graduation Credit: Math

## Prerequisite: Algebra I

NCAA Eligibility Center Approved Course
A SCIENTIFIC CALCULATOR IS RECOMMENDED. This course involves the study of two and three dimensional figures. The students will discover, explore and apply the basic geometric theorems and postulates with an emphasis on those applying to triangles, quadrilaterals and circles. The students will be introduced to inductive, deductive and logical reasoning as they apply to the derivation of theorems.

## 045H-Geometry Honors

Credit: 1.0
Grade: 9

## Graduation Credit: Math

NCAA Eligibility Center Approved Course
A CALCULATOR WITH TRIG FUNCTIONS IS RECOMMENDED. This weighted course covers the content of the regular geometry course but in greater depth. Emphasis is given to formal proofs to develop thinking and reasoning skills.
*Geometry Honors will only be offered at Mifflin County Junior High School.

## 9431-Math 9

## Credit: 1.0

## Grade: 9

Graduation Credit: Math
Prerequisite: Teacher Recommendation, must be taken prior to Algebra I or Algebra IA Math 9 is a textbook free course designed to focus on increasing foundational mathematical skills, increasing mathematical fluency and further developing mathematical skills. This course was developed to help prepare students for more complex and abstract mathematical courses and increase their confidence in their mathematical skills. Throughout the course, students will practice basic math, financial math, measurement, and geometry skills. In addition to those skills, they will begin exploring careers/fields of interest and complete projects relating to their anticipated field of study, with a connection to the mathematical skills covered throughout the course.

## 146H-Precalculus Honors

Credit: 1.0 Grades: 10-12 Graduation Credit: Math
Prerequisite: Teacher Recommendation and Algebra II or Advanced Algebra II Honors and Geometry or Geometry Honors
NCAA Eligibility Center Approved Course
A GRAPHING CALCULATOR IS REQUIRED. This course is an integrated sequence of advanced topics in Algebra and Trigonometry. It is designed for those students with above average mathematical ability. This course is intended for those students who wish to take Calculus in high school or those who intend to pursue a career in a mathematically related field.

## 143H-Prestatistics Honors

## Credit: $1.0 \quad$ Grades: 10-12 Graduation Credit: Math <br> Prerequisites: Teacher Recommendation and Algebra II or Advanced Algebra II Honors and Geometry or Geometry Honors

This full year course will expand upon the basic concepts of descriptive statistics, data collection, statistical design, graphical representations, and probability. Throughout this course, students will complete projects and statistical research that mirror what is necessary for academic-level research. Students will gain experience with statistical software programs such as MiniTab, SAS, and Excel to gain a base of the software used in real-world application. A GRAPHING CALCULATOR IS RECOMMENDED. This course is meant to prepare students who are interested in taking AP Statistics.

## 1430-Probability and Statistics I

Credit: 0.5
Grades: 11-12
Graduation Credit: Math
Prerequisite: Algebra I, Geometry, and Algebra II (may take concurrently with Algebra II)
NCAA Eligibility Center Approved Course
A GRAPHING CALCULATOR IS RECOMMENDED. This semester course explores the basic concepts of descriptive statistics, data collection, statistical design, graphical representations, and probability. This course will help prepare students for probability and statistics concepts they may encounter in upper level math and/or the college level.

## 2430-Probability and Statistics II

Credit: $0.5 \quad G r a d e s: 11-12$
Graduation Credit: Math
Prerequisite: Probability and Statistics I
NCAA Eligibility Center Approved Course
A GRAPHING CALCULATOR IS RECOMMENDED. This is a semester course designed for students who are strong in math. The course includes an expansion into a deeper understanding of topics started in Probability and Statistics I with a greater emphasis on inferential statistics and the analysis of statistical relationships.

## 2470-Trigonometry

Credit: 0.5
Grades: 11-12
Graduation Credit: Math
Prerequisite: Algebra II or Advanced Algebra II Honors
NCAA Eligibility Center Approved Course
A SCIENTIFIC OR GRAPHING CALCULATOR IS RECOMMENDED. This semester course considers relationships among the angles and sides of triangles and their connection to the circular functions. Emphasis is placed on simplifying, solving, analyzing, graphing, and modeling with trigonometric functions and expressions.

## Math Department Courses: Recommended Academic and Non-Academic Track 2024-2025*

## Academic Track


**Probability and Statistics I and II can also be taken as a fourth math credit after Algebra II or Adv. Algebra II Honors.

## Non-Academic Track


*Please note that based on student performance and teacher recommendation, students may jump from the academic track to the non-academic track and vice versa. Please also note that Accounting I, a Business Department course, may be taken and will count as a math credit.

# Music Department Course Descriptions 

## 2710-Concert Band (Three days per cycle)

## Credit: $0.5 \quad G r a d e s: ~ 9-12$ <br> Graduation Credit: Elective

In this course, all styles of Concert Band music are studied and publicly performed with emphasis on form and style, as it is related to classic and modern wind band literature. Basic musical proficiency, to a greater or lesser degree, is attained by each member through group lessons, sectionals, and full ensemble rehearsals. According to our basic music philosophy, all members, from the average to the most advanced, will share in all educational and performance experiences which shall include, but not be limited to public performances at the winter concert, spring concert, commencement exercises, adjudicated festivals, community functions, and school assemblies throughout the year.

## 2610-Concert Choir (Three days per cycle)

## Credit: $0.5 \quad$ Grades: 9-12 Graduation Credit: Elective

The Concert Choir is available to any student who expresses the desire and certain level of musical ability to create vocal music. Special emphasis is stressed upon each section to be able to sing independently of the other voices and to ensure proper balance throughout the entire choir. According to our basic music philosophy, an attitude has been developed which ensures the most average singer a chance to share educational, as well as performance oriented choral experiences.

# Physical Education and Health Department Course Descriptions 

## 9855-Health

Credit: 0.5
Grade: 9
Graduation Credit: Health
This course is divided into the following units: Stress Theory and Management; Alcohol, Tobacco, and Other Drugs; Human Development; Health Promotion and Disease Prevention: Safety and First Aid. Health incorporates Pennsylvania Department of Education goals, National Health Standards and Mifflin County School District Essential Skills objectives to promote learners and strategic thinkers.

## 1800-Maintaining Fitness

Credit: $0.5 \quad$ Grades: 9-12 Graduation Credit: Physical Education
This course is an introduction of life time sports to develop useful and desirable skills to serve as a basis for leisure-time activities. Maintaining Fitness promotes the development of analytical thinking and judgment through guided experiences in a wide variety of meaningful and challenging activities; a realization of the importance of leisure-time activities following graduation as a means of physical fitness in future years. Maintaining Fitness runs every day of the six day cycle for a marking period at MCJHS and runs every day during a semester at MCHS.

## 1870-Strength and Conditioning I ${ }^{*}$

Credit: 0.5 Grade: $9 \quad$ Graduation Credit: Physical Education
This course is designed to offer our students an elective that goes beyond the basic physical education courses. This activity will provide our students with the opportunity to improve self-esteem, self-concept, and expose them to lifelong activity for fitness. Class activities will include strength training, agilities, plyometrics, flexibility, coordination, balance, and safety awareness. Students will be assessed on exercise and spotting techniques, adherence to safety rules and procedures, overload principles, progression, and specificity.
*Strength and Conditioning I will only be offered at Mifflin County Junior High School. It runs every day for two marking periods.

# Science Department Course Descriptions 

## 13AP-Advanced Placement Biology

Credit: $1.0 \quad$ Grades: 11-12_ Graduation Credit: Science
Prerequisites: Teacher Recommendation and student must have achieved a B average or

above in Biology, Chemistry I or Chemistry I Honors, and Algebra II and be
taking Physics I concurrently to be eligible for AP Biology

## NCAA Eligibility Center Approved Course

This weighted course is a detailed study of four big ideas: the process of evolution drives the diversity and unity of life; biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis; living systems store, retrieve, transmit, and respond to information essential to life processes; biological systems interact, and these systems and their interactions possess complex properties. Two main goals of this course are to help students gain an appreciation of science as a process. The following topics will be covered: Chemistry of Life, Cells, Cellular Energy, Heredity, Molecular Genetics, Evolutionary Biology, Diversity of Organisms, Plants and Ecology. Students will be required to take the AP exam. Any cost related to the exam will be the responsibility of the student.

## 23AP—Advanced Placement Chemistry

Credit: 1.0
Grades: 11-12
Graduation Credit: Science
Prerequisites: Teacher Recommendation and the students must have achieved a B average or above in Biology, Chemistry I or Chemistry I Honors, and Algebra II and be taking Physics I concurrently to be eligible for AP Chemistry.
NCAA Eligibility Center Approved Course
This weighted course is a detailed study of matter, its structure, properties and composition, and the changes that matter undergoes. The course builds upon the principles already learned and expands to new topics. The following topics will be covered: measurement, atoms, chemical bonding, chemical reactions, states of matter, solutions, equilibrium, acids/bases, thermodynamics, kinetics, electrochemistry, organic chemistry and coordination chemistry. The mathematical formulations associated with these chemical principles will be emphasized. Independent work in the laboratory and laboratory activities will reinforce the concepts and processes discussed in class. Students will be required to take the AP exam. Any cost related to the exam will be the responsibility of the student.

## 03AP—Advanced Placement Physics C: Mechanics

Credit: 1.0
Grade: 12
Graduation Credit: Science
Prerequisites: Teacher Recommendation and the student must have achieved a B average or above in Biology, Chemistry I or Chemistry I Honors, and Physics and be taking Calculus Concepts or AP Calculus concurrently to be eligible for AP Physics.
NCAA Eligibility Center Approved Course
This weighted course will cover Kinematics (including Vectors), Newton's Laws of Motion, Circular Motion, Oscillations and Gravitation. In AP Physics C, the C means Calculus will be used. Students will be required to take the AP exam. Any cost related to the exam will be the responsibility of the student.

## 231A-Biology 101: Introduction to Biological Sciences

## Credit: 1.0

Grade: 11-12
Graduation Credit: Science
Pending NCAA Eligibility Center Approval
Prerequisites: Teacher Recommendation and the students must have achieved a B average or above in Biology, Chemistry I or Chemistry I Honors, and Algebra II and be taking Physics I concurrently to be eligible for Biology 101.
This is an introductory college level biology course. Topics covered include the following: basic chemistry/biochemistry as it relates to life and living things, cell structure and function, tissue types and characteristics, taxonomy, genetics and heredity, and several body systems. The purpose is to develop an appreciation and understanding of the biological world, its importance, and its impact on living things. This course is a college level course offered through Luzerne County Community College, is intended for students pursuing non-medical/non-technical related fields, and is likely to transfer to many colleges and universities; however, parents and students are encouraged to research whether or not the course will transfer to colleges/universities to which students intend to apply. The cost associated with the course will be the responsibility of the student. Upon completion, students will have finished the equivalent of one semester of introductory college level Biology and will be able to gain college credit for the course.

## 033H-Biology I Honors

Credit: 1.0
Grade 9
Graduation Credit: Biology
Prerequisite: B or higher in $8^{\text {th }}$ grade science; B or higher in $8^{\text {th }}$ grade English;
Teacher Recommendation
NCAA Eligibility Center Approval
This course is designed for students with exceptional abilities, self-motivation, and high achievement expectations. Students will be challenged with an honors-level biology curriculum, focusing on exploring biological principles, the chemistry of living things, the cell, genetics, evolution, the structure and function of living things, and ecology. Student laboratory sessions and projects will be used to reinforce these topics. Students will be required to take the Biology Keystone exam at the end of this course.
*Biology I Honors will only be offered at Mifflin County Junior High School.

## 0330-Biology I

## Credit: 1.0

Grades: 9-10
Graduation Credit: Biology
NCAA Eligibility Center Approved Course
The purpose of the Biology I course is to continue the growth and development of students in the understanding of and engagement in the scientific processes. This will be accomplished through a variety of educational techniques with emphasis on scientific inquiry in the laboratory. Students will continue to explore basic biological principles, the chemical basis for life, bioenergetics, homeostasis, cell growth and reproduction, genetics, evolution, and ecology.

## 231H-Anatomy and Physiology Honors

## Credit: $1.0 \quad G r a d e s: 11-12$

Graduation Credit: Science
Prerequisite: Teacher Recommendation and B or better in Biology I, B or better in Chemistry I, or C or better in Chemistry I Honors
NCAA Eligibility Center Approved Course
This course covers the essentials of Human Anatomy and Physiology. Anatomy is the study of the body whereas physiology is the study of how the body functions. This course is designed to facilitate students considering a health related career.

## 1340-Chemistry I

Credit: $1.0 \quad G r a d e s: 10-12 \quad G r a d u a t i o n ~ C r e d i t: ~ S c i e n c e ~$
Prerequisite: Biology I and Algebra I or A in Algebra IA
NCAA Eligibility Center Approved Course
This course involves the study of the composition and behavior of matter and the fundamental laws and principles of chemistry. It is designed for college preparatory students, especially those requiring a science background. Chemistry I includes ample laboratory work and use of modern instrumentation. Students who have had difficulty with Algebra and /or Biology I should be strongly discouraged from taking Chemistry I and should instead consider taking the half credit science electives.

## 135H—Chemistry I Honors

Credit: $1.0 \quad G r a d e s: 10-12 \quad G r a d u a t i o n ~ C r e d i t: ~ S c i e n c e ~$
Prerequisite: Must have science teacher recommendation and a B average or above in Biology I and A average in Algebra I
NCAA Eligibility Center Approved Course
This weighted course involves the study of the composition and the behavior of matter and the laws and principles of chemistry. It is designed for college bound students who plan to pursue a career in science or math. The course is designed to encourage critical thinking and problem solving through intensive lab work and use of modern instrumentation. This course will prepare students to take upper level courses like AP Biology and AP Chemistry. Students who do not have a strong background in science and math should not take this course and should consider Chemistry I or the half credit science electives.

## 0340-Ecology of Mifflin County

Credit: 0.5 Grades: 10-12
NCAA Eligibility Center Approved Course
Students will become acquainted with the ecology and environmental issues facing Mifflin County. These issues will be approached from a scientific perspective while also examining local social, economic, and political impacts. We will focus on these real life scenarios by refining problem solving skills and the course will be heavily project-based, using the most up-to-date research and articles, including traditional and non-traditional texts. Additionally, the course will include an introduction to the native flora and fauna that inhabit the area.

## 0342-Forensic Science

## Credit: 0.5

Grades: 10-12
Graduation Credit: Science
Prerequisite: Biology I or Honors Biology
NCAA Eligibility Center Approved Course
Forensic Science is the application of science to the criminal and civil laws that are enforced by police agencies in a criminal justice system. This includes the investigation of fingerprinting, fiber analysis, ballistics, arson, trace evidence analysis, poisons, drugs, blood spatters, and blood samples, Students are taught the proper collection, preservation, and laboratory analysis of various samples, especially in the crime scene format.

## 0341-Global Environmental Science

Credit: $0.5 \quad$ Grades: 10-12

## Graduation Credit: Science

NCAA Eligibility Center Approved Course
Students will become acquainted with topical environmental issues facing the U.S. and the planet. Natural resources, their effects on climate change, and the resulting government policy will be the focal point of this course. These issues will be approached from a scientific perspective while also examining worldly, social, economic, and political impacts. The most current research and articles will be accessed via the Internet.

## 0343-Microbiology

Credit: 0.5
Grades: 10-12
Graduation Credit: Science
Prerequisite: Biology I or Honors Biology
NCAA Eligibility Center Approved Course
In this course, students will study those organisms not visible to the human eye and their effects on humans. The emphasis is on a hands-on approach to learning with labs and projects. Students will learn proper procedures for handling microbes, and develop a good understanding of how microbes affect our lives in both positive and negative ways. This labintensive course is designed for those students going into the career fields of microbiology, medical technology, nursing, medicine, and any other science or health related career.

## 136H—Physics I Honors

Physics I (Honors) is an advanced, high paced academic study of mechanics, heat, waves, and electricity. The course requires and will enhance proficiency in math and trigonometry, as well as analytical skills sufficient to meet the challenges of problem solving applications associated with the aforementioned forms of energy. Students will be using multiple graphing methods and problem-solving strategies to take the physics I class to the next level. Laboratory exercises will be performed to provide a hands-on perspective to the content objectives of this course. A college bound student considering a future in science, technology, or engineering should consider Physics I as a personal requirement in order to afford maximum opportunity in the academic future and allow him or her to compete at higher levels of academic demand.

## 1360-Physics I

Credit: $1.0 \quad$ Grades: 11-12 Graduation Credit: Science
Prerequisites: Algebra I; Geometry/Geometry Honors; Biology I/Honors Biology; Chemistry
I/Chemistry I Honors

NCAA Eligibility Center Approved Course
Physics I is an academic study of mechanics, heat, waves, and electricity. The course requires and will enhance proficiency in math and trigonometry, as well as analytical skills sufficient to meet the challenges of problem solving applications associated with the aforementioned forms of energy. Laboratory exercises will be performed to provide a hands-on perspective to the content objectives of this course. Both the technically oriented and college bound student should consider Physics I as a personal requirement in order to afford maximum opportunity in the academic future and allow him or her to compete at higher levels of academic demand.

## 2360-Physics II Honors

Credit: 1.0
Grades: 11-12

## Graduation Credit: Science

Prerequisites: Physics I or Physics I Honors
NCAA Eligibility Center Approved Course
This course develops principles covered in Physics I and introduces additional topics that will enhance the student's understanding of basic physics and cultivate skills related to different fields of engineering. Similar to Physics I, a primary avenue of learning in Physics II Honors will be through problem solving and hands-on experimentation in the lab thus requiring the students to apply concepts of mathematics on a regular basis. While the topics will largely follow a traditional progression, the course affords the opportunity for topics to be selected based on student interest. Reasoning and problem solving will be stressed more than memory. The mathematical ability of a student who was successful in Physics I is sufficient to qualify them for Physics II Honors.

## 0344-Survival Science

Credit: 0.5
Grades: 10-12
Graduation Credit: Science
Prerequisite: Biology I or Honors Biology
This course is designed for students wanting to learn wilderness survival skills and the scientific concepts behind human survival. Reasons vary from the desire to develop a real connection to the natural world to wanting to be prepared for a natural or man-made disaster. This elective course will teach students the skills and knowledge needed to survive in situations where life and safety depend on their decisions and will examine the science behind those decisions. This semester course will explore the following topics related to human survival: navigation, water, shelter, thermoregulation, fire science, rope making, cooking, psychology of survival, wilderness first aid, and poisonous and edible plants. The course will meet outside often and will ideally culminate in an outdoor trip.

## 0345-Wildlife and Fisheries Science

Credit: 0.5 Grades: 10-12 Graduation Credit: Science

Prerequisites: Biology I or Honors Biology
NCAA Eligibility Center Approved Course
Wildlife and Fisheries Science includes the study of the conservation, management, ecology, behavior, and identification of PA native wildlife and fish species; the habitats where they live; and application of that knowledge to conserve and manage biodiversity and ecosystems. This one semester course includes applied outdoor lab experiences to enhance course work and will help prepare students who are interested in pursuing a career in wildlife and fisheries management or students who are interested in the conservation of the natural world.

## Science Department Courses: Recommended Progression* 2024-2025



* All students are required to take Biology I. After a student has passed Biology I, he or she may be recommended for Chemistry I, Chemistry I Honors, or the half credit science classes.
*** Physics or Physics I Honors must be taken before or concurrently with any Advanced Placement Science Course (Physics I or Physics I Honors must be taken before AP Physics). Please note that teacher recommendation is required for all Advanced Placement Courses. Please also note that Physics I is not a prerequisite for Anatomy and Physiology Honors.


# Social Studies Department Course Descriptions 

22AP—Advanced Placement U.S. Government and Politics<br>Credit: 1.0 Grades: 11-12 Graduation Credit: Social Studies<br>Prerequisites: Teacher Recommendation; B average or higher in World Cultures; $B$ average or higher in current English class (this is due to the high volume of writing in this course)

NCAA Eligibility Center Approved Course
This weighted course will provide students with an analytical perspective on government and politics in the United States. The study will include general principles of government and analysis of specific examples to gain an understanding on the American political system. The students will understand the various institutions, groups, beliefs, and ideas that constitute American politics. Students who complete AP Government as juniors are not eligible to take DIA as seniors. The course will be taught as a college level course and is designed to prepare students for the Advanced Placement examination which is required. Any cost related to the AP exam is the responsibility of the students.

## 221A-Advanced Placement Psychology

Credit: $1.0 \quad$ Grades: 11-12 Graduation Credit: Social Studies
Prerequisites: Teacher Recommendation; $B$ average or higher in World Cultures; $B$ average or higher in current English class (this is due to the high volume of writing in this course)
NCAA Eligibility Center Approved Course
The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological basis of behavior, sensation and perception, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas (AP CollegeBoard). Students who are accepted in AP Psychology and complete the course will not be eligible for the semester psychology course. The course will be taught as a college level course with assigned readings and other assignments that will be completed outside of class. Students will need to commit a designated time for reading and studying to be successful. The course is also designed to prepare students for the AP examination which is required. Any cost related to the AP exam is the responsibility of the student

## 222A-History 201: American History to 1865

Credit: $0.5 \quad$ Grades: 11-12 Graduation Credit: Social Studies
Prerequisite: Teacher recommendation and student must have achieved "A" in World History
or " $B$ " or higher in World History Honors. DIA can be taken concurrently.

American History to 1865 is a college level course taught by a Mifflin County High School instructor. It is offered through Luzerne County Community College and will be worth 3 college credits. This course is likely to transfer to many colleges and universities; however, parents and students are encouraged to research whether or not the course will transfer to colleges/universities to which students intend to apply. Students will earn a high school graduation credit upon successful completion of American History to 1865. There is a cost associated with this course that the student and his/her parent will need to satisfy with Luzerne County Community College. According to the Luzerne County Community College, this course will introduce students to the development of the United States from the period of discovery and colonization to the end of the Civil War. The focus will be on the most important political, economic, social, and cultural forces.

## 224A-History 202: American History 1865 to Present

## Credit: $0.5 \quad$ Grades 11-12 Graduation Credit: Social Studies

Prerequisite: Teacher recommendation and History 201
History 202: American History 1865 to present is a college level course taught by a Mifflin County High School instructor. It is offered through Luzerne County Community College and will be worth 3 college credits. This course is likely to transfer to many colleges and universities; however, parents and students are encouraged to research whether or not the course will transfer to colleges/universities to which students intend to apply. Students will earn a high school graduation credit upon successful completion of History 202. There is a cost associated with this course that the student and his/her parent will need to satisfy with Luzerne County Community College. This course will cover the development of the United States from the Reconstruction Era to the present. Emphasis is given to late nineteenth and twentieth century industrialization, the expansion of government, the emergence of the industrial-urban society, and America's status as a world power.

## 9231-American Cultures

Credit: 1.0
Grade: 9

## Graduation Credit: Social Studies

NCAA Eligibility Center Approved Course
This course is designed to present those forces that shaped the history and character of the United States from 1890 to present. It is to be presented thematically, as well as chronologically, with greater emphasis on cause and effect rather than facts. The principle themes to be developed include the following: immigration, industrialization, urbanization, reform-democracy and foreign policy.
American Cultures will only be offered at Mifflin County Junior High School.

Prerequisites: Teacher Recommendation; "B" or higher in $8^{\text {th }}$ grade Social Studies; " $B$ " or higher in $8^{\text {th }}$ grade English
NCAA Eligibility Center Approval
This course is designed to present the forces that shaped the history and character of the United States from 1890 to the present. It is to be presented thematically surrounding political, social, economic, cultural themes as well as chronologically, with greater emphasis on cause and effect rather than facts. The development of source analysis/historical thinking skills will be stressed throughout the course. The principle concepts to be explored include the changing nature of U.S. democracy, the changing face of American society, and the United States' changing role in the world. Students enrolled in this course are expected to be selfdriven learners who will complete more rigorous work on a daily basis.
American Cultures Honors will only be offered at Mifflin County Junior High School.

## 1251-Democracy in Action (DIA)

Credit: $1.0 \quad$ Grade: 11

## Graduation Credit: Social Studies

NCAA Eligibility Center Approved Course
The purpose of this course is to enable students to develop an understanding of the complexity of the American political, legal, and economics system. Students will be exposed to the foundations and basic documents of American government. Also, students will examine their role in the political process and gain an understanding of the function of government at the national, state, and local levels. Finally, the students will explore the basics of the American economic system and understand the vital role economics plays in our everyday lives.

## 125H—Democracy in Action Honors

Credit: $1.0 \quad$ Grade: $11 \quad$ Graduation Credit: Social Studies Prerequisites: Teacher Recommendation; " $B$ " or higher in previous social studies class; " $B$ " or higher in previous English class
NCAA Eligibility Center Approval
The purpose of this course is to provide students with a detailed understanding of the foundation and the influences on American Government. This course provides students with a framework for understanding the complexities of American democracy, practices of American government as established by the US Constitution, advanced concepts of American political theory and citizenship. Concepts of economics are layered into government to understand guiding national economies. The goal of this course is to help to prepare students to become responsible and effective citizens in the interdependent world.

# 2280-Famous Trials in American History 

## Credit: 0.5

Grades: 11-12

## Graduation Credit: Elective

## Prerequisite: English 10

NCAA Eligibility Center Approved Course
This course will examine famous trials that have changed America such as the 0.J. Simpson trial and Andrea Yates trial. In the 1920s, corruption in professional baseball stood trial and changed how Americans viewed professional sports. Students learn about these and other famous trials from the earliest days of our founding up to the trial of the terrorist Zacarias Moussaoui for the September $11^{\text {th }}$ attacks.

## 2260-Geography

Credit: 0.5
Grades: 10-12
Graduation Credit: Elective
Prerequisite: English 9
NCAA Eligibility Center Approved Course
This course will focus on spatial relations expressed as patterns and processes. It will include the study of physical, political, economic, and cultural geography. Special emphasis will be placed on regional studies and human geography. Geography is strongly recommended for college bound students and is a course requirement at many colleges.

## 2240-Psychology

Credit: 0.5
Grades: 11-12

## Graduation Credit: Elective

Prerequisite: English 10
NCAA Eligibility Center Approved Course
This course is the study of why human beings and animals behave as they do. Included is a desire to understand the whole range of human experience, along with reasons for people's motives, thoughts, feelings, and emotions. Why we behave as we do and why we experience things as we do have great importance in our daily lives. With this knowledge we can better adjust to situations and meet the challenges that face us in our daily living. This course is offered for one half year. The depth and complexity of this elective will be determined by the students' abilities, inquisitiveness and desire to learn more about themselves and their fellow human beings.

## 0253-World History

Credit: 1.0
Grade: 10
Graduation Credit: Social Studies
Prerequisite: American Cultures
NCAA Eligibility Center Approved Course
This course is a study of the cultural development of mankind. Emphasis is placed on the diversity which exists among cultural groups with regard to social, political, and economic customs and practices. This course also includes the study of those facets of culture which are universal and a part of all organized human societies. The continuum of the overall progress of mankind from 1450 to the present is illustrated and stressed.

## 025H-World History Honors

Credit: 1.0
Grade: 10
Graduation Credit: Social Studies
Prerequisites: Teacher recommendation; " $B$ " or higher in previous social studies class; " $B$ " or higher in previous English class
NCAA Eligibility Center Approval
World History Honors is a weighted course designed as a study of the cultural development of humanity. The course will examine the diverse, and also the common aspects, of culture and history. Social, political, and economic practices will be a feature of studies. The course will span the progress of humanity from 1450 to the present. Students will engage in criticalthinking exercises, activities focused on independent thoughts and written communication, as well as an examination of primary-source documents.

# STEM Course Descriptions 

## 2380, 2385-STEM Studio

Credit: 0.5-1.0
Grade: 10-12

## Graduation Credit: Elective

Prerequisite: Biology I and Algebra I or Algebra IB
STEM Education is an approach to learning that aims to tackle real world problems using multiple disciplines including, but not limited to, Science, Technology, Engineering, and Math. The STEM Studio course seeks to produce more students who are both passionate and prepared to become the next generation of entrepreneurs and business leaders. A lesson or unit in a STEM class is typically based around finding a solution to a real-world problem and emphasizes collaborative, project-based learning with the goal of mimicking the way solutions are formed in the business world.
Lessons will:

- Focus on real-world issues and problems
- Be guided by the engineer design process
- Immerse students in hands-on inquiry and open-ended exploration
- Involve students in productive teamwork
- Apply school content students are learning
- Allow for multiple right answers and encourage failure as a necessary part of learning


## 2390, 2395-STEM Internship

Credit: 0.5-1.0 Grade: 11-12 Graduation Credit: Elective

## Prerequisite: Biology I and Algebra I or Algebra IB

The STEM Internship Program allows students to collaboratively create interdisciplinary, standards-based lesson plans geared towards the kindergarten through $5^{\text {th }}$ grade levels. Once these lessons are created, groups will have the opportunity to teach their lessons in grade appropriate classrooms across the district. Throughout this class, students will be taught lessons on topics including lesson planning, questioning techniques, forms of assessment, differentiation to reach all learners, and applying state mandated standards. Student-created lessons will include components of science, math, English/language arts, technology, and art. In addition to working with their peers, students will work with a cooperating elementary teacher to ensure lessons meet grade-level topics and standards.

# Technology Education Department Course Descriptions 

## 1795-2D Engineering Design

Credit: 0.5 Grades 10-12 Graduation Credit: Elective
2D Engineering Design is an introductory level course that primarily familiarizes students with 2-dimensional design, fabrication, problem-solving, and laser engraving/cutting techniques. Students will learn drafting and design skills and will be trained to use CADD (computer-aided drafting and design) software programs such as Autodesk AutoCAD and Adobe Illustrator. This course is optimal for ALL students. Some potential projects that will be completed are as follows: laser engraved pumpkins, laser engraved glasses, custom LED lights, mechanical drafting activities, cupcake wars, constructible designs, cardboard box design challenge, and comic strip design challenge.

## 1796-3D Engineering Design

Credit: . 5 Grades 10-12 Graduation Credit: Elective
3D Engineering Design is an introductory level course that primarily familiarizes students with 3-dimensional design, modeling, fabrication, problem-solving, and 3D printing processes. Students will learn drafting and design skills and will be trained to use CADD (computer-aided drafting and design) software programs such as Autodesk Inventor, Autodesk AutoCAD, and Adobe Illustrator. Some potential projects that will be completed are as follows: 3D Printed Logos, 3D Printed Cookie Cutters, Cupcake Wars, 3D Modeling \& Design Activities, Practical Applications Design, Transportation Design, and MagicaVoxel Design Challenge.

## 1771-Advanced Print Media Production

Credit: $1.0 \quad G r a d e s: 11-12$

## Graduation Credit: Elective

Prerequisite: Introduction to Print Media A
Students will build upon their knowledge gained in the Introduction to Print Media A course to create professional-level quality projects. Students will build upon their knowledge of vinyl printers and cutters, multicolor screen printing, garment printing, laser cutting and engraving, large vinyl prints, and other professional-quality printing applications. Some potential projects that will be completed are as follows: 3D Laser Cutting, Heat Transfer Vinyl, Heat Transfer Prints, Photo Editing, Multicolor Screenprint, Multicolor Vinyl, DSLR Camera Operation, and video editing.

## 0705-Architectural Design

## Credits: 0.5 <br> Grades: 10-12 <br> Graduation Credit: Elective

Architectural Design is an introductory-level course that primarily familiarizes students with the elements of residential home design. Students will learn drafting and design skills, explore architectural styles, design architectural plans and models, and will be trained to use the CADD (computer-aided drafting and design) software program Autodesk Revit. This course is optimal for ALL students. Some potential projects that will be completed are as follows: Tiny House Design Challenge, Dream Home Design Challenge, Apartment Design Challenge, Introduction to Residential Architectural Design.

## 0735-Digital Electronics

Credit: 0.5
Grades: 10-12 Graduation Credit: Elective
Throughout this course, students will learn the basics of building and programming electrical circuits. Students will gain an understanding of how electricity works, different types of electrical components, basic programming skills, and more. Some potential projects that will be completed are as follows: custom arcade machine, low ( 5 v ) circuits, home ( 120 v ) circuits, arduinos circuits, raspberry pi circuits, programmable lights and sounds, programmable holiday light display, and assist with stage crafting components.

## 0706-Engineering \& Innovations

Credit: $0.5 \quad$ Grades: 10-12 Graduation Credit: Elective
Prerequisite: 2D Engineering Design or 3D Engineering Design
This course is offered as an extension of Engineering Design for students interested in utilizing manufacturing equipment such as the laser engraver/cutter, plasma cutter \& 3D printer to create innovative designs. Students will have the opportunity to design, build, and manufacture products that demonstrate an understanding of drafting concepts in a handson and practical way. Students will enhance their drafting and design skills and will be trained to use new and advanced functions of CADD (computer-aided drafting and design) software programs such as Autodesk Inventor, Autodesk Auto CAD, Autodesk Revit, and Adobe Illustrator. Some potential projects that will be completed are as follows: Mini-Game Design Challenge, Train Car Design Challenge, Arcade/Carnival Games, Cupcake Wars.

## 9795-Exploring Drafting

Credit: 0.5 Grade: 9 Graduation Credit: Elective
Exploring Drafting is an introductory course to acquaint students to the fundamentals and drafting techniques of modern drafting. The major skills taught will be in measurement, geometric construction, multi-view drawings, dimensioning, sectional and auxiliary view drawings. Students will understand basic drafting techniques by creating working drawings utilizing manual, freehand, and CAD techniques.
Exploring Drafting is only offered at Mifflin County Junior High School.

## 9775-Exploring Technology

Credit: 0.5 Grade: 9 Graduation Credit: Elective
Exploring Technology is an introductory course which introduces students to a wide variety of materials, basic shop skills, and techniques necessary for all the technology courses offered. It is recommended that this course be taken first by new technology education students. Areas of study include structural engineering, plastics, sheet metal, sketching, and project planning. All students will be making required projects and will be responsible for expenses.
Exploring Technology is only offered at Mifflin County Junior High School.

## 9715-Exploring Visual Communications

Credit: 0.5
Grade: 9

## Graduation Credit: Elective

Exploring Visual Communications is an introductory course that will allow students to study some modes of communication through sight. Students will concentrate on the history of graphic arts, layout, and design. Students will be introduced to the basic processes of printing, photography and darkroom procedures, platemaking, binding and finishing.
Exploring Visual Communications is only offered at Mifflin County Junior High School.

## 0715-Introduction to Print Media Production A

Credit: $0.5 \quad$ Grades: 10-12 Graduation Credit: Elective
Throughout this course, students will learn the basics of digital design and print media production tools to edit photos and images for the purposes of printing them in high quality. Students will learn the basic operations of laser engraving and cutting, vinyl cutters and printers, photo printing, screen printing, and other hands-on projects. Some potential projects to be completed are as follows: photo editing, movie poster design, laser engraving, vinyl cut decal, vinyl printed decal, 1-color screenprint, camera operation, custom notepads, and custom projects.

## 0725-Introduction to Print Media Production B

Credit: 0.5
Grades: 10-12
Graduation Credit: Elective
Prerequisite: Introduction to Print Media Production A
Throughout the first half of this course, students will learn the basics of digital design and print media production tools to edit photos and images for the purposes of printing them in high quality. During the second half, students will be given challenges that will allow them to create custom work for real-world purposes. Some potential projects to be completed are as follows: redesign a menu challenge, design a book cover challenge, and TSA Photography challenge.

## 0776-Introduction to Product Development A

## Credit: $0.5 \quad$ Grades: 10-12 Graduation Credit: Elective

Introduction to Product Development A will introduce students to different techniques and processes when following plans to create a product. This course will include an introduction to machines, budgeting, reading simple technical drawings, and exploring a variety of materials. Some potential projects to be completed are as follows: jewelry box, cutting boards, and lamps.

## 0777-Introduction to Product Development B

Credit: $0.5 \quad$ Grades: 10-12 Graduation Credit: Elective
Prerequisite: Introduction to Product Development $A$
Introduction to Product Development B will introduce students to different techniques and processes when following plans to create a product. This course will include an introduction to machines, budgeting, reading simple technical drawings, and exploring a variety of materials. The latter half of the course will include more independent projects with a personal choice of materials. Some potential projects to be completed are as follows: custom designed projects, tensegrity table, cutting boards, bandsaw boxes, and lamps.

## 2771/2775-Print Media Production Assistant (Independent Study) Credit: 0.5-1.0 Grades: $12 \quad$ Graduation Credit: Elective Prerequisite: Teacher Recommendation and Advanced Print Media Production

 Students will use their knowledge of the printing procedures and machines to assist students, complete enrichment projects for the district and other contributors, and otherwise assist with the needs of the lab. Some potential projects to be completed are as follows: create promotional materials for MCHS/MCSD and create personalized materials for clubs, sports teams, organizations, etc...
## 2776-Product Design and Development

## Credit: 1.0 <br> Grades: 11-12 <br> Graduation Credit: Elective

Prerequisite: Introduction to Product Development A
Students will build upon their knowledge gained in Introduction to Product Development to create professional-level quality projects. This class will focus on the design and development of a project that the student will build. Each student is responsible for their product from conception to completion. Potential projects to be completed are both studentdriven and teacher-approved projects.

## 9772-Robotics \& Engineering

Credit: $0.5 \quad$ Grades: 10-12
Graduation Credit: Elective
Robotics \& Engineering is an introductory level, project-based course. As a team, students will learn how to build and program robots to follow remote and autonomous instructions. Students will explore several types of robotics systems and programming platforms and will develop teamwork and problem-solving skills. This course uses Tetrix Robotics build kits and Tetrix Prizm robotics controllers. Some potential projects to be completed are as follows: Introduction to Tetrix Robotics Kits, Tetrix Robotics Kit Builds, Tetrix Robotics Competition, Programming Activities, and Drones.

## 0775-Stage Craft

Credit: 0.5
Grades: 10-12
Graduation Credit: Elective
Working with the Theater/Drama team, students will learn various aspects of theatrical production including set constructions, prop making, and use of computer and media-based applications. This course prepares students to engage in the hands-on application of production elements in design and technology. Some potential projects to be completed are as follows: construct sets for the play, basic electrical wiring, and prop making.

## 9771-Underwater Robotics

Credit: 0.5 Grades: 10-12 Graduation Credit: Elective
Underwater Robotics is an introductory level, project-based course. In this course, students learn about remotely operated vehicles through guided exploration. Students work in teams to design, build, modify and test, and problem-solve their underwater robot builds. At the conclusion of the project, teams test their final design at an underwater robotics event held at the Juniata Valley YMCA. This course is optimal for all students. Some potential projects to be completed are as follows: introduction to remotely operated vehicles, underwater robotics design and creation, underwater robotics competition, introduction to 3D printing, engineering design process, introduction to laser cutting, introduction to soldering, and the dynamic process of technology.

# World Language Course Descriptions 

## 9180-Spanish I

Credit: 1.0
Grades: 9-12
Graduation Credit: Elective
NCAA Eligibility Center Approved Course
Experience another culture through new sounds, new sights, and new tastes in Spanish I. Students will use basic Spanish to talk about themselves, family and friends, surroundings, and activities. In addition to listening and speaking, students will begin to read and write in the new language. Learning a language is not only fun, but it is also a worthwhile skill for the future.

## 0180-Spanish II

Credit: 1.0
Grades: 10-12
Graduation Credit: Elective
Prerequisite: Spanish I
NCAA Eligibility Center Approved Course
In this course speaking and listening skills continue to be developed with increasing emphasis on free responses and creative use of Spanish. Writing activities become more personalized, focusing on the students' own experiences. Grammar and vocabulary first introduced in Spanish I are expanded significantly. Short stories and articles pertaining to student interests are included, and students continue to explore cultural and geographical similarities and differences between their own and the target cultures.

## 018H-Accelerated Spanish II

## Credit: $1.0 \quad G r a d e s: ~ 9-12$ <br> Graduation Credit: Elective

Prerequisite: Teacher Recommendation; " $B$ " or higher in Spanish I

## Pending NCAA Eligibility Center Approval

Students will build upon Spanish I knowledge to practice speaking, writing reading, and listening skills with college level pacing and expectations. Students will utilize expanded vocabulary and grammatical tenses in simulated situations to make meaningful use of the target language. There is an emphasis on comprehensible input through reading and films to encourage students to speak and write the language creatively and effectively on their own. Culture is explored through songs, readings, and films. Upon completion, students will have finished the equivalent of one semester of introductory college level Spanish and will be able to gain college credit for the course. Accelerated Spanish II is a college level course offered through Luzerne County Community College and taught by a Mifflin County High School instructor. Students will earn a high school elective graduation credit upon successful completion of Accelerated Spanish II. There is a cost associated with this course that the student and his/her parent will need to satisfy with Luzerne County Community College.

## 1180-Spanish III

Credit: 1.0
Grades: 11-12
Graduation Credit: Elective
Prerequisite: Spanish II
NCAA Eligibility Center Approved Course
Students begin to develop more sophisticated conversational strategies which will eventually enable them to interact with native or near-native speakers of the target language in this course. Among others, these strategies include how to express and defend opinions as well as how to discuss emotions and attitudes. Reading material at this level encourages students to explore the Hispanic culture and civilization and provides a basis for discussions and mini-talks in the target language. Writing activities are less structured and more creative and incorporate more complex grammatical structures.

## 218H-Spanish IV-Honors

Credit: 1.0
Grade: 12
Graduation Credit: Elective
Prerequisite: Spanish III
Pending NCAA Eligibility Center Approval
Students continue developing sophisticated conversational strategies and begin to read authentic Spanish literature as they further their exploration of Hispanic culture and civilization. Writing activities form a foundation for more complex self-expression and are often converted into mini-talks in the target language. Grammatical structures of the language are reviewed with a view to enable the fourth year student to gain college credits through university placement or entrance exams should he or she choose to do so.

## Spanish is the only world language that is offered for four years/levels.

## Online World Language Options

If students are interested in taking an alternate language, there are others available through Mifflin County School District's online programs. These courses offer live classes; students will be required to complete the coursework at their own pace and either on their own time or during a study hall scheduled during the school day at no charge to the student as long as the student does not exceed carrying 7 full credits. All classes will be offered for two years/levels (ex. Japanese I and II). Online World Language course options are listed below with their course descriptions.

## Prerequisites:

Due to the independent work and the level of skill required to be successful in an online language course, prerequisites have been set for students wishing to take these courses. In order to take an online language course, a student must have $10^{\text {th }}$ grade status or higher and have $a B$ or higher in his or her current English class.

## L911-Arabic I

Credit: 1.0
Grades: 10-12

## Graduation Credit: Elective

NCAA Eligibility Center Approved Course
By the end of Arabic I, learners will in-shaa' a-llah; master the Arabic alphabet and sound system, be able to distinguish and pronounce all Arabic sounds, and write accurately from dictation; comprehend simple print texts on familiar topics as well as simple audio/video texts and compose simple paragraphs about themselves and family and friends. Students will know the differences between formal and spoken Arabic, recognize both registers, and be able to use basic expressions in at least one dialect.

## L011-Arabic II

Credit: 1.0
Grades: 11-12
Graduation Credit: Elective
Prerequisite: Arabic I
NCAA Eligibility Center Approved Course
In Arabic II, students will in-shaa' a-llah, strengthen previous learned writing skills using the symbols of the Arabic language. In addition, students will build the following skills: tell a story or anecdote (oral and written) using complex sentences, describe themselves and others, describe past activities and future plans, and speak extemporaneously to a topic studied during the semester. Students will be able to answer questions and maintain a conversation with a native speaker about basic topics such as their city, trips, interests, studies, families, etc.; express feelings, likes, and dislikes; contrast and connect English and Arabic by translating sentences and short paragraphs; and reflect on the learning process, mastery of stated learning outcomes, and the development of strategies to facilitate effective learning.

## L912-Chinese-Mandarin I

Credit: 1.0
Grades: 10-12

## Graduation Credit: Elective

NCAA Eligibility Center Approved Course
Chinese-Mandarin I is designed to develop an authentic and practical understanding of the Chinese language and culture. Students will begin to master the Chinese alphabet and sound system, be able to distinguish and pronounce Chinese sounds, and write accurately from dictation, comprehend simple print texts on familiar topics as well as simple audio/video texts. Students will have the ability to express their thoughts, feelings, and opinions in the target language within basic, real-life situations and learning scenarios. All new concepts will be introduced in context while incorporating various learning, speaking, and writing activities.

## L012-Chinese-Mandarin II

## Credit: 1.0

Grades: 11-12

## Graduation Credit: Elective

## Prerequisite: Chinese-Mandarin I <br> NCAA Eligibility Center Approved Course

Chinese-Mandarin II is designed to build upon skills learned in Chinese-Mandarin I and prepare students to communicate further using reading, writing, speaking, and listening. Students in this course will further their grammar skills to be able to communicate in other verb tenses and build skills that require more explanation. Students in this course will also build upon thematic vocabulary dealing with traveling, food, shopping, etc. Students will complete hands-on activities and innovative assignments to achieve the can-do statements laid out in the coursework.

## L916-French I

Credit: 1.0
Grades: 10-12

## Graduation Credit: Elective

NCAA Eligibility Center Approved Course
French I is designed to develop an authentic and practical understanding of the French language and culture. Students will have the ability to express their thoughts, feelings, and opinions in the target language within basic, real-life situations and learning scenarios. All new concepts will be introduced in context while incorporating various listening, speaking and writing activities.

## L016-French II

Credit: 1.0
Grades: 11-12
Graduation Credit: Elective
Prerequisite: French I
NCAA Eligibility Center Approved Course
French II is designed to build upon skills learned in French I and prepare students to communicate further using reading, writing, speaking, and listening. Students in this course will further their grammar skills to be able to communicate in other verb tenses and build skills that require more explanation. Students in this course will also build upon thematic vocabulary dealing with traveling, food, shopping, etc. Students will complete hands-on activities and innovative assignments to achieve the can-do statements laid out in the coursework.

## L917-German I

Credit: 1.0
Grades: 10-12

## Graduation Credit: Elective

NCAA Eligibility Center Approved Course
German I is designed to develop an authentic and practical understanding of the German language and culture. Students will have the ability to express their thoughts, feelings, and opinions in the target language within basic, real-life situations and learning scenarios. All new concepts will be introduced in context while incorporating various listening, speaking, and writing activities.

## L017-German II

Credit: 1.0

## Graduation Credit: Elective

## Prerequisite: German I

NCAA Eligibility Center Approved Course
German II is designed to build upon skills learned in German I and prepare students to communicate further using reading, writing, speaking, and listening. Students in this course will further their grammar skills to be able to communicate in other verb tenses and build skills that require more explanation. Students in this course will also build upon thematic vocabulary dealing with traveling, food, shopping, etc. Students will complete hands-on activities and innovative assignments to achieve the can-do statements laid out in the coursework.

## L913-Japanese I

Credit: 1.0
Grades: 10-12

## Graduation Credit: Elective

NCAA Eligibility Center Approved Course
Japanese I is designed to develop an authentic and practical understanding of the Japanese language and culture. Students will begin to master the Japanese alphabet and sound system, be able to distinguish and pronounce Japanese sounds, and write accurately from dictation, comprehend simple print texts on familiar topics as well as simple audio/video texts. Students will have the ability to express their thoughts, feelings, and opinions in the target language within basic, real-life situations and learning scenarios. All new concepts will be introduced in context while incorporating various listening, speaking, and writing activities.

## L013-Japanese II

Credit: 1.0
Grades: 11-12
Graduation Credit: Elective
Prerequisite: Japanese I
NCAA Eligibility Center Approved Course
Japanese II is designed to build upon skills learned in Japanese I and prepare students to communicate further using reading, writing, speaking, and listening. Students in this course will further their grammar skills to be able to communicate in other verb tenses and build skills that require more explanation. Students in this course will also build upon thematic vocabulary dealing with traveling, food, shopping, etc. Students will complete hands-on activities and innovative assignments to achieve the can-do statements laid out in the coursework.

## L915-Latin I

Credit: 1.0
Grades: 10-12

## Graduation Credit: Elective

NCAA Eligibility Center Approved Course
Latin I is an introduction to the language and culture of the Latin speaking ancient Romans and is meant for beginners without prior exposure. Latin I will develop at the basic level an understanding and competence in the interpretation of the written (and spoken) Latin language on a variety of topics. Students will read, understand, appreciate and make a personal response to some of the literature written in Latin.

## L015-Latin II

Credit: 1.0
Prerequisite: Latin I
NCAA Eligibility Center Approved Course
Latin II is building upon skills and concepts developed in Latin I. Learners will acquire some understanding of the Roman civilization within which the Latin language was used and demonstrate an understanding of the relationship between the practices and perspectives of the culture studied. Students will develop a sensitive and an analytical approach to language by seeing English in relation to a language of very different structure and by observing the influence of the ancient language on our own.

# Mifflin County Academy of Science and Technology Course Descriptions 

At the Mifflin County Academy of Science and Technology, students are given various opportunities to learn skill sets, earn college credit, and earn certifications in a number of different career fields. Students must fill out an application and be considered for admission to the program of their choice; attendance, grades, and discipline are all considered during the admission process.

## 312A, 412P, 513P-Agriculture Sciences

Credit: 3.0
Grades: 10-12
Graduation Credit: Elective
The mission of Agricultural Education is to prepare students for successful careers and a lifetime of informed choices in the global agriculture, food, fiber and natural resources system. Through agricultural education, students are provided opportunities for leadership development, personal growth and career success. Today, over 800,000 students participate in formal agricultural education instructional programs offering a thorough knowledge in the growing and producing of plants and livestock, marketing, management, finance, and production skills.

## Pennsylvania College of Technology Dual Enrollment

| HRT 101: Introduction to Ornamental Horticulture | 1 credit |
| :--- | :--- |

## 307A, 407P, 507P—Automotive Technology

Credit: 3.0
Grades: 10-12
Graduation Credit: Elective
This program prepares students to apply technical knowledge and skills to repair, service, and maintain all types of automobiles. Automotive Technology includes instruction in brake systems, electrical systems, engine performance, engine repair, drive trains, suspension and steering as well as heating and air conditioning systems.

## Industry Certifications

- PA Safety Inspection
- Mobile Air Climate Systems (MACS)
- Section 609 Air Conditioning
- PA On-Board Diagnostic II (OBD II)
- Emissions Certification
- Pro-Cut- Level One Certification
- Alldata
- SP2 Certifications

Pennsylvania College of Technology Dual Enrollment

| AMT112: Brake Systems | 3 credits |
| :--- | :--- |
| AMT113: Steering and Suspension | 3 credits |

## 330A, 430P, 530P-Building Trades and Construction

Credit: 3.0
Grades: 10-12
Graduation Credit: Elective
The Building Trades and Construction program prepares individuals to apply knowledge and skills in the construction technology field. Instruction is provided in the basic skills in a variety of areas associated with building construction such as carpentry, masonry, plumbing, heating and electrical. Instruction includes but is not limited to blueprint reading; cost estimating; uses of hand and power tools; cutting, fitting, fastening and finishing various materials; and applying technical specifications and knowledge concerning the physical properties of materials.

## Industry Certifications

- OSHA 10
- PA Skills Certificate
- Telehandler Operator
- American Ladder Institute
- Fall Protection Certificate
- Areal Work Platform Certification


## Pennsylvania College of Technology Dual Enrollment

| BCT 103: Construction Hand \& Power Tools | 1 credit |
| :--- | :--- |
| BCT 109: Framing Principles | 4 credits |
| BCT 234 Masonry Principles | 5 credits |

## 306A, 406P, 506P—Collision Repair

## Credit: 3.0 <br> Grades: 10-12 <br> Graduation Credit: Elective

The Collision Repair program is designed to provide students with comprehensive training in collision repair and automotive refinishing techniques. This program equips students with the knowledge and skills necessary to pursue careers in the automotive collision repair industry or continue their education in related fields with emphasis on real-world learning experiences to reinforce theoretical concepts. The Academy's Collision Repair program provides a strong foundation in collision repair techniques and industry standards, develops critical thinking, problem-solving, and teamwork skills through hands-on projects and practical scenarios, and prepares students for successful entry into the workforce or further education in automotive-related fields.

## Industry Certifications

- OSHA 10
- PA Safety Inspection License
- PA Emissions License

Pennsylvania College of Technology Dual Enrollment

| ABC 100: Introduction to Non-Structural Collision Repair | 2 credits |
| :--- | :--- |
| ABC 104: Introduction to Non-Structural Collision Repair Applications | 3 credits |

## 317A, 417P, 517P, 517F-Cosmetology

Credit: 6.0
Grades: 12
Graduation Credit: Elective
This Cosmetology program prepares individuals to cut, trim, and style scalp, facial, and body hair; apply cosmetic preparations; perform manicures and pedicures; acquire skills to massage the head and extremities; and prepare for practice as licensed cosmetologists in specialized or full-service salons. Instruction includes hair cutting and styling, manicuring, pedicuring, facial treatments, shampooing, chemical applications, esthetics, shop management, sanitation and safety, customer service, and applicable professional and labor laws and regulations.

## Industry Certifications

- Barbicide
- OSHA 10
- Milady Rise
- Olaplex
- Loreal access
- Various Cosmetology SP2


## 318A, 418P, 518P—Culinary Arts/Hospitality

 Credit: 3.0 Grades: 10-12Graduation Credit: Elective
The Culinary Arts/Hospitality program prepares individuals in production and food service establishments and related food industry occupations. It is designed to provide a comprehensive and hands-on experience in the world of culinary arts and is tailored to introduce students to the fundamentals of cooking, kitchen safety, food preparation techniques, nutrition, and culinary entrepreneurship. Through a blend of practical exercises, theoretical knowledge, and real-world experiences, students will develop essential culinary skills while fostering creativity and innovation in the kitchen. This course includes instruction in selecting, storing, preparing and serving food and food products; basic nutrition; sanitation and food safety; the use and care of commercial equipment; serving techniques; and the operation of institutional food establishments.

## Industry Certifications

- ServSafe/Manager Food Safety
- SP/2 Culinary-Food Safety
- ServSafe Allergen
- CareerSafe OSHA
- ServSafe Food Handler
- Heart saver CPR


## Pennsylvania College of Technology Dual Enrollment

| FHD 118: Sanitation | 1 credit |
| :--- | :--- |
| FHD137: Introductory Baking | 3 credits |

## 311A, 411P, 511P-Early Childhood Childcare

Credit: 3.0
Grades: 10-12
Graduation Credit: Elective
The Early Childhood Education program prepares youth with the knowledge, skills, and professional dispositions necessary to support the work of young children and their families in early education settings. Students are expected to use critical thinking to cultivate and apply understanding of children's development and learning in real time teaching activities. Opportunities to explore a variety of careers associated with young children are also provided. Students may elect to pursue the Child Development Associate credential to support post-secondary career and/or college pathways. Coursework includes the following: Introduction to the Profession, Theories of Learning and Development, Play \& The Arts in Early Childhood, Family Involvement, Health and Safety, Learning in the Subject Areas, Observation and Assessment, Children's Behavior and Positive Guidance Working with Families, Curriculum Development and Cooperative Education and Internships. Program goals and objectives include exploration of professions (and professionalism) related to work with young children; design, development and implementation of learning activities for children informed by child development and learning theories; creation of a professional portfolio aligned with the Child Development Associate credential; and successful transition into a first-year job and/ post-secondary education related to early childhood.

## Industry Certifications

- CDA-Ready Certificate
- CDA
- Pediatric First Aid
- First Aide
- Infant and Child CPR
- Get Started with Center-Based Care
- Act 31-Mandatory Reporter


## 320A, 420P, 520P-Electrical Installation

## Credit: $3.0 \quad$ Grades: 10-12

## Graduation Credit: Elective

The Electrical Installation program at the Academy is a comprehensive and hands-on course that equips individuals with the technical expertise required for various electrical occupations. The program covers a wide range of skills, including installation, operation, maintenance, and repair of residential, commercial, and industrial electrical systems. Students in this program learn practical applications such as interpreting circuit diagrams, understanding electrical codes, and blueprint reading, which are all fundamental skills needed in the electrical field. Additionally, the program emphasizes reading and interpreting wiring codes and specifications, along with the installation and maintenance of wiring, service, and distribution networks to prepare students for real-world scenarios. Overall, this program offers a strong foundation and practical skills necessary for individuals aiming for a career in the electrical installation and maintenance field.

## Industry Certifications

- American Ladder Institute
- OSHA 10/ OSHA 30
- ILG MEWP'S
- JLG Telehandler operators


## Pennsylvania College of Technology Dual Enrollment

ELT116: Construction Lab I: Residential
5 credits

## 328A, 428P, 528P—Emergency Services/Fire Safety/Law Enforcement

## Credit: 3.0 Grades: 10-12 Graduation Credit: Elective

This program is designed for students interested in the many professions associated with Emergency Services and First Responders. Potential jobs include the following: Emergency Medical Technician, Law Enforcement Officer, Corrections Officer, Armed Forces, Firefighter, and 911 Dispatch/Public Safety Telecommunicators. This program is designed to equip high school students with essential skills and knowledge in emergency response and disaster management and aims to prepare students to become effective first responders, fostering responsibility and leadership within their communities. Through theoretical applications, field simulations and exercises, students learn the elements of emergency response procedures, disaster preparedness and mitigation, community engagement and outreach, and leadership development.

## Industry Certifications

- American Heart Association CPR
- Emergency Medical Technician (National)
- Vehicle Rescue Technician
- Fire Essentials with a Live Burn
- National Incident Management (FEMA) 100-200-800-700
- Hazardous Materials Operations
- 911 Dispatch with APCO Telecommunicator
- Traffic Incident Management
- PA State Fire Academy Essentials Program


## 325A, 425P, 525P—Health Professions

## Credit: $3.0 \quad$ Grades: 10-12 Graduation Credit: Elective

Acquire skills to be an outstanding member of any health care team in the Academy's Health Professions program. This program offers both theory-based and hands-on learning to prepare students for the challenges of the healthcare industry. Topics that will be covered include anatomy and physiology, medical terminology, basic patient care and basic clinical skills. The Health Professions program offers career exploration with opportunities for closer looks within specific health careers. Job shadowing, cooperative education and Penn College of Technology dual enrollment courses are other excellent opportunities the program boasts.

## Industry Certifications

- BLS Health Care Provider-American Heart Association
- OSHA 10 Hour General Industry Health
- PA Dept. of Human Services Personal Care Home Direct Care Staff


## Pennsylvania College of Technology Dual Enrollment

| MTR100: Medical Terminology Survey | 1 credit |
| :--- | :--- |
| MTR104: Basics of Medical Terminology | 3 credits |
| BIO103: Human Anatomy and Physiology Survey | 4 credits |

## 308A, 408P, 508P—Mechatronics, Robotics, \& Automation

 Credit: $3.0 \quad G r a d e s: 10-12 \quad G r a d u a t i o n ~ C r e d i t: ~ E l e c t i v e ~$The Academy's Mechatronics, Robotics, and Automation program prepares individuals for the fast-paced world of integrated technology. Students learn key technical skills in industrial electricity, hydraulics, pneumatics, mechanical drive systems, electronics, logic control, robotics, and coding. Students learn the basics of system design, testing, and implementation of industrial automation, robotics, and logic control. Instruction will also include multiple collaborative projects incorporating numerous demonstrated skills and various leadership roles. In this program, students may choose to continue on to higher education in mechatronics, electrical engineering, mechanical engineering, process control, or automation / robotics. Students completing this course may also choose to enter the workforce in numerous roles including automation technician, industrial maintenance technician, process technician, or integration and automation technician.

## Industry Certifications

- OSHA 10 Hour Safety
- Ladder/Fall Safety
- JLG Elevated Work Platform
- JLG Tele-handler


## Pennsylvania College of Technology Dual Enrollment

| EET114: Introduction to Digital Electronics | 3 credits |
| :--- | :--- |
| EET115: Digital Circuits Applications | 1 credit |
| EET116: Electronic Circuits and Devices I | 5 credits |
| EET124: Engineering, Technology, and Society | 3 credits |

## 327A, 427P, 527P—Precision Machining

## Credit: $3.0 \quad G r a d e s: 10-12$ <br> Graduation Credit: Elective

The Academy's Precision Machining program spends considerable time in the study and operation of industrial equipment and tools. Students will develop skills used by tool and die production companies and production/manufacturing facilities. This includes emphasis on the set up and operation of computer numerical controlled (CNC) mills and lathes. Students will also be taught manual machining, basic welding and computer-aided design/computer-aided machining (CAD/CAM) software and its applications. A strong project method-driven curriculum assures both theoretical and practical skill development. This program prepares students to enter career pathways of CNC, CAM, tool production, machine tool operating, fabrication, quality control, and production or manufacturing.

## Industry Certifications

- NIMS Machining Level I Manual Drill Press Operations
- NIMS Machining Level I Manual Milling
- NIMS Machining Level I Manual Surface Grinding
- NIMS Machining Level I Manual Turning with Chucking
- NIMS Machining Level I Planning, Benchwork, Layout
- NIMS Machining Level I Measurements, Materials, and Safety
- OSHA Certification
- NIMS Machining Level I Manual Turning between Centers
- NIMS CNC Milling Programming Setup \& Operations
- NIMS CNC Turning Programming Setup \& Operations
- NIMS Machining Level I
- NIMS Machining Level I CNC milling
- NIMS Machining Level I CNC turning


## Pennsylvania College of Technology Dual Enrollment

| MTT128: Mill Applications | 4 credits |
| :--- | :--- |
| MTT129: Lathe Applications | 4 credits |

## 335A, 435P, 535P-Welding Technology

Credit: $3.0 \quad$ Grades: 10-12
Graduation Credit: Elective
The Academy's comprehensive Welding Technology program equips students with a robust skill set and theoretical understanding of welding. Emphasis is placed on safety protocols, basic metallurgy, and hands-on experience in Shielded Metal Arc Welding (SMAW) and Gas Metal Arc Welding (GMAW). Students delve into advanced techniques, introducing Flux Core Arc Welding (FCAW), Gas Tungsten Arc Welding (GTAW), Carbon Arc Cutting, and Oxyfuel Cutting/Welding. Upon program completion, students will have acquired refined skills through advanced applications, have a strong grasp of blueprint reading and interpretation abilities, and be able to impart their knowledge of industrial codes and standards. Students graduate with not only proficiency in various welding processes but also a deep understanding of safety, machine operations, blueprint interpretation, and adherence to industry standards, positioning themselves for successful careers in welding and fabrication.

## Industry Certifications

- OSHA 10 Certification
- AWS D1.1 Structural Steel


## Pennsylvania College of Technology Dual Enrollment

| WEL114: Shielded Metal Arc I | 2 credits |
| :--- | :--- |
| WEL116: Shielded Metal Arc II | 2 credits |
| WEL120: Gas Metal Arc I | 2 credits |
| WEL120: Gas Metal Arc I | 2 credits |
| WEL123: Gas Tungsten Arc I | 2 credits |
| WEL124: Gas Metal Arc II | 2 credits |
| WEL129: Gas Tungsten Arc II | 2 credits |
| WEL132: Flux Core I | 2 credits |
| WEL136: Flux Cored II | 2 credits |

