

# PCSD

Parma City School District

NORMANDY ~ VALLEY FORGE

2025-2026

## High School Course Guide



440/842-5300



[www.parmacityschools.org](http://www.parmacityschools.org)



7377 Chateau Dr 44130

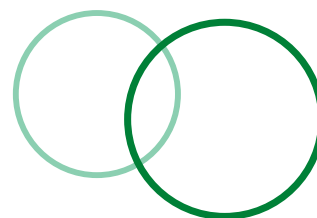


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## NORMANDY HIGH SCHOOL

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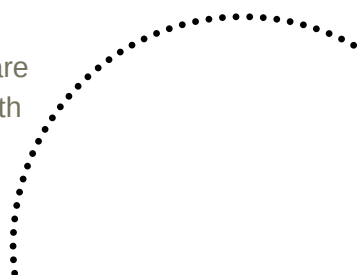


## VALLEY FORGE HIGH SCHOOL

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Thank you to the Teaching Staff, Counselors, and Administrators who prepared the Parma City School District High School Course Guide. Every effort has been made to provide an accurate and complete document. This document is in alignment with the Parma City School District Board of Education policies at the time of publication. Policies, procedures, rules, information, and guidelines in this document are subject to changes in Board of Education Policy, Ohio Department of Education and Workforce policy, Ohio Revised Code, United States federal law, changes to which may be beyond the scope of the PCSD to control. Phone numbers, website information, and other information is current at the time of publication and may change without notice. In the event that any inaccuracies are present in this document, the administration reserves the right to act in good faith to ensure all school functions are successfully administered.







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# GRADUATION REQUIREMENTS

To be eligible for graduation and to receive a Parma City School District High School diploma, a student must have earned a minimum of 20 credits and successfully completed State of Ohio Graduation Requirements. The Ohio Graduation Requirements consist of three key components: Course Completion, Demonstrating Competency, and Demonstrating Readiness.



## 1. Credits (Course Completion)

Students will satisfy Ohio's curriculum requirements and any additional local requirements. Students will complete the state minimum 20 credits, with specific credits required in each content area.

## 2. Demonstrating Competency

Students will demonstrate competency in the foundational areas of English language arts and mathematics or through alternative demonstrations, which include College Credit Plus, career-focused activities, their ACT or SAT scores, or military enlistment.

## 3. Demonstrating Readiness (Seals)

Students will demonstrate readiness for their post-high school paths by earning two diploma seals that allow them to demonstrate important foundational and well-rounded academic and technical knowledge, professional skills, and leadership and reasoning skills.

## Credits (Course Completion)

GRADUATION REQUIREMENTS - 20 CREDITS MINIMUM		
Credits	Area	Required
4	ENGLISH	English I, II, III, IV
4	MATHEMATICS	4 credits of mathematics (must include Algebra II or equivalent)
3	SOCIAL STUDIES	1 credit in U.S. History 1 credit in World History 1 credit in U.S. Government
3	SCIENCE	1 credit in Biology 1 credit in Physical Science 1 credit in an additional science
.5	HEALTH	Required for graduation
.5	PHYSICAL EDUCATION	1/4 credit for PE Survey and 1/4 credit PE course*
5	ELECTIVES	See course guide for options. 1 credit must be in the area of Fine Arts** .5 credit in Financial Literacy

\*Students who opt for the PE Waiver must also complete 1/2 credit in a content area other than physical education to fulfill the graduation requirement.

\*\*Career & Technical Education students that successfully complete at least 4 units of CTE program courses are exempt.

## Demonstrating Competency



Students are required to take six End of Course exams throughout high school, including Algebra, Geometry, English Language Arts II, Biology, U.S. History, and Government. To graduate, students must earn a "competency" score on the English Language Arts II and Algebra I end-of-course tests or complete other options. Students not earning competency scores on the first attempt must be offered appropriate remediation and support and retake the relevant test at least once. In lieu of attaining competency scores on the state tests, students can choose between four other ways to demonstrate competency following remediation and second test attempts. The alternative ways to demonstrate competency are as follows: College Credit Plus, ACT or SAT, Career Experience and Technical Skill, and Military Enlistment. See the Ohio Department of Education and Workforce website for requirements for each alternative option. <https://education.ohio.gov>

Passing/Competency Score	Test
684	Algebra I
684	English II

## Demonstrating Readiness (Seals)

In addition to fulfilling curriculum requirements and meeting competency requirements, students must also show they are prepared for their next steps after high school. Students will demonstrate readiness by earning at least two diploma seals, one of which must be state-defined. There are 12 Graduation Seal options for students to demonstrate readiness for careers, college, or the military (3 PCSD locally defined seals and 9 state-defined seals).

- Community Service Seal (Local)
- Fine and Performing Arts Seal (Local)
- Student Engagement Seal (Local)
- Citizenship Seal (Ohio)
- College-Ready Seal (Ohio)
- Industry-Recognized Credential Seal (Ohio)
- Military Enlistment Seal (Ohio)
- Ohio Means Jobs Readiness Seal (Ohio)
- Science Seal (Ohio)
- Seal of Biliteracy (Ohio)
- Technology Seal (Ohio)
- Honors Diploma Seal (Ohio) 5 Options:
  - Academic, Career Tech, STEM, Arts, Social Sciences & Civic Engagement

Locally-Defined Diploma Seals	Requirements
Community Service Seal	40 hours of community service with specific documentation in the Voluntary Community Service Time Log that outlines volunteer hours, date(s), a description, name of the business/organization, and the supervisor's signature. Students submit completed logs to their counselor. Time logs are available online and in Student Services. It is recommended that students complete at least 10 hours of community service each year of high school, totaling 40 hours by January 15th of their senior year.
Fine and Performing Arts Seal	Earn 3 high school credits in the Fine Arts discipline during grades 9 - 12 and complete written reflection. Reflection Forms will be due on January 15th of senior year.
Student Engagement Seal	<p>Participate in at least 4 extra curricular PCSD activities (approved by Counselor) during their high school career and meet the following criteria in a non-academic course:</p> <ul style="list-style-type: none"> <li>• While enrolled in grades 9-12, students will participate in at least 4 total extracurricular activities offered by PCSD during their high school career. *(Students should choose extracurricular activities from their school-approved Student Activity list).</li> <li>• Students must attend at least 80% of activities for chosen extracurricular, including practices and games if applicable.</li> </ul>







State-Defined Diploma Seals	Requirements
Citizenship Seal	A student can: 1. Earn a score of Proficient/3 or higher on Ohio's State Test in both the American history and American government; 2. Earn a final course grade that is equivalent to a "B" or higher in American History and/or American Government 3. Earn a score of 2 or higher on an Advanced Placement or International Baccalaureate test; or Earn a "B" or higher in appropriate College Credit Plus courses.
College-Ready Seal	Earn remediation-free cores on the ACT or SAT. Visit the Department's website to see current remediation-free scores.
Industry-Recognized Credential Seal	Earn a 12-point approved industry-recognized credential or group of credentials totaling 12 points in a single career field.
Military Enlistment Seal	Provide evidence that a student has enlisted in a branch of the U.S. Armed Forces; or Participate in an approved JROTC program.
Ohio Means Jobs Readiness Seal	Meet the requirements and criteria established for the readiness seal. including demonstration of work-readiness and professional competencies.
Science Seal	A student can: 1. Earn a score of 3 or higher on Ohio's State Test in Biology; 2. Earn a final course grades that is equivalent to a "B" or higher in an advanced science course. 3. Earn a score of a 2 or higher on an appropriate Advanced Placement science test; or Earn a "B" or higher in a College Credit Plus science course.
Seal of Biliteracy	Meet the requirements and criteria, including proficiency requirements on assessments in a world language and English.
Technology Seal	A student can: Earn a final course grade that is equivalent to a "B" or higher in an appropriate class taken through the College Credit Plus program or complete a course offered through the district that meets the Technology Seal guidelines as indicated by the Ohio Department of Education. Courses that provide students with opportunity to earn a Technology Seal are indicated in the registration guide by Tech Seal Logo.
Honors Diploma Seal	Earn one of five Honors Diplomas as outlined on page 5: 1. Academic Honors Diploma 2. Career-Tech Honors Diploma 3. STEM Honors Diploma 4. Arts Honors Diploma 5. Social Science and Civic Engagement Honors Diploma

# Honors Diploma Criteria

Subject	Academic Honors Diploma	Career-Technical Honors Diploma	STEM Honors Diploma	Arts Honors Diploma (includes dance, drama, theatre, music, visual art)	Social Science & Civic Engagement Honors Diploma
English	4 Units	4 Units	4 Units	4 Units	4 Units
Mathematics	4 units, Algebra I, Geometry, Algebra II or equivalent and one other higher level course	4 units, Algebra I, Geometry, Algebra II or equivalent and one other higher level course	4 units, Algebra I, Geometry, Algebra II or equivalent and one other higher level course	4 units, Algebra I, Geometry, Algebra II or equivalent and one other higher level course	4 units, Algebra I, Geometry, Algebra II or equivalent and one other higher level course
Science	4 units, including one unit of advanced science	3 units	4 units, including one unit of advanced science	3 units, including two units of advanced science	3 units
Social Studies	4 Units	3 Units	3 Units	3 Units	5 Units
World Languages	3 units of one world language, or no less than 2 units of each of two world languages studied	2 units of one world language studied	3 units of one world language, or no less than 2 units of each of two world languages studied	3 units of one world language, or no less than 2 units of each of two world languages studied	3 units of one world language, or no less than 2 units of each of two world languages studied
Fine Arts	1 Unit	N/A	1 Unit	4 Units	1 Unit
Electives	N/A	4 units of Career-Technical minimum	2 units of additional STEM courses	Two units of Fine Arts (may overlap with general four units)	3 units with a focus in social sciences and/or civics
Grade Point Average	3.5 on a 4.0 scale (unweighted)	3.5 on a 4.0 scale (unweighted)	3.5 on a 4.0 scale (unweighted)	3.5 on a 4.0 scale (unweighted)	3.5 on a 4.0 scale (unweighted)
ACT/SAT Workkeys	27 ACT/ 1280 SAT	ACT: Score of 27 or higher, SAT: Score of 1280 or higher Workkeys: Earn a score of six or higher on all three sections of the WorkKeys assessment.	27 ACT/ 1280 SAT	27 ACT/ 1280 SAT	27 ACT/ 1280 SAT
Seal Requirement	Earn two additional seals, not including Honors Diploma Seal	Meet requirements to earn the Industry-Recognized Credential Seal or Technology Seal	Meet requirements to earn the Industry-Recognized Credential Seal or Fine Arts Seal	Meet local district requirements to earn the Fine Arts Seal	Meet local district requirements to earn the Community Service Seal
Experiential Learning	Field experience, OhioMeansJobs Readiness Seal, Portfolio, or Work-Based Learning	Field experience, OhioMeansJobs Readiness Seal, Portfolio, or Work-Based Learning	Field experience, OhioMeansJobs Readiness Seal, Portfolio, or Work-Based Learning	Field experience, OhioMeansJobs Readiness Seal, Portfolio, or Work-Based Learning	Field experience, OhioMeansJobs Readiness Seal, Portfolio, or Work-Based Learning





# Advanced Placement

The **Advanced Placement Program (AP)** offers students the opportunity to participate in rigorous and demanding coursework that may allow the students to earn college credit. The students may earn this college credit or advanced standing with a sufficient score on the **AP** exam. **AP** courses have exceptionally high standards (as outlined by the College Board), require more in-depth study by students, and carry a weighted grade. These courses place a high degree of emphasis on the student's own self-motivation, study skills, and the ability to self-direct his/her own learning. Homework is generally assigned daily, and is more extensive than is assigned in Honors level courses. **AP** exams are given in May and contain multiple-choice and free-response questions. The exams include problem-solving and the use of other higher-level thinking skills. Students enrolled in AP courses are expected to take the AP exams. The AP exam fee is approximately \$97. The district will cover most of the cost; students will pay \$40 toward the exam fee. As with other fees assigned, students who have their fees waived due to their free/reduced lunch status will not pay the fees for the course or exam.

The following high school level classes will be offered this year as **AP** courses:

SUBJECT	ADVANCED PLACEMENT
ART	AP Drawing AP 2-D Art and Design AP 3-D Art and Design
CAREER & TECHNICAL	Biotechnology Honors /AP Biology
ENGLISH	AP English III - Language and Composition AP English IV - Literature and Composition
MATHEMATICS	AP Calculus AB AP Statistics AP Pre-Calculus
MUSIC	AP Music Theory
SCIENCE	AP Chemistry AP Physics I: Algebra-Based AP Physics C: Mechanics Biotechnology Honors /AP Biology
SOCIAL STUDIES	AP European History AP Macro Economics/Micro Economics AP Psychology AP U.S Government and Politics AP U.S. History AP World History
WORLD LANGUAGES	AP French AP Spanish

## College Credit Plus (CCP)

Students enrolled in certain college courses will be earning both college credit and high school credit simultaneously. There is no cost to the student to participate in this program. Students must meet certain criteria as established by the college to participate in this program. An informational night regarding College Credit Plus will take place in January. For more information about this program, please visit [www.collegecreditplus.com](http://www.collegecreditplus.com). To obtain Parma City School District College Credit Plus forms, please visit the high school counseling department webpage found on our district website under each high school: <https://sites.google.com/parmacityschools.org/highschoolcounseling/district/college-credit-plus>

We offer the following CCP courses at the high school:

Valley Forge High School: English 1010, English 1020

Normandy High School: English 1010, English 1020, Chemistry 1300/130L, Chemistry 1310/131L

Course offerings are tentative and subject to change based on availability.

## Credit Flexibility

Ohio school districts are required to offer students the opportunity to earn high school credit in ways other than traditional classroom seat time. Credit Flexibility is a student driven/student-owned study option that provides customized learning of standards focused on a student's interests and needs. Specifically, credit flexibility is a structured learning opportunity that allows students in grades 7-12 to demonstrate mastery of course standards through an approved plan with defined learning standards and goals, planned learning activities, and standards for evaluating student learning coordinated by a qualified educator.

To access credit flexibility information, guidelines, and the application, visit the high school counseling department webpage found on our district website under each high school: or by following this link: [https://sites.google.com/parmacityschools.org/highschool\\_counseling/district/credit-flexibility](https://sites.google.com/parmacityschools.org/highschool_counseling/district/credit-flexibility)

Applications for first semester are due to the student's counselor by April 1st of the previous school year. Applications for second semester are due October 15th of the current school year. All submitted applications will be reviewed by the building Credit Flexibility Committee.

## Honors Program

The high school Honors Program presents students with the opportunity for in-depth study and research in the areas of English, Mathematics, Social Studies, Science, and World Language. The Honors Program is considered rigorous, and students should be prepared for the additional work and scholarly expectations. Since Honors courses have standards that are higher than in regular courses, students receive a weighted grade which means one additional point for the class grade given when calculating the GPA. Students interested in pursuing the Honors Program should see their counselor and discuss this option with their subject-area teacher.

The following high school level classes will be offered this year as Honors courses:

SUBJECT	HONORS
ENGLISH	Pre-AP English I Honors Pre-AP English II Honors
MATHEMATICS	Algebra I Honors Geometry Honors Algebra II Honors
WORLD LANGUAGE	French IV Honors Spanish IV Honors
SCIENCE	Biology I Honors Chemistry Honors Engineering Physics Honors
SOCIAL STUDIES	U.S. History - 9 Honors

## Academic Credit

Academic Credit is awarded upon satisfactory completion of a course. Credit for semester courses is awarded at the end of the semester, and credit for yearlong courses is awarded at the end of the year. Partial credit is not awarded. To receive academic credit, students must earn a passing grade as the final grade in the course.

## Course Load

The minimum student course load is 5 credits per year for all students. This minimum course load will keep students on track to earn the necessary 20 credits for graduation by the end of their senior year. Students are encouraged to explore the many opportunities offered by the Parma City School District and take classes beyond the minimum course load. Continuation high school and/or summer school coursework is in addition to the minimum number of credits needed per year. To maintain athletic eligibility, a student must carry a minimum of 5 classes (excluding physical education) each semester.

## Grade Placement

High school students will be considered to be in the grade and class appropriate to the following designations:

9th Grade: 0-4.99 Credits earned  
10th Grade: 5.0-9.99 Credits  
11th Grade: 10.0-14.99 Credits  
12th Grade: 15.00+ Credits

## Rank-In-Class

A student's grade point average will be calculated by taking the final average grade for each course that is completed. The appropriate point value for each grade earned is assigned. This point value is then multiplied by the number of course credits. The points earned for all courses are totaled. This total is divided by the number of course credits earned, thus establishing the student's grade point average (GPA). The student's final rank-in-class will be determined by his/her grade point average at the end of the first semester of grade 12.



## Regular Diplomas

According to state-established guidelines, the Parma City School District will be offering the opportunity to receive either a regular high school diploma or an honors diploma. The regular high school diploma will be granted to students who: (a) meet the Ohio Department of Education graduation requirements; or (b) meet the requirements for "Alternative Conditions for Eligibility for Diploma" as specified in Ohio Revised Code 3313.615 AND meet district requirements for course completion.

See pages 1-4 of this guide for details about the three areas required to earn a diploma:

1. Credits (Course Completion)
2. Demonstrating Competency
3. Demonstrating Readiness (Seals)

## Honors Diplomas

High school students can gain state recognition for exceeding Ohio's graduation requirements through an honors diploma. To meet honors diploma requirements, students challenge themselves by taking and succeeding at high-level coursework and in real-world experiences.

Students have the opportunity to pursue one of five honors diplomas:

1. Academic Honors Diploma
2. Career Tech Honors Diploma
3. STEM Honors Diploma
4. Arts Honors Diploma (includes dance, drama/theatre, music and visual art)
5. Social Science and Civic Engagement Honors Diploma

See page 5 of this guide for details about the requirements of each Honors Diploma.

## Graduation Plan

Every child in grades 9-12 will have a graduation plan that is updated yearly and communicated to parents/families. The graduation plan is connected to credits, competency, and readiness. The graduation plan can be viewed in Home Access Center (HAC).





## School of Choice

Students may apply to attend a PCSD high school other than the one designated by their residence zone. For deadlines and application, visit the PCSD Registration and Enrollment Department's website.

## Fees

The Parma City School District establishes a fee schedule for consumable items utilized in various courses. These fees are used to purchase items such as workbooks, paperback books, and supplies used by the student. No refund of fees will be given after the third week of any course. All students must pay outstanding fees prior to attending prom or commencement. If fees are not paid, students may not be permitted to purchase a parking permit.

## Exempted from Physical Education Requirement

The physical education waiver, as provided by the Ohio Department of Education, provides a student who participated in two complete seasons of interscholastic high school athletics, cheerleading, or marching band the opportunity to explore other options. Students can earn the  $\frac{1}{2}$  credit in content areas other than physical education to fulfill the  $\frac{1}{2}$  credit physical education graduation requirement.

## Course Request Registration Steps

The Home Access Center (HAC) is the district's current online grade book for both parent and student use.

### For the 2025 - 2026 School Year:

1. Students will enter their desired course requests for the next school year in HAC between **2/3/25 and 2/10/25**.
2. Counselors will meet with students to review online course requests in late February/early March. Counselors will ensure students have selected the proper courses and are on track to graduate.
3. After meeting with counselors, students should review final course requests with parents in HAC before the **counselor registration window closes on March 7, 2025**.
4. Every effort will be made to ensure that students are properly placed in classes that they select during the registration process. Minimal schedule changes will be made after the March deadline.

## Schedule Changes

Every effort will be made to ensure that students are properly placed in classes which they select during the registration process. Students and parents should give serious consideration when initially selecting courses. Please make any schedule change requests in writing to the counselor. Final approval will need consent from the parent/guardian, counselor, and administrator.



# ART COURSES



## LEVEL 1

### Art Foundations (Level 1)

Art Foundations is a one-credit, year-long survey course focusing on the process of making art by exposing students to the materials and methods of the studio artist. Students will explore both the art elements and principles by creating two-dimensional and three-dimensional artworks in a variety of mediums. This class is a prerequisite to taking other courses in the Art Department, and many of the projects will serve as introductions to those elective classes. **Students have the opportunity to earn a Fine and Performing Arts Seal. This Course is a prerequisite course to taking all other art courses starting with 2026 graduates and beyond.**

Course No.	771
Grade	9-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	\$25.00

## LEVEL 2

### 3D ART I (Level 2 Course)

We don't just want products that work, people want products that look good. From coffee cups to cars, designers add style to objects we use everyday. Students will learn historic solutions to design problems using traditional materials and progress to creating their own solutions using modern technology. We would start with materials that could be manipulated by hand like ceramics, then move on to other materials such as textiles and finish with technologies such as 3D printing. **This class is a combination of the former ceramics and crafts classes. Students have the opportunity to earn a Fine and Performing Arts Seal.**

Course No.	788
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Art Foundations
Fee	\$25.00

# ART COURSES



## LEVEL 2

### Ceramics I (Level 2)

This course is an exploration of ceramics. You will use a variety of hand-building and surface-decoration techniques to create original personal expressions. Using the potter's wheel to create hand-thrown objects may be introduced. Students have the opportunity to earn a Fine and Performing Arts Seal.

Course No.	780
Grade	10-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	Art Foundations
Fee	\$20.00

### Media Arts I (Level 2)

While visual arts focuses on mark-making by hand, Media Arts focus on capturing images by mechanical processes like photography. This course will focus on still images and can be comprised of images created by traditional photographic processes in the darkroom, move to digital photographs, and then focus on manipulating images in the computers. **This class is an expanded version of Photography. Students have the opportunity to earn a Fine and Performing Arts Seal.**

Course No.	790
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Art Foundations
Fee	\$20.00

### Visual Art I (Level 2)

Traditionally we created 2 dimensional works like drawing and painting by making marks on paper or canvas. In Visual Arts I we will continue to develop our drawing and painting skills using traditional mediums, but we will also experiment with technology to find new ways to make marks and alter our images. **Students have the opportunity to earn a Fine and Performing Arts Seal.**

Course No.	772
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Art Foundations
Fee	\$25.00

# ART COURSES



## LEVEL 3

### 3D ART II (Level 3)

Again the theme focuses on form following function. Students will advance from hand building to techniques requiring more significant use of tools to create solutions. The focus materials could begin with materials like metals using saws and presses and lead up to technology like a laser cutter or C-N-C machine. This requires a greater level of craftsmanship and knowledge of tools. **This class is a combination of the former jewelry and crafts class. Students have the opportunity to earn a Fine and Performing Arts Seal.**

Course No.	789
Grade	11-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Art Foundations and 3D Art I
Fee	\$25.00

### Ceramics II (Level 3)

This course advances students' ceramic skills through complex techniques and projects. Building upon Ceramics I foundations, students will refine their hand-building expertise while developing proficiency on the potter's wheel. Students will create both functional and sculptural works that demonstrate technical mastery and creative vision. Students have the opportunity to earn a Fine and Performing Arts Seal.

Course No.	784
Grade	11-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	Art Foundations and Ceramics I
Fee	\$20.00

### Media Arts II (Level 3)

While visual arts focus on mark-making by hand Media Arts, focus on capturing images by mechanical processes like photography. This change in this course will focus on dynamic moving images, through recording or generating in the computers. **Students have the opportunity to earn a Fine and Performing Arts Seal.**

Course No.	791
Grade	11-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Art Foundations and Media Arts I
Fee	\$20.00



# ART COURSES



## LEVEL 3

### Visual Arts II (Level 3)

<p>A continuation of Visual Arts I we will continue to develop our drawing and painting skills using traditional and digital mediums. The focus will switch from individual projects to helping the students build a body of quality work that can be used for a portfolio. <b>Students have the opportunity to earn a Fine and Performing Arts Seal.</b></p>	Course No.	773
	Grade	11-12
	Credit	1
	Periods Per Week	5
	Length of Course	Year
	Prerequisite	Art Foundations and Visual Arts I
	Fee	\$20.00

## LEVEL 4

### Art Studio (Level 4)

<p>This class is the culminating studio art experience. It is intended for those students who are seriously interested in the study of art.</p> <p>You may need to purchase additional materials that go beyond the normal scope of the class. <b>Students have the opportunity to earn a Fine and Performing Arts Seal.</b></p>	Course No.	792
	Grade	12
	Credit	1
	Periods Per Week	5
	Length of Course	Year
	Prerequisite	Teacher Recommendation
	Fee	\$25.00

### AP Art and Design/AP Drawing (Level 4)

<p>This class is the culminating studio art experience. It is intended for those students who are seriously interested in the study of art and the potential for college credit. An individualized course that you will select a type of formal portfolio:</p> <ul style="list-style-type: none"> <li>• AP Drawing Portfolio with a concentration in drawing and painting</li> <li>• AP 2-D Design Portfolio with a concentration in elements of principles and design</li> </ul> <p>You may need to purchase additional materials that go beyond the normal scope of the class. <b>Students have the opportunity to earn a Fine and Performing Arts Seal.</b></p>	Course No.	773P
	Grade	12
	Credit	1
	Periods Per Week	5
	Length of Course	Year
	Prerequisite	Teacher Recommendation
	Fee	\$65.00-Includes AP Fee

# BUSINESS TECHNOLOGIES COURSES



## Accounting I (Financial)

Accounting is the language of business. Not sure if accounting or finance is for you? Try out this ONE semester course. If you are sure a career in business, finance, or accounting is for YOU, this course is a MUST. This one-semester course will provide the basics of planning, recording, analyzing, and interpreting financial information. Students will master the concepts of debits and credits, analyze and record transactions, calculate payroll, and create financial statements that tells the story of a business's financial health. After completing this course, you will have an advantage when taking college accounting and possess the skills necessary for entry-level accounting and bookkeeping careers.

Course No.	424
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	None

## Accounting II (Managerial)

More than just numbers and columns, Accounting information can be an effective management tool. Students will build on skills learned in Financial Accounting. This one-semester course will examine ways that businesses utilize financial documents to make business decisions. Topics will include: profit/loss analysis, manufacturing conversion process, debt amortization, time value of money, make/buy decisions, cost volume profit analysis, ratios, and cash flow statement. Students will analyze real corporation's financial documents.

Course No.	425
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	Accounting I
Fee	None

## Business Foundations 9-12

Business Foundations, an introductory business course, provides the framework for all future business courses. It acquaints students with personal banking and finance, economics, entrepreneurship, management, and marketing. Business Foundations will use technology to synthesize and share business information. Employability skills, leadership and communications, business etiquette, ethics and personal financial literacy will be addressed. This course will be the new Money Management with a business twist. Students will explore the fundamentals of decision making, setting financial goals, budgeting, taxes, banking services, credit, consumer laws and risk management. A stock market simulation allows students to manage a \$100,000 stock portfolio and compete with other schools.

Course No.	429
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	None

# BUSINESS TECHNOLOGIES COURSES



## Entrepreneurship

Are you interested in starting your own business, designing a product/service or creating a business plan? This is a course for designers, engineers, techies, writers, and all students interested in excelling in an innovative idea. You will use innovation skills to generate ideas for new products and services, evaluate the feasibility of ideas, and develop a strategy for commercialization. Students will develop an entrepreneurial mindset, a mindset capable of critical thinking and problem solving in a fast-paced professional setting. Students will build a basic knowledge of various entrepreneurial ventures and create a business plan. Students will be exposed to different types of innovative entrepreneurial concepts, such as design thinking, rapid prototyping, and team-building. Students will also be challenged to identify and develop their personal professional strengths along with their innovative spirits.

Course No.	426
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	None

# CAREER & TECHNICAL EDUCATION COURSES



## CTE PROGRAM LOCATIONS

### NORMANDY

Auto Collision	Biotechnology/AP Biology
Carpentry	Cooperative Marketing Mgmt.
Dental Technology	Digital Media Creative Arts
Engineering (PLTW)	Job Training
Cosmetology	Networking & Advanced Comp.
Culinary Arts	Medical Professions

### VALLEY FORGE

Auto Service Technology  
Biotechnology/AP Biology  
Business & Financial Mgmt.  
CMM  
Education Professions  
Culinary Arts  
Engineering (PLTW)  
Job Training  
Visual Communications  
Welding

**Note:** Shuttle buses are provided between buildings during the day for students who are taking a Career/Technical course that is not located at their home school.

The Parma City School District is a comprehensive Career and Technical Education (CTE) Planning District, meaning students have the opportunity to apply to 17 CTE pathway programs that are housed within the two high schools. CTE programs offer students work-based and hands-on learning and the opportunity for college credits and certifications. For more information on CTE, please visit the following link: <https://www.parmacityschools.org/academics/career-and-technical-education>

**Note:** College course credits are contingent upon legislative decisions, external funding, and college courses of program study.

# CAREER & TECHNICAL EDUCATION COURSES



## Auto Collision Technology I

This program covers the skills necessary to do late model collision work and gain entry-level employment into the automotive collision field. Techniques taught include metal straightening and dent repair, proper use of body fillers, painting and refinishing, welding, plastic body repair and replacement and automobile construction. 12 point ICAR certification and college credits are available pending student meets requirements. **This course is taught at Normandy High and is available to students from both high schools.**

Course No.	626VA
Grade	11
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	None
Fee	None

## Auto Collision Technology II

This program utilizes the skills and techniques learned in Auto Collision Technology I. In this program students will learn about unibody straightening, suspension, automotive electrical and cooling systems, analyzing automotive body damage and estimate writing. Students get on-the-job experience through repair of customer service cars. 12 point ICAR certification and college credits are available pending student meets requirements. **This course is taught at Normandy High School and is available to students from both high schools.**

Course No.	627VA
Grade	12
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	Auto Collision Tech I
Fee	None

## Automotive Service Technology I

This course designed to provide students with a career in the automotive field. This course is supported by the auto manufacturers so students receive training on the newest motor vehicles. Students will begin with the basics and continue through to studying advanced systems such as: computer controls, fuel injections, emission controls, etc. Mentoring, internship and job placement are possible. This program is nationally certified by Automotive Youth Education Systems (AYES) and the National Automotive Technicians Education Foundation (NATEF), the education branch of ASE. 12 point ASE Length of Course Year certifications and college credits available pending student meets requirements. **The course is taught at Valley Forge High School but is available to students from both high schools.**

Course No.	692VA
Grade	11
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	None
Fee	None

# CAREER & TECHNICAL EDUCATION COURSES



## Automotive Service Technology II

This is the second year of the program. Students will expand on the basics they learned during the first year course with regard to studying manufacturers' specific technology. All phases of diagnostic procedures will be covered from using computer scan tools to lab scopes, to engine oscilloscopes. This course prepares a student for direct entry into the workforce or additional training at the college level. 12 point ASE certifications and Length of Course Year college credits available pending student meets requirements. This program is nationally certified by Automotive Youth Education Systems (AYES) and the National Automotive Technicians Education Foundation (NATEF), the education branch of ASE. **The course is taught at Valley Forge High School, but is available to students from both high schools.**

Course No.	693VA
Grade	12
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	Automotive Service Technology I
Fee	None

## Biotechnology Honors/AP Biology

This is a Tech Prep/STEM/College Board designed course to prepare students for a seamless transition to high tech careers in the Biological Sciences. Students will be exposed to college level course content. An emphasis is placed upon developing the laboratory and research skills that are required by employers in Science and Industry. Cutting edge topics required for Science careers in the 21st century are covered. Skills developed in this course include, but are not limited to, designing a plan for collecting data, analyzing data, modeling of concepts, applying mathematical routines, and connecting concepts in and across domains. This course meets for **TWO PERIODS A DAY**. More than 60% of contact time is spent in the lab. **College credits available through Ohio Higher Education and Tech Prep. Further college credits can be earned as students are expected to take the AP Biology exam in May. Biotechnology will be taught at both High Schools.**

Course No.	237PA
Grade	12
Credit	2
Periods Per Week	10
Length of Course	Year
Prerequisite	Chemistry
Fee	\$40-Includes AP exam fee



# CAREER & TECHNICAL EDUCATION COURSES



## Business & Financial Management I

Business & Financial Management is a two year program designed for students who are interested in working in the business field and/or planning on going to college to major in business, finance, accounting, human resources, or management. Business is huge! Business Financial Management focuses on accounting while at the same time developing technology skills. Students will develop competencies in problem-solving, communication, project management, operations management, sales, and entrepreneurship. Instructional strategies include computer/technology applications, simulations and Internet research. Students will train in Microsoft Office 2019 software with MOS certifications in Word, PowerPoint, Outlook and Excel. Students may earn up to 16 college credits. All students join Business Professionals of America, a Career and Technical Student Organization in which students develop professional and technical skills for careers in business. All students participate in leadership and competitive events at the regional level with a chance to advance to state and nationals. **This course is taught at Valley Forge High School, but is available to students from both high schools. Students have the opportunity to obtain the Technology Seal.**

Course No.	469VA
Grade	11
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	None
Fee	None

## Business & Financial Management II

In the second year of Business & Financial Management students will continue to develop their business skills that were introduced in the first year. Students will enhance their training in finance, accounting, human resources and management. Students will train in QuickBooks Online, a web-based accounting software of choice for many small businesses. At the end of the training, students will take the QuickBooks Certified User (QBCU) certification test, an important credential for those in accounting and bookkeeping roles. Students will also train in an online Payroll Accounting course thru Labyrinth Learning. Students will continue to train in Microsoft Office 2019 in Access and Word Expert and compete again in Business Professionals of America. **This course is taught at Valley Forge High School, but is available to students from both high schools. Students have the opportunity to obtain the Technology Seal.**

Course No.	473VA
Grade	12
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	Business Management I
Fee	None

# CAREER & TECHNICAL EDUCATION COURSES



## Carpentry I

This program covers the aspects of basic residential constructions. Beginning level students will learn to use hand tools and both portable and stationary power tools. Students will work on the framing of walls, floors and roofs and get experience working with siding, roofing, drywall, doors, windows and interior trim. Emphasis will be placed on reading blueprints as students work together to construct training modules in the shop setting. Estimation and related math skills are needed. Our carpentry facility is accredited by the National Center for Construction Education and Research. **This course is taught at Normandy High School, but is available to students from both high schools.**

Course No.	629VA
Grade	11
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	None
Fee	None

## Carpentry II

This advanced course reinforces the skills students learned in Carpentry I as they construct dwellings, building additions and tackle other projects in the community. Commercial construction techniques are introduced (forming concrete, metal studs, suspended ceilings) and work will be done at job sites off of school grounds. Our carpentry facility is accredited by the National Center for Construction Education and Research. College credits may be available if student meets certain criteria. **This course is taught at Normandy High School but is available to students from both high schools. Students have the opportunity to obtain the Technology Seal.**

Course No.	630VA
Grade	12
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	Carpentry I
Fee	None

# CAREER & TECHNICAL EDUCATION COURSES



## Cooperative Marketing Management (CMM/DECA) - Senior Only

Cooperative Marketing Management is a one-year internship program for seniors interested in business, marketing and management. It provides career preparation in one of the largest and fastest growing areas of our business community: marketing and management. Cooperative Marketing Management students learn technical skills as well as a college preparatory curriculum in marketing and management. They will study marketing, as well as advertising, management, sales, entrepreneurship, E-Commerce, computer technology, marketing research, communication and employability skills. Membership in DECA, an Association of Marketing Students, enables one to participate in district, state and national competition. In addition, students will be involved in conferences that promote leadership development, civic consciousness, career technical understanding, and social awareness. As a Cooperative Marketing Management student, you will attend class in the morning and work in a business in the afternoon and/or evening. The two daily class periods will result in two credits, and students earn additional credit depending on employment. This cooperative learning will link real-life examples to the concepts learned in the classroom. Students can earn up to 22 College credits if student meets certain criteria. **Students have the opportunity to obtain the Technology Seal. This course is taught at both high schools.**

Course No.	463VC
Grade	12
Credit	4
Periods Per Week	20
Length of Course	Year
Prerequisite	None
Fee	None

## Cosmetology I

This course covers the basic requirements for licensing which includes sanitation/disinfection, anatomy/physiology, chemistry, hairstyling, hair color, haircutting, facials, skin care, manicures, gel nails, and chemical hair relaxing. **This course is taught at Normandy High School; however, it is available to students from both high schools.**

Course No.	558VC
Grade	11
Credit	4
Periods Per Week	20
Length of Course	Year
Prerequisite	None
Fee	None



# CAREER & TECHNICAL EDUCATION COURSES



## Cosmetology II

This second year Cosmetology course covers additional requirements needed to complete the two-year course of study to be eligible to take the Ohio State Board of Cosmetology Licensing Exam. College credits may be available if student meets certain criteria. **This course is taught at Normandy High School; however, it is available to students from both high schools.**

Course No.	559VC
Grade	12
Credit	4
Periods Per Week	20
Length of Course	Year
Prerequisite	Cosmetology I
Fee	None

## Culinary Arts I

Culinary Arts I classroom includes sanitation (Ohio law) and allows students to achieve nationally recognized ServSafe certification. The student will be exposed to techniques used in a professional kitchen. The level one course work is aligned to the National Restaurant Association requirements to receive ProStart certification at the conclusion of the two-year program. Topics covered at this level include stocks, sauces, management, service, and career success. The students are expected to participate in the running and operation of the Sword & Shield Restaurant. **This course is taught at Normandy High School but is available to students from both high schools.**

Course No.	551VC
Grade	11
Credit	4
Periods Per Week	20
Length of Course	Year
Prerequisite	None
Fee	None

## Culinary Arts II

Culinary Arts II level two course work continues to align with the National Restaurant Association requirements to receive ProStart certification. Topics covered at this level include purchasing and inventory, meat, poultry, seafood, desserts, and global cuisines. The students are expected to participate in the running and operation of the Sword & Shield Restaurant. **This course is taught at Normandy High School but is available to students from both high schools.**

Course No.	552VC
Grade	12
Credit	4
Periods Per Week	20
Length of Course	Year
Prerequisite	Culinary I
Fee	None

# CAREER & TECHNICAL EDUCATION COURSES



## Dental Technology I

Dental Assisting I is a two-year program that prepares students for entry level positions in dental offices, dental clinics, and in the armed forces. Duties include assisting the dentist in all phases of treatment, sterilizing instruments, preparing treatment rooms, providing patient education and nutritional counseling, exposing, processing and mounting radiographs, performing a variety of intra-oral expanded functions, fabricating mouth guards, working as a member of the dental team, performing basic laboratory procedures, selecting and transferring instruments, arranging and confirming appointments, and preparing dental claims. The dental assistant performs many tasks requiring both interpersonal and technical skills. Extra activities include: internship at Case Western Reserve University School of Dental Medicine, Give Kids a Smile, first grade demonstrations, and volunteerism. Students receive CPR training. **This course is taught at Normandy High School; however, it is available to students from both high schools.**

Course No.	570VA
Grade	11
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	None
Fee	None

## Dental Technology II

Pre-requisite is successfully passing Dental Technology I and Algebra II by graduation. Practical experiences in dental offices will be available to those who qualify. Students attend school in the morning and expand their skills by early job placement in the afternoon. Upon successful completion of this program, the student will be eligible to take the Commission on Dental Accreditation (CODA) Certification Exam held in Columbus. This State certification exam is held in October and May. Students are responsible for fees and transportation associated with this exam. Extra activities may include: Cleveland Metroparks Zoo (observing dental/medical procedures), Henry Schein Dental Expo, and Give Kids a Smile. **College credits may be available if student meets certain criteria. This course is taught at Normandy High School; however, it is available to students from both high schools.**

Course No.	571VA
Grade	12
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	Dental I
Fee	None

# CAREER & TECHNICAL EDUCATION COURSES



## Digital Media & Creative Arts I

This course provides an overview of audio, video, film, photography and social media basics. Equipment training is provided on high-definition studio/field cameras, DSLR cameras, microphones, audio consoles, and film and television lighting. Students will also be trained on Adobe Premiere for video editing, Adobe Audition and GarageBand for audio and music editing, and Adobe Photoshop for still image and graphic design. Students also have the opportunity to produce the Morning Announcements for each high school one day a week using High Definition studio equipment. The projects in class are designed to train students in the art of television, film, audio, and music production. **This course is taught at Normandy High School but is available to students from both high schools. Students have the opportunity to obtain the Technology Seal.**

Course No.	543VA
Grade	11
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	None
Fee	None

## Digital Media & Creative Arts II

Students in the second year course will continue to develop their skills in the areas of audio, video, film, photography, and social media production. As part of the second year curriculum, students will be preparing for the Adobe Premiere, Photoshop, and Flash Certification exams. Students will also continue to produce the Morning Announcements for each high school one day a week while developing more advanced studio production skills. Students will showcase their work through various video contests along with the SkillsUSA Student Regional and State Competitions. Students are provided job skills training such as resumes, cover letters, and job interviews in order to complete a professional portfolio. College credits are available to students who meet certain criteria. **This course is taught at Normandy High School but is available to students from both high schools. Students have the opportunity to obtain the Technology Seal.**

Course No.	544VA
Grade	12
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	DMCA I
Fee	None

# CAREER & TECHNICAL EDUCATION COURSES



## Job Training I

This two-year job-training program provides opportunities for students to perform entry level job readiness skills in preparation for all ranges of employment after high school. Each student will participate in supervised off-campus training at various job sites from late September until May. On non-site days, students will receive classroom training to reinforce appropriate work site behavior, safety, sanitation, and grooming. Students are placed according to skill level and then rotated at the teacher's discretion. Students will be initially monitored at the sites with the eventual goal of independence. Students will also focus on resume writing and other skills necessary for successful employment after graduation. Students will leave the program with both hard and soft skills which will assist them in being successful in supportive employment in the community and/or adult activities in the community. Some students may also be eligible for assistance from the Bureau of Vocational Rehabilitation or the Cuyahoga County Board of Developmental Disabilities. If a student is eligible for these additional services, the teachers, students, parents, and transition coordinator will work in conjunction with these outside resources to determine appropriate post-secondary placement and support requirements. **This course is available at both high schools dependent upon each building's student needs, and placement is an Individualized Fee None Education Plan Team decision. Students have the opportunity to earn a Community Service Seal.**

Course No.	546V
Grade	11-12
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	IEP Team Decision
Fee	None

## Job Training II

This two-year job-training program provides opportunities for students to perform entry level job readiness skills in preparation for all ranges of employment after high school. Each student will participate in supervised off-campus training at various job sites from late September until May. On non-site days, students will receive classroom training to reinforce appropriate work site behavior, safety, sanitation, and grooming. Students are placed according to skill level and then rotated at the teacher's discretion. Students will be initially monitored at the sites with the eventual goal of independence. Students will also focus on resume writing and other skills necessary for successful employment after graduation. Students will leave the program with both hard and soft skills which will assist them in being successful in supportive employment in the community and/or adult activities in the community. Some students may also be eligible for assistance from the Bureau of Vocational Rehabilitation or the Cuyahoga County Board of Developmental Disabilities. If a student is eligible for these additional services, the teachers, students, parents, and transition coordinator will work in conjunction with these outside resources to determine appropriate post-secondary placement and support requirements. **This course is available at both high schools dependent upon each building's student needs, and placement is an Individualized Education Plan Team decision.**

Course No.	545V
Grade	11-12
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	IEP Team Decision
Fee	None

# CAREER & TECHNICAL EDUCATION COURSES



## Community Based Employment I

This is a two-year training program that provides training opportunities for students to perform job and community skills in preparation for supportive employment and/or community opportunities after graduation from high school. The students will be at the job sites for approximately 40% of their course time, in the community 40% of the time, and in the classroom 20%. Skills practiced at job sites may include cleaning, setting tables, vacuuming, mopping, and dusting. Possible community locations are the grocery store, mall, restaurants, bowling alley, etc. During these community opportunities, skills practiced may include money management, functional reading skills, self-advocacy, and communication. During the time in the classroom, the skills practiced may include cooking, cleaning, laundry, hygiene, and in house vocational tasks. The students are provided transportation from their high school to their job/community location. Students will leave the program with both hard and soft skills which will assist them in being successful in supportive employment in the community and/or adult activities in the community. Some students may also be eligible for assistance from the Bureau of Vocational Rehabilitation or the Cuyahoga County Board of Developmental Disabilities. If a student is eligible for these additional services, the teachers, students, parents, and transition coordinator will work in conjunction with these outside resources to determine appropriate post-secondary placement and support requirements. **This course is available at both high schools dependent upon each building's student needs, and placement is an Individualized Education Plan Team decision.**

Course No.	547V
Grade	11-12
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	IEP Team Decision
Fee	None

## Community Based Employment II

This is a two-year training program that provides training opportunities for students to perform job and community skills in preparation for supportive employment and/or community opportunities after graduation from high school. The students will be at the job sites for approximately 40% of their course time, in the community 40% of the time, and in the classroom 20%. Skills practiced at job sites may include cleaning, setting tables, vacuuming, mopping, and dusting. Possible community locations are the grocery store, mall, restaurants, bowling alley, etc. During these community opportunities, skills practiced may include money management, functional reading skills, self-advocacy, and communication. During the time in the classroom, the Credit 3 skills practiced may include cooking, cleaning, laundry, hygiene, and in house vocational tasks. The students are provided transportation from their high school to their job/community location. Students will leave the program with both hard and soft skills which will assist them in being successful in supportive employment in the community and/or adult activities in the community. Some students may also be eligible for assistance from the Bureau of Vocational Rehabilitation or the Cuyahoga County Board of Developmental Disabilities. If a student is eligible for these additional services, the teachers, students, parents, and transition coordinator will work in conjunction with these outside resources to determine appropriate post-secondary placement and support requirements. **This course is available at both high schools dependent upon each building's student needs, and placement is an Individualized Education Plan Team decision. Students have the opportunity to earn a Community Service Seal.**

Course No.	548V
Grade	11-12
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	IEP Team Decision
Fee	None



# CAREER & TECHNICAL EDUCATION COURSES



## Education Professions I

Education Professions is a program designed to provide insight into careers pertaining to education, leadership positions, and group management. Students will develop competencies in classroom management, educational principles, organizational abilities, and minor philosophies in education, while also developing technology skills that can be applied in and out of the classroom. Students will have the ability to gain certifications in CPR/First-Aid, Child Abuse, Communicable Disease, along with Microsoft Office 2019 certifications, applicable to the workforce.. All students will participate in projects pertaining to district-wide initiatives in order to develop fundamental skills in lesson planning and classroom management. Students will compete at the regional, state, and national levels through Educators Rising. **The course is taught at Valley Forge High School, but is available to students from both high schools. Students have the opportunity to obtain the technology seal.**

Course No.	640VA
Grade	11
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	None
Fee	None

## Education Professions II

The second year of Education Professions, provides students with the opportunity to work on the topics and principles established in Professions in Education I. Students will be able to improve their skills in classroom management, educational principles, organizational abilities, and philosophies on education, as well as aiming to achieve their Paraprofessional certification (1:1 classroom aide), Microsoft Office Specialist (MOS) Certification, Google certifications for education. Year two will also expand on shadowing opportunities throughout the year in specific areas of interest for the students. Students will compete at the regional, state, and national levels through Educators Rising. **The course is taught at Valley Forge High School, but is available to students from both high schools. Students have the opportunity to obtain the technology seal.**

Course No.	641VA
Grade	12
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	None
Fee	None

## Medical Health Professions I

Medical Health Professions I prepares students to pursue careers in the medical field. Students are given a strong base of anatomy and physiology and medical terminology that could lead to an entry level job in the medical field. This junior year program lays the groundwork for students to pursue their education in the medical field. **The course is taught at Normandy but is available to incoming juniors from both high schools.**

Course No.	560VA
Grade	11
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	None
Fee	None

## Medical Health Professions II

This is a three-period class that will build on information students gained during Medical Health Professions I. Students will have the opportunity for internships, capstone projects, and various out-of-class activities that will better prepare them for an entry-level medical position and/or higher education in the medical field. **Students have a choice of the following pathways: nursing assistant, biomedical engineering, exercise science, and medical assisting. The course is taught at Normandy but is available to students from both high schools.**

Course No.	561V A/B/C/D
Grade	12
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	Medical I
Fee	None

# CAREER & TECHNICAL EDUCATION COURSES



## Networking & Advanced Computers I

This course is for anyone who desires a practical, technical introduction to the field of information technology and computer science. This course is for students who are able to work at the community college level and are interested in careers as network technicians, computer programmers, database administrators, and help-desk staff. Students will use online curriculum that includes interactive media, labs, and network simulation software including Packet Tracer. Students will use specialized networking devices called routers and switches. They will have hands-on labs to connect, use, program, and troubleshoot computer equipment. Year one includes the first two of four courses (CCNA 1 and CCNA 2). The courses focus on network terminology, network protocols, local-area networks (LANs), Open System Interconnection (OSI) model, Cabling, Cabling tools, routers, router programming, Ethernet, Internet Protocol (IP) addressing, and Network standards. The course also focuses on initial router configuration, CISCO IOS software management, routing protocol configuration, TCP/IP, and access control lists (ACLs). In addition to networking, students also learn A+ (computer repair), JAVA (computer programming), and HTML. College credits may be available if student meets certain criteria. **This course is taught at Normandy High School but is available to students from both high schools. Students have the opportunity to obtain the Technology Seal.**

Course No.	600VA
Grade	11
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	None
Fee	None

## Networking & Advanced Computers II

This second year of the program is for students who have successfully completed year one. Year two includes the final two of four courses (CCNA 3 and CCNA 4). With CCNA 3, students will develop skills in the configuration of advanced IP addressing techniques and intermediate routing protocols, CLI switch configuration, Ethernet switching, VLAN configuration, VTP configuration, and inter-VLAN routing configuration. In CCNA 4, students will develop skills in the configuration of advanced IP addressing techniques, WAN technology evaluation, WAN design, WAN protocol configuration and troubleshooting, and network management. Upon completion of this course, students may take the CCNA certification exam. In addition to the CCNA certification, students may also qualify for A+ (computer repair), HTML, and JAVA (computer programming) certifications. College Length of Course Year credits may be available if student meets certain criteria. **This course is taught at Normandy High School but is available to students from both high schools. Students have the opportunity to obtain the Technology Seal.**

Course No.	601VA
Grade	12
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	Networking & Adv Computers 1
Fee	None

# CAREER & TECHNICAL EDUCATION COURSES



## Introduction to Engineering Design (IED)

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects like designing a new toy or improving an existing product. Students are provided the opportunity for a certification in MOS Word. College credits may be available if student meets certain criteria. **Students have the opportunity to obtain the Technology Seal.**

Course No.	702
Grade	9
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	None

## Principles of Engineering (POE)

Students explore a broad range of engineering topics including mechanisms, strength of structure and materials, and automation, and then they apply what they know to take on challenges like designing a self-powered car. Students are provided the opportunity for a certification in MOS PowerPoint. College credits may be available if student meets certain criteria. **Students have the opportunity to obtain the Technology Seal.**

Course No.	703
Grade	10
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	IED
Fee	None

## Digital Electronics (DE)

Students explore the foundations of computing by engaging in circuit design processes to create combinational logic and sequential logic (memory) as electrical engineers do in industry. Students are provided the opportunity for a certification in MOS Outlook. College credit opportunities available. **Students have the opportunity to obtain the Technology Seal.**

Course No.	704
Grade	11
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	POE
Fee	None

## Aerospace Engineering (AE)

Students explore the physics of flight and bring what they're learning to life through hands-on projects like designing a glider and creating a program for an autonomous space rover. Students are provided the opportunity for a certification in MOS Excel. College credit opportunities available. **Students have the opportunity to obtain the Technology Seal.**

Course No.	705
Grade	12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	DE
Fee	None



# CAREER & TECHNICAL EDUCATION COURSES



## Pathway to Success - Senior Only Credential

This senior year only, two semester elective course will help students meet the requirements for graduation and help them with the transition from high school to career or postsecondary education. Students will earn a 12 point industry credential through the RiseUp curriculum. They will earn the Ohio Means Job seal through project based learning. Students will also work on resume writing and interviewing skills and other career readiness activities. **This course will be taught at both Normandy and Valley Forge High Schools.**

Course No.	461VA
Grade	12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	None

## Visual Communications Art I

Creative, disciplined, problem solving, mature, self-motivated and hardworking? Visual Communications Art I could be the program for you. Students will learn basic art skills, principles of design, and how to prepare attractive printed pieces working on Macintosh computers. Learn how to use the up-to-date Adobe product line to develop good work habits and creative problem solving techniques. Students will prepare competitive portfolios so previous experience in art is strongly recommended. **This course is taught at Valley Forge High School but is available to students from both high schools. Students have the opportunity to obtain the Technology Seal.**

Course No.	603VA
Grade	11
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	None
Fee	None

## Visual Communications Art II

This is the second year of the program where advanced curriculum is taught with a professional approach to various skills, techniques, and practices within the design fields. Macintosh computers, digital video and still cameras, high resolution scanners and CD burners are used in this course. Adobe CS, Photoshop, Illustrator, InDesign, along with Macromedia Flash and Dreamweaver software programs are explored. Apple's Final Cut Pro 3 is used for video editing and MAYA for 3D animation. Students will complete a web page created in HTML, and post their student designed portfolio based on individual career/educational goals. Job placement is an option during second semester for senior students only. College credits may be Length of Course Year available if student meets certain criteria. **This course is taught at Valley Forge High School but is available to students from both high schools. Students have the opportunity to obtain the Technology Seal.**

Course No.	604VA
Grade	12
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	Viscom 1
Fee	None

# CAREER & TECHNICAL EDUCATION COURSES



## Welding Technology I

The Welding Technology program will teach you the fundamentals of welding, the most common way of permanently joining metal parts, and the processes used to fabricate metal. You will receive training in gas, arc, flux core, and MIG and TIG welding. Along with blueprint reading and welding symbols, you will also learn how to use a grinder, drill, plasma arc cutter, burning torch, arc welding machines, and more. **The course is taught at Valley Forge High School, but is available to students from both high schools. Students have the opportunity to obtain the Technology Seal.**

Course No.	614VA
Grade	11
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	None
Fee	None

## Welding Technology II

This course is designed for those students who wish to continue in the Welding Technology program. The course objectives are similar to Welding Technology I except for the depth and time on task. However, the instruction will focus on the development of entry level job skills. **The course is taught at Valley Forge High School, but is available to students from both high schools. Students have the opportunity to obtain the Technology Seal.**

Course No.	615VA
Grade	12
Credit	3
Periods Per Week	15
Length of Course	Year
Prerequisite	Welding I
Fee	None

# COMPUTER SCIENCE COURSES



## Information Technologies

This first course in the IT career field is designed to provide students with a working knowledge of computer concepts and essential skills necessary for work and communication in today's society. Students will learn safety, security, and ethical issues in computing and social networking. Students Length of Course Semester will also learn about input/output systems, computer hardware and operating systems, and office applications. **Students have the opportunity to obtain the Technology Seal through this course.**

Course No.	304
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	None

## Multimedia & Image Management Technologies

Students will apply principles of image creation, management procedures, and multimedia techniques as they create, revise, optimize, and export graphics for video, print, and web publishing. The course will address issues related to web based publishing, social media, and security. Students will utilize current commercial and open source languages, programs, and applications. **Students have the opportunity to obtain the Technology Seal through this course.**

Course No.	336
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	None

## Visual Programming/Intro Computer Science

Students will create event-driven programs using object oriented programming techniques for use in web based and standalone applications. Students will map out, design, and test computer applications, web applications, and mobile applications. Both commercial and open source programs and applications will be used. **Students have the opportunity to obtain the Technology Seal through this course.**

Course No.	320
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	None

## Web Design

Students will learn the dynamics of the Web environment while pursuing an in-depth study of both Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS). Web based protocols such as FTP, TCP/IP, and HTTP will be addressed. Students will create a website with tag text elements, special characters, lines, graphics, hypertext links, and graphical tables. **Students have the opportunity to obtain the Technology Seal through this course.**

Course No.	325
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	None

# ENGLISH COURSES (REQUIRED)



## English I

This course offers an integrated approach to the study of fiction and informational text with an emphasis on building reading, writing, speaking, and listening skills. Essays will be informative, narrative, analytical, and argumentative.

Course No.	014
Grade	9
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	\$20.00

## Pre-AP English I Honors

Pre-AP English I focuses on the reading, writing, and language skills that have immediate relevance for students and that will be essential for their future coursework. Texts take center stage in the classroom, inspiring and preparing all students for close, critical reading and analytical writing. The course trains the reader to observe the small details in a text to arrive at a deeper understanding of the whole. It also trains the writer to focus on crafting complex sentences, building this foundational skill en route to more sophisticated, longer-form analyses. **This course has a summer reading requirement.**

Course No.	014H
Grade	9
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	\$30.00

## English II

This course offers an integrated approach to the study of fiction and informational text from around the world with emphasis on building reading, writing, speaking, and listening skills. Essays will be informative, narrative, analytical, and argumentative.

Course No.	067
Grade	10
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	English I
Fee	\$20.00

## Pre-AP English II Honors

This course emphasizes the recursive moves that matter in preparing students for the challenges of college-level reading, writing, and discussion. While English I introduces the fundamental routines of close observation, critical analysis, and appreciation of author's craft, English II requires students to apply those same practices to a new host of nonfiction and literacy texts. As readers, students develop a vigilant awareness of how the poet, playwright, novelist, and writer of nonfiction alike can masterfully manipulate language to serve their unique purposes. As writers, students compose more nuanced analytical essays without losing sight of the importance of well-crafted sentences and a sense of cohesion. **This course has a summer reading requirement.**

Course No.	067H
Grade	10
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	English II
Fee	\$30.00

# ENGLISH COURSES (REQUIRED)



## English III

This course offers an integrated approach to the study of American fiction and informational text with an emphasis on building reading, writing, speaking, and listening skills. Essays will be informative, narrative, analytical, and argumentative.

Course No.	068
Grade	11-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	English II
Fee	\$20.00

## English III Advanced Placement: Language & Composition

This course is designed to prepare students for success on the Advanced Placement English Language exam and the demands of college level coursework. Content includes an in-depth study of fiction and informational text with intensive focus on rhetoric, argumentation, and composition. **This course has a summer reading requirement. Students will be expected to take the AP Exam in May.**

Course No.	068P
Grade	11-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Pre-AP English II Honors
Fee	\$75.00 -Includes AP Exam Fee

## English IV

This course offers an integrated approach to the study of British fiction and informational text with an emphasis on building college and career readiness skills. Essays will be informative, narrative, analytical, and argumentative.

Course No.	070
Grade	12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	English III
Fee	\$20.00

## English IV Advanced Placement: Literature & Composition

This course is designed to prepare students for success on the Advanced Placement English Literature exam and the demands of college level coursework. Content includes an in-depth study of fiction with intensive focus on literary analysis and composition. **This course has a summer reading requirement. Students will be expected to take the AP Exam in May.**

Course No.	070P
Grade	12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	English III
Fee	\$75-Includes AP Exam Fee



# ENGLISH COURSES (ELECTIVES)



## English for English Language Learners (EL)

This course is intended to help EL students (as identified by the approved state screener) improve their English language skills. There is a particular focus on developing reading and writing skills, speaking, pronunciation, listening, spelling, and grammar. **It may NOT** be taken in place of the required four units of English.

Course No.	056E
Grade	9-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	\$15.00

## Creative Writing

This is a course for students interested in writing stories, poems, essays, articles and plays with additional emphasis on style and revision. Students will be encouraged to submit their work for publication in student newspapers, magazines, and writing competitions.

Course No.	079
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	\$15.00

## Literature and Film

Students will examine the films inspired by selected texts and make connections between the role of literature and film in history as well as modern society. The coursework will include follow-up assignments for each work studied. Technical language of film-making and the specifics of script format will be included.

Course No.	080
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	\$20.00

## Mythology

Students will read and study the myths of the world's cultures with an emphasis on Greek and Roman mythology. Students will become familiar with the myths, and they will be able to use this knowledge in the many mythological references that are found in books, magazines, newspaper articles, movies, and television shows.

Course No.	075
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	\$15.00

# ENGLISH COURSES (ELECTIVES)



## Speech and Debate

Students will learn how to organize and deliver demonstrative, informative and persuasive speeches, and will continue to develop research skills in preparation for formal debates. This course will benefit students who are considering further study in communications, law, politics, education, sales, or business.

Course No.	076
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	\$18.00

## Theater Arts

This semester course provides students with practical performance arts within the English course of study. This course may be taken as an English elective or used to fulfill part of the fine arts requirement for graduation. Theatre Arts will expose students to many aspects of theater production. Active classroom participation will be expected.

Course No.	078
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	\$12.00

# FAMILY & CONSUMER SCIENCES COURSES



## Career and College Readiness

It is highly recommended that students take this course during their 10th or 11th grade year to help fulfill their graduation electives requirement. This course is designed to walk students through the college application process and prepare for future career and personal finance planning. Students will use college and career readiness tool of Naviance.

**Part 1 - College Readiness:** Students will explore college and scholarship options. They will be designing and writing college applications and requesting strong letters of recommendation. Students will be using Naviance to continue college and career exploration and planning. Additional support for graduation requirements, including state and local seal preparation and completion, will be reviewed.

**Part 2 - Career Readiness:** Students will develop effective learning strategies and skills to provide a strong foundation for successful lifelong learning. Throughout the course, students will research careers and occupations. Students will develop the skills necessary to apply and interview for a job. They will have the opportunity to learn about careers through guest speakers, guidance counselors, and College Now representatives.

**Part 3 - Personal Finance Planning:** Students will develop personal financial plans for individual personal well-being. Throughout the course, students will develop financial literacy skills to provide a basis for responsible citizenship and career success.

Course No.	648
Grade	10-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	None

## Creative Foods for Healthy Living

Course content will focus on building and maintaining a healthy body through exercise and diet. Students will practice safe food handling procedures to prevent food-borne pathogens while participating in advanced healthy food lab experiences. Students will use time management strategies, decision-making skills, and multi-cultural awareness that relate to work and family goals to sustain productive, meaningful lifestyles. During this hands-on course, students create food patterns and evaluate nutritional information to guide food choices for a healthy lifestyle. **Because students will be eating what they prepare, teacher must be notified of a dietary concerns and/or food allergies.**

Course No.	533
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	None

# FAMILY & CONSUMER SCIENCES COURSES



## Child Development

Students will understand the decisions of parenting, conception, pregnancy, prenatal care and child development by focusing on physical, social, emotional, and intellectual development at various stages. Completing the Real Care Babies project is required for this class. Some special topics include child abuse, adoptions, careers, divorce, parenting trends, and childcare.

Course No.	538
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	None

## Freshmen Experience

This course is designated for students that are at risk for passing ELA or Math OST and may have issues pertaining to attendance. **This course is set only for the 1st Semester during 9th-grade year.** Students will work through adaptive remediation along with character education and technology needed to be successful during high school.

The course will consist of two parts: transitioning to high school and computer technology skills. The course is designed to help ninth-grade students make a smooth transition to high school. Quarter A or B: The transition portion of the course will emphasize instruction in the following: Google Workspace apps, study skills, note-taking, character and leadership development, Career and Technical Education opportunities, graduation requirements, extracurricular and community service opportunities, and college and career readiness utilizing Naviance. Quarter A or B: The second portion of the course will provide students with computer technology skills. Students will be provided instruction in the following areas: Google Workplace apps, keyboarding, digital communication, online etiquette and safety, computer organization, online research, Chrome web browser, and introductory Microsoft Office Suite (MOS) tasks in word, powerpoint, and excel.

Course No.	303
Grade	9
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	None

# FAMILY & CONSUMER SCIENCES COURSES



## Teen Foods and Nutrition

Teen Foods & Nutrition will teach you how to shop smart, plan and prepare healthy meals, using the USDA ChooseMyPlate.gov and new dietary guidelines. Students will explore the cultural, family, community and economic implications of food patterns and behavior with an emphasis on healthy lifestyles. Participation in cooking labs will enable students to demonstrate safe food handling practices while preparing attractive, tasty and healthy foods. **Because students will be eating what they prepare, teacher must be notified of a dietary concerns and/or food allergies.**

Course No.	532
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	None

## Textiles and Interior Design

In this course, students will explore a broad range of topics relating to the various aspects and career opportunities available in the field of textiles and design. The emphasis will be given to textiles project development and developing strategies to maintain the home. Additional topics will include project collaboration, design techniques, and environmental sustainability.

Course No.	535
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	None



# HEALTH & PHYSICAL EDUCATION COURSES



The student is responsible for:

- PE shirt and lock. Each individual school will provide details. The lock is required for the storage and security of clothing and shoes.
- the care and cleanliness of their clothing and shoes.
- All valuables must be securely locked in a gym locker during class.

The Parma City School District is not responsible for lost or stolen articles. For participation in a physical education class, it is strongly recommended that students wear: an athletic short or sweatpants. The clothes worn for physical education class must meet the rules and standards of the Parma City School District dress code.

**All shoes worn for physical education classes must be athletic shoes that have non-marking soles.**

## PE Survey

This course will be an overview of physical education. Students will participate in a variety of activities including: individual sports, team sports, and fitness activities (such as cardiovascular endurance, strength training, and flexibility). This course will serve as the prerequisite for all physical education classes.  
**REQUIRED FOR GRADUATION.**

Course No.	910
Grade	9-12
Credit	1/4
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	\$8.00

## Health Education

This course includes study in the areas of mental health, chemical substances, interpersonal relationships, diseases, well-being, and lifestyle decisions. Current health topics are discussed. This course provides instruction in CPR and the use of an automated external defibrillator(AED). **REQUIRED FOR GRADUATION.**

Course No.	937
Grade	9-10
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	\$8.00

# HEALTH & PHYSICAL EDUCATION COURSES



## Body for Life

This course is designed for anyone who wants to get into shape. Students will participate in activities that will encompass all of the components of fitness. The focus will be on a variety of different activities designed to incorporate all aspects of fitness. The goals of the class will be to increase core strength, flexibility, muscular strength, cardiovascular endurance, and reduce body fat. The class will include activities like weight lifting, abdominal work, yoga, Pilates, cardiovascular training, and some aspects of the current trends of the 30-90 day workout routines. Proper nutrition and recovery activities will also be discussed. The skills from this class can be utilized throughout the student's life.

Course No.	912
Grade	9-12
Credit	1/4
Periods Per Week	5
Length of Course	Semester
Prerequisite	PE Survey
Fee	\$8.00

## Lifeguarding

This course is designed for students who are interested in learning lifeguarding skills in order to become a certified lifeguard. **As required by the American Red Cross, the student must be 15 years of age and be able to demonstrate Level 7 swimming skills for enrollment.** This entails treading water for two minutes, retrieving a brick from the bottom of the pool, and swimming 500 meters using two strokes. An American Red Cross Lifeguarding Certificate is awarded upon successful completion of this course and a passing score on the American Red Cross lifeguard examination. **\*Students enrolled in this course must pay a fee required for materials supplied by the American Red Cross. Fee is set by the American Red Cross; current fee is \$100.00.**

Course No.	934
Grade	10-12
Credit	1/4
Periods Per Week	5
Length of Course	Semester
Prerequisite	Water Sports, Swim & Safety and or/PE Survey
Fee	\$100.00 Red Cross Fee

## Recreation & Lifetime Sports

This course will cover the basic skills in select recreational group or individual sport activities. Sports and activities may vary according to the school facility. Tennis, badminton, Frisbee, volleyball, golf and bocce are examples of such activities. Assessment will be based on written and physical skill tests.

Course No.	928
Grade	9-12
Credit	1/4
Periods Per Week	5
Length of Course	Semester
Prerequisite	PE Survey
Fee	\$8.00

# HEALTH & PHYSICAL EDUCATION COURSES



## Team Sports I

This course will include selected team sport activities such as softball, basketball, volleyball, touch football, soccer, lacrosse, and other games of organization. Written and physical skill tests, rules, strategies, and team competition will be stressed in the course. The activities may vary according to season and school facilities.

Course No.	925
Grade	9-12
Credit	1/4
Periods Per Week	5
Length of Course	Semester
Prerequisite	PE Survey
Fee	\$8.00

## Team Sports II

This course will emphasize many skills for different team sports. These include: specialized skill development, cooperative learning, strategical planning, and teaching games for understanding. Students will design in-game strategies and promote teamwork during game play. Physical performance assessments, written tests, team competition, and cognitive behavioral assessments will be emphasized. A deeper analysis of each sport will be explored. The activities may vary according to season and school facilities.

Course No.	926
Grade	9-12
Credit	1/4
Periods Per Week	5
Length of Course	Semester
Prerequisite	PE Survey & Team Sports I
Fee	\$8.00

## Water Sports, Swim & Safety

This course will provide students with a variety of water activities. Sports may include water polo, basketball, volleyball, etc. Instruction will also include basic swim strokes, water safety procedures, CPR, and basic first aid (optional CPR certification will be offered). **Students enrolled in this course who choose to be CPR certified will be subject to a fee established by the American Red Cross.**

Course No.	932
Grade	9-12
Credit	1/4
Periods Per Week	5
Length of Course	Semester
Prerequisite	PE Survey
Fee	None

# HEALTH & PHYSICAL EDUCATION COURSES



## Weight Training

This is an introductory course to strength and conditioning for overall fitness. The emphasis in this course is on muscular strength, endurance, flexibility, agility, and safety. Weight Training will be divided into strength training days and fitness days. Strength training days will consist of weight training and will be performed three times per week. Fitness days will consist of alternative training methods and will be performed two times per week. This is an excellent course for all student athletes.

Course No.	936
Grade	9-12
Credit	1/4
Periods Per Week	5
Length of Course	Semester
Prerequisite	PE Survey
Fee	\$8.00

## Weight Training Advanced

This course picks up right where Weight Training left off. The students will be exposed to many different types of workout options. This will include learning new exercises, altering sets, reps, and recovery periods. This will contribute to a workout where students can expect to build strength, get lean and toned, and develop coordination and balance. Proper program development and nutrition guidelines will be discussed. Resistance training will be the focus of this class, but we will also be engaging in multiple alternative training methods as well. If you like to participate in resistance training activities and completed Weight Training, this class is for you.

Course No.	938
Grade	9-12
Credit	1/4
Periods Per Week	5
Length of Course	Semester
Prerequisite	PE Survey & Weight Training
Fee	\$8.00

# INDUSTRIAL EDUCATION COURSES



## Remodeling/Renovation

Students will apply structural and mechanical skills to remodeling and renovations. In addition, students will learn the process of securing the required building permits, the management of subcontractors, and the coordination of formal building inspections. Students will troubleshoot design or logistics issues and provide possible solutions. Throughout the course, the safe handling of materials, personal safety, prevention of accidents and the mitigation of hazards are emphasized.

Course No.	706
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	\$

## Woods I (Manufacturing Operations I)

Woods Technology I is for the beginning student who may have little or no experience in woodworking. This course will focus on students learning the fundamentals of cabinet making so students can eventually build high quality furniture on their own. Areas of study will include safety and the proper use of power equipment, identifying various woods, figuring board feet, types of fasteners, glues, and finishes. Students can build projects of their own design as time permits. Students will learn the production processes applied across manufacturing operations. Students will be able to demonstrate a broad array of technical skills with an emphasis given to quality practices, measurement, maintenance and safety. **Students have the opportunity to obtain the Technology Seal.**

Course No.	717
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	\$

## Woods II (Manufacturing Operations II)

Woods Technology II begins where Woods Technology I ends. The focus of Woods Technology II is on design and construction of serious wood working projects. Students are expected to make one or more major projects using various equipment. Areas of study include safety, problem solving skills, career opportunities and becoming a better consumer. Students will learn the production processes applied across manufacturing operations. Students will be able to demonstrate a broad array of technical skills with an emphasis given to quality practices, measurement, maintenance and safety. **Students have the opportunity to obtain the Technology Seal.**

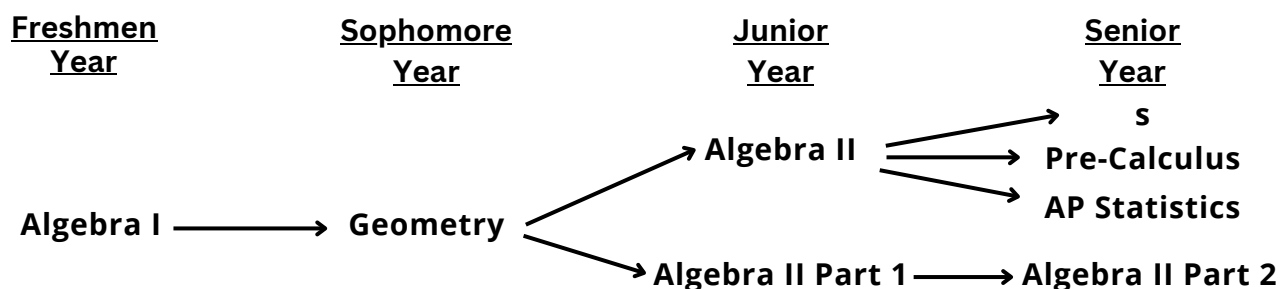
Course No.	718
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	Woods I
Fee	



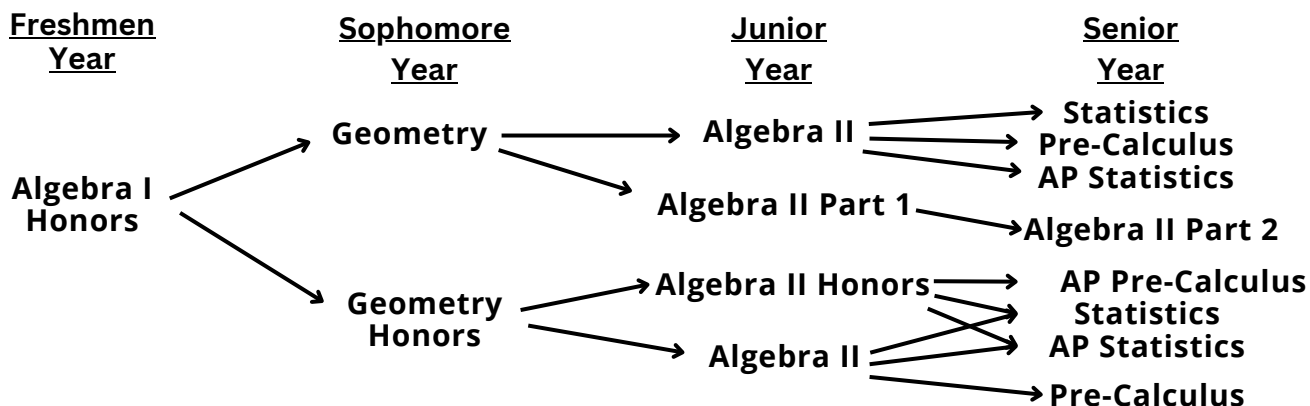
# PARMA CITY SCHOOL DISTRICT SEQUENCE OF MATHEMATICS COURSES

The following is the recommended sequence of study in the mathematics curriculum. Any deviation from this sequence requires the approval of the department. Students entering Honors Math will be recommended by their teachers using the Honors Math entrance rubric that weights the following criteria for enrollment: (1) accelerated scores on winter MAP test and most recent AIR test, (2) teacher recommendation, (3) average math grade of B or higher, (4) Gifted identification in math or superior cognitive.

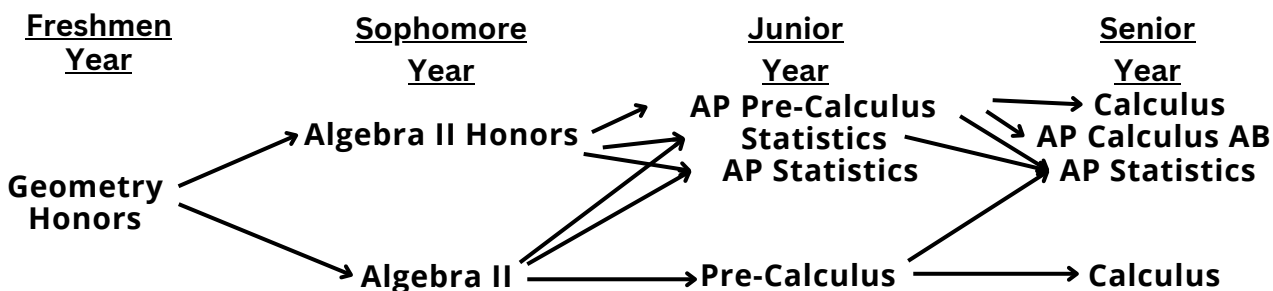
## General Mathematics Sequence



## Honors Mathematics Sequence



## Honors Mathematics Sequence



# MATHEMATICS COURSES

A GRAPHING CALCULATOR IS RECOMMENDED FOR ALL MATH COURSES



## Advanced Placement Calculus AB

Calculus is the branch of mathematics studying the rate of change of quantities and the length, area, and volume of objects. This course provides an in-depth study of differential and integral calculus. The focus of this course will be on evaluating limits, calculating rates of change, finding velocities and accelerations of moving bodies, and finding the area under a curve and using it to evaluate area and volumes of solid objects. Algebraic, numerical and graphical representations of these concepts will be emphasized and connected throughout the course. AP Calculus is equivalent to at least a semester of calculus at most colleges and universities, perhaps up to a year of calculus at some. **Students will be expected to take the AP Exam in May.**

Course No.	370P
Grade	12
Credit	1
Length of Course	Year
Periods Per Week	5
Prerequisite	AP Pre-Calc
Fee	\$70 includes AP Exam Fee

## Advanced Placement Pre-Calculus

AP Precalculus centers on functions modeling dynamic phenomena. This research-based exploration of functions is designed to better prepare students for college-level calculus and provide grounding for other mathematics and science courses. In this course, students study a broad spectrum of function types that are foundational for careers in mathematics, physics, biology, health science, business, social science, and data science. AP Precalculus is designed to be the equivalent of a first-semester college precalculus course. AP Precalculus provides students with an understanding of the concepts of college algebra, trigonometry, and additional topics that prepare students for further college-level mathematics courses. **Students will be expected to take the AP Exam in May.**

Course No.	367P
Grade	11-12
Credit	1
Length of Course	Year
Periods Per Week	5
Prerequisite	Algebra II
Fee	\$70 includes AP Exam Fee

## Advanced Placement Statistics

The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: (1) Exploring Data: Describing patterns and departures from patterns, (2) Sampling and Experimentation: Planning and conducting a study, (3) Anticipating Patterns: Exploring random phenomena using probability and simulation, and (4) Statistical Inference: Estimating population parameters and testing hypothesis. Students who successfully complete the course and AP exam may receive college credit, college advanced placement, or both for a one-semester introductory college statistics course. An introductory statistics course is typically required for college majors, such as social sciences, health sciences, and business. **Students will be expected to take the AP Exam in May.**

Course No.	368P
Grade	11-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Algebra II
Fee	\$70 includes AP Exam Fee

# MATHEMATICS COURSES

A GRAPHING CALCULATOR IS RECOMMENDED FOR ALL MATH COURSES



## Algebra I

All students require a rigorous and demanding curriculum in order to develop sound reasoning and strong problem-solving skills. Algebra I students will progress from their informal middle school experience with number relationships, data analysis, linear, and nonlinear equations to more formal definitions, algebraic reasoning, and graphical representations.

Course No.	359
Grade	9-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Math 8
Fee	None

## Algebra I Applied Math

This course addresses content through concrete models and real-world situations. Targeted instruction in foundational algebra concepts, such as number relationships, linear and non-linear equations, algebraic reasoning, and graphical representations will help the student succeed with the pace, rigor, and accountability of their regular Algebra I course.

**This course must be taken at the same time as the Algebra 1 course. Students will earn credit for both classes.**

Course No.	359AA
Grade	9
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Recommendation
Fee	None

## Algebra I Honors

This course provides a more in-depth presentation of Algebra I and is more rigorous. It is designed for the highest level mathematics student who is expected to be an independent thinker and is able to make connections within the topics of Algebra I.

Course No.	360H
Grade	9-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Honor Math Course Requirement
Fee	None

## Algebra II

This is the second course in Algebra and will continue to develop all the concepts previously studied. Algebra II is essential for the student who desires to continue a formal study of mathematics. The course focuses on comparing, contrasting, and modeling nonlinear functions, as well as an introduction to trigonometric functions. **This course is a state mandated graduation requirement.**

Course No.	361
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Algebra I
Fee	None

# MATHEMATICS COURSES

A GRAPHING CALCULATOR IS RECOMMENDED FOR ALL MATH COURSES



## Algebra II - Part 1

This course covers the first semester of the Algebra II curriculum taught over an entire school year. This course is designed for students who need slower pacing of Algebra II concepts. The course will focus on relations and functions, linear equations, inequalities and systems, quadratic functions, and polynomial functions. **This course is the first half of the state mandated graduation requirement.**

Course No.	361A
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Algebra I
Fee	None

## Algebra II - Part 2

This course covers the second semester of the Algebra II curriculum taught over an entire school year. This course is designed for students who need slower pacing of Algebra II concepts. The course will focus on polynomial equations, inverses and radical functions, exponential functions, logarithmic functions, and rational functions. **This course is the second half of the state mandated graduation requirement.**

Course No.	361B
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Algebra II Part 1
Fee	None

## Algebra II Honors

This course is a more rigorous and in-depth Algebra II course, designed for the highest level mathematics student. Students are expected to be independent thinkers, and they must be able to make connections within the topics of Algebra II.

Course No.	361H
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Geometry or Geometry Honors
Fee	None

## Calculus

Calculus is the branch of mathematics studying the rate of change of quantities and the length, area, and volume of objects. This course provides an introduction into differential and integral calculus. After a review of important Pre-Calculus concepts, the focus of this course will be on evaluating limits, calculating rates of change, finding velocities and accelerations of moving bodies, and finding the area under a curve. Algebraic, numerical and graphical representations of these concepts will be emphasized and connected throughout the course.

Course No.	369
Grade	12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Pre-Calc or AP Pre-Calc
Fee	None

# MATHEMATICS COURSES

A GRAPHING CALCULATOR IS RECOMMENDED FOR ALL MATH COURSES



## Geometry

The main goal of geometry is to develop students' abilities to reason and to present coherent arguments. In addition to this deep involvement with logic and deduction, students discover connections between formal geometry and the algebraic techniques. Students will also learn the important practical applications of geometry.

Course No.	363
Grade	9-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Algebra I
Fee	None

## Geometry Honors

This course is a more rigorous and in-depth Geometry course, designed for the highest level mathematics student. Students are expected to be independent thinkers, and they must be able to make connections within the topics of Geometry.

Course No.	363H
Grade	9-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Algebra I
Fee	None

## Pre-Calculus

This course builds on the application of non-linear functions from Algebra II with the study of polynomial, exponential, logarithmic, trigonometric, parametric functions along with vectors, linear algebra, conic sections and probability and statistics. With an introduction to limits.

Course No.	366
Grade	11-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Algebra II
Fee	None

## Statistics

Statistics plays a vital role in many professional fields including archeology, business, economics, medicine, natural science, and consumer science. Students will enhance their interdisciplinary and mathematical foundation in examining and analyzing problems through the exploration of real life applications and data sets, incorporating technology in the process.

Course No.	368
Grade	11-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Algebra II
Fee	None



# MUSIC COURSES



## Advanced Placement Music Theory

The AP Music Theory course corresponds to two semesters of a typical introductory college music theory course that covers topics such as musicianship, ear training, music literacy, and 18th Century compositional techniques. Musicianship skills (including dictation, sight singing, and keyboard harmony), are considered an important part of the course. Prior to enrollment in this course, students should be able to read and write musical notation, and it is strongly recommended that the student has acquired at least basic performance skills in voice or on an instrument. **Students have the opportunity to earn a Fine and Performing Arts Seal. Students will be expected to take the AP Exam in May.**

Course No.	850P
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	\$66.00- includes AP exam fee

## Auxiliary Corps

This course is designed only for majorettes, flag corps, dance, and others designated with the band director's permission. Students must audition and be selected for this course. **Students have the opportunity to earn a Fine and Performing Arts Seal.**

Course No.	840
Grade	9-12
Credit	1/4
Periods Per Week	5
Length of Course	Quarter
Prerequisite	Audition
Fee	None

## Bel Canto

This treble-voiced choir helps students learn to sing with proper vocal techniques, become familiar with choral literature, and develop an understanding and appreciation of music. Performance at concerts during the year is an outgrowth of class work. **Students have the opportunity to earn a Fine and Performing Arts Seal.**

Course No.	837OG
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	None

# MUSIC COURSES



## Concert Band

The Concert Band is the entry-level band. It is composed of high school wind and percussion musicians. It will be balanced from the standpoint of instrumentation and members will play all types of music. Marching Band is included as a mandatory segment of Concert Band. **Students have the opportunity to earn a Fine and Performing Arts Seal.**

Course No.	841
Grade	9-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	None

## Concert Choir

This is a select choir for the most advanced singers, typically juniors and seniors. This course furthers the development of musicianship and encourages singers to continue exploring diverse genres, styles, and time periods. Students find joy in sharing music with others in class and through public performances. This ensemble participates in concerts throughout the year, both in school and in the community. Students must audition and be selected for this course. **Students have the opportunity to earn a Fine and Performing Arts Seal.**

Course No.	838
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Audition
Fee	None

## Mixed Choir

This choir helps talented students learn to sing with proper vocal techniques, become familiar with choral literature, and develop an understanding and appreciation of music. This is the recommended course for Freshman and novice singers. Performance at concerts during the year is an outgrowth of class work. **Students have the opportunity to earn a Fine and Performing Arts Seal.**

Course No.	837
Grade	9-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	None

## Music Theory

This course addresses, in depth, the more academic concepts of how music works. This course builds upon the student's prior knowledge to solidify understandings of pitch and rhythm, melody, harmony, and basic form. **Students have the opportunity to earn a Fine and Performing Arts Seal.**

Course No.	850
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	Demonstrate Basic Music Literacy Skill
Fee	\$14.00

# MUSIC COURSES



## Orchestra (String)

The orchestra is open to students who play an orchestral string instrument. The orchestra performs during the school year for concerts and other school activities. This class contributes to the development of a student's musicianship and promotes the appreciation of music. **Students have the opportunity to earn a Fine and Performing Arts Seal.**

Course No.	845
Grade	9-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	None

## Percussion Ensemble

This course is designed for any percussion students who are either signed up for band or who choose to be in a music group other than band as an elective. Students will play a wide variety of music including cadences and ensembles. Instruments will be provided. Students must have a background in percussion playing with at least an eighth grade level of ability or the band director's permission. **Students have the opportunity to earn a Fine and Performing Arts Seal.**

Course No.	852
Grade	9-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	Director Permission
Fee	None

## Symphonic Band

This band is composed of the most advanced high school wind and percussion musicians. Membership in this ensemble will be partially based upon balanced instrumentation. Marching Band is included as a mandatory segment. **Students have the opportunity to earn a Fine and Performing Arts Seal.**

Course No.	842
Grade	9-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	None

### Music Department Special Note:

**Evening and/or weekend attendance is expected at performances of all vocal and instrumental groups. Failure to attend may affect student's course grade. Conflicts will be handled on a case-by-case basis.**

# PARMA CITY SCHOOL DISTRICT SEQUENCE OF SCIENCE COURSES

The following is the recommended sequence of study in the science curriculum. Any deviation from this sequence requires the approval of the department chairperson.

Honors Biology	Students taking Honors Chemistry in 10th grade are strongly recommended to take AP Physics or Physics in 11th Grade		AP Chemistry AP Biology/Honors Biotechnology
	Honors Chemistry	AP Physics I AP Physics C <i>Electives</i> AP Chemistry Astronomy	Honors Engineering Physics  Astronomy
Biology	Students taking Honors Chemistry in 10th grade are strongly recommended to take AP Physics or Physics in 11th Grade		Biology II AP Chemistry AP Biology/Honors Biotechnology
	Chemistry	Physics Biology II  <i>Electives</i> Astronomy	Engineering Physics  Astronomy
Biology	Physical Science	Environmental Science  Chemistry	Physical Geology  Chemistry  Physics

## **Science Department Note:**

In an effort to offer a quality laboratory program as part of our Science classes, it is necessary to assess a student fee to purchase consumable items and replenish lab materials that are subject to normal wear, tear, and breakage.

# SCIENCE COURSES

A SCIENTIFIC CALCULATOR IS RECOMMENDED FOR ALL SCIENCE COURSES



## Advanced Placement Chemistry

This course is designed to be the equivalent of the general chemistry course usually taken during the first college year. Topics such as the structure of matter, kinetic theory of gases, chemical equilibria, chemical kinetics, and concepts in thermodynamics will be discussed in considerable depth. College Board lab requirements require this course to be scheduled as a block. Students will be expected to take the AP Exam in May. **A TI-30XIIS scientific calculator or comparable calculator is recommended. Students will be expected to take the AP Exam in May.**

Course No.	232P
Grade	11-12
Credit	2
Periods Per Week	10
Length of Course	Year
Prerequisite	Chemistry, Algebra II or Trig.
Fee	\$52-Includes AP Exam Fee

## Advanced Placement Physics 1: Algebra-Based

AP Physics 1: Algebra-Based is the equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It will also introduce electric circuits. This class meets two periods a day, five days a week. **A graphing calculator is recommended with the TI-83 model preferred. Students will be expected to take the AP Exam in May.**

Course No.	234P
Grade	11-12
Credit	2
Periods Per Week	10
Length of Course	Year
Prerequisite	Geometry and Chemistry
Fee	\$62.00-Includes AP Exam Fee

## Advanced Placement Physics C: Mechanics

The Physics C: Mechanics course is equivalent to a one semester calculus-based, college-level physics course with a lab component. It is especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as kinematics; Newton's laws of motion; work, energy and power, systems of particles and linear momentum; gravitation. circular motion and rotation, and oscillations and gravitation. Introductory differential and integral calculus is used throughout the course. **A graphing calculator is recommended with the TI-83 model preferred. Students will be expected to take the AP Exam in May.**

Course No.	235P
Grade	11-12
Credit	2
Periods Per Week	10
Length of Course	Year
Prerequisite	Completed or concurrently in Calc
Fee	\$62.00-Includes AP Exam Fee

## Astronomy

In this course, the students will learn about the sun, the solar system, galaxies, stars, comets, and other celestial bodies (an overview of the world's space programs should time permit). Students should have a good background in algebra, and should understand basic chemical equations. **Students are encouraged to register for both Astronomy and Physical Geology, as these are one-semester courses that will be offered the same period.**

Course No.	240
Grade	11-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	\$19.00



# SCIENCE COURSES



A SCIENTIFIC CALCULATOR IS RECOMMENDED FOR ALL SCIENCE COURSES

## Biology I

Biology I investigates the composition, diversity, complexity and interconnectedness of life on Earth. Fundamental concepts of heredity and evolution provide a framework through inquiry-based instruction to explore the living world, the physical environment, and the interactions within and between them. This is aligned with the State of Ohio standards which will prepare students for success with the OST test and serves as base knowledge for future science courses.

Course No.	207
Grade	9-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	\$16.00

## Biology I Honors

The content is similar to Biology I, but it is taught at a faster, more demanding pace and has a stronger lab orientation.

Course No.	207H
Grade	9
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	\$19.00

## Biology II

This course will emphasize anatomy and physiology priority standards, as well as topics in Biological Science that are most important in creating a Biological Literate Citizen. The course comprises systematic study in which students will examine human anatomy and physical functions, and a workable knowledge of medical terminology through cutting edge areas in Biology. Each topic will be covered in great detail exploring it through laboratory experience. Additional topics include: virology, bacteriology, human genetics, molecular biology, and Biology I biological forensics.

Course No.	236
Grade	11-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Chemistry & Biology I
Fee	\$19.00

# SCIENCE COURSES

A SCIENTIFIC CALCULATOR IS RECOMMENDED FOR ALL SCIENCE COURSES



## Biotechnology Honors (Tech Prep)/AP Biology

This is a Tech Prep/STEM/College Board designed course to prepare students for a seamless transition to high tech careers in the Biological Sciences. Students will be exposed to college level course content. An emphasis is placed upon developing the laboratory and research skills that are required by employers in Science and Industry. Cutting edge topics required for Science careers in the 21st century are covered. Skills developed in this course include, but are not limited to, designing a plan for collecting data, analyzing data, modeling of concepts, applying mathematical routines, and connecting concepts in and across domains. This course meets for **TWO PERIODS A DAY**. More than 60% of contact time is spent in the lab. **College credits available through Ohio Higher Education and Tech Prep. Further college credits can be earned as students are expected to take the AP Biology exam in May. Biotechnology will be taught at both High Schools**

Course No.	237PA
Grade	12
Credit	2
Periods Per Week	10
Length of Course	Year
Prerequisite	Chemistry
Fee	\$40-Includes AP Exam Fee

## Chemistry

Chemistry is the study of matter and the changes it undergoes. This course explores the concepts of matter and its properties. Focus is on elements and the formation of compounds, atomic structure, and the principles of chemical bonding. Problem-solving, mathematical analysis of data, and logical thinking are emphasized. Chemistry provides the student with an excellent foundation for more advanced science courses. Students taking this course must have successfully passed Algebra I and/or have a teacher recommendation. **A TI-30XIIS scientific calculator or comparable calculator is recommended.**

Course No.	230
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Biology I and Algebra I
Fee	\$16.00

## Chemistry Honors

The content is similar to Chemistry, but it is taught at a faster, more demanding pace. Material is explored in greater depth with more extensive assignments required. **A TI-30XIIS scientific calculator or comparable calculator is recommended.**

Course No.	230H
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Biology I and Algebra I
Fee	\$19.00

# SCIENCE COURSES

A SCIENTIFIC CALCULATOR IS RECOMMENDED FOR ALL SCIENCE COURSES



## Engineering Physics Honors

This course addresses how concepts covered in Physics apply to design and engineering. This is a project-oriented class in which students will frequently work in teams to solve engineering-related challenges. Students will learn about the major areas of engineering such as aeronautic, chemical, electrical, industrial, and mechanical engineering through projects and guest speakers and competitions. This course is recommended for students interested in a technically oriented career.

Course No.	233H
Grade	12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Physics and Algebra II
Fee	\$47.00

## Environmental Science

Environmental Science is designed to introduce students to major ecological concepts and the environmental problems that affect the real world in which they live. The role and impact of human activities on the earth's environment and energy will involve inquiry-based learning with students performing classroom and laboratory investigations. Teacher recommendation required.

Course No.	227
Grade	11-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Biology Physical Sci.
Fee	\$16.00

## Physical Geology

Physical Geology incorporates basic chemistry, physics and environmental science and introduces students to key concepts, principles and theories within geology. Topics include minerals and rocks, Earth's history, plate tectonics, Earth's resources and glacial geology. Minimally, students should have had Biology, Physical Science and Environmental Science before taking this course. **Students are encouraged to register for both Astronomy and Physical Geology, as these are one-semester courses that will be offered the same period.**

Course No.	225
Grade	12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	Biology, Physical & Environ. Science
Fee	\$20.00

# SCIENCE COURSES

A SCIENTIFIC CALCULATOR IS RECOMMENDED FOR ALL SCIENCE COURSES



## Physical Science

This is a yearlong lab intensive course that deals with the study of physics and chemistry. The chemistry portion deals with atoms, physical/chemical changes, conservation of matter and various chemical reactions. The physical portion deals with the production and transfer of energy, motion and waves. This course focuses on real life applications and proper lab techniques. It is an excellent preparatory class for Chemistry.

Course No.	224
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Biology I
Fee	\$16.00

## Physics

The objective of this course is to familiarize students with the workings of our physical world. Concepts, which will be covered, include motion, energy, work, electricity, magnetism, wave characteristics, and light. An emphasis is placed on logical thinking, problem solving and mathematical analysis.

Course No.	234
Grade	11-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Chemistry, Algebra I & Geometry
Fee	\$19.00

# SCIENCE COURSES



## Introduction to Engineering Design (IED)

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects like designing a new toy or improving an existing product. Students are provided the opportunity for a certification in MOS Word. College credits may be available if student meets certain criteria. **Students have the opportunity to obtain the Technology Seal.**

Course No.	702
Grade	9
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	None

## Principles of Engineering (POE)

Students explore a broad range of engineering topics including mechanisms, strength of structure and materials, and automation, and then they apply what they know to take on challenges like designing a self-powered car. Students are provided the opportunity for a certification in MOS PowerPoint. College credits may be available if student meets certain criteria. **Students have the opportunity to obtain the Technology Seal.**

Course No.	703
Grade	10
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	IED
Fee	None

## Digital Electronics (DE)

Students explore the foundations of computing by engaging in circuit design processes to create combinational logic and sequential logic (memory) as electrical engineers do in industry. Students are provided the opportunity for a certification in MOS Outlook. College credit opportunities available. **Students have the opportunity to obtain the Technology Seal.**

Course No.	704
Grade	11
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	POE
Fee	None

## Aerospace Engineering (AE)

Students explore the physics of flight and bring what they're learning to life through hands-on projects like designing a glider and creating a program for an autonomous space rover. Students are provided the opportunity for a certification in MOS Excel. College credit opportunities available. **Students have the opportunity to obtain the Technology Seal.**

Course No.	705
Grade	12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	DE
Fee	None



# SOCIAL STUDIES COURSES



## Advanced Placement European History

The study of European History since 1450 introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. The emphasis is on creating a context for understanding the development of contemporary institutions, the role of continuity and change in present-day society and politics, and the evolution of current forms of artistic expression and intellectual discourse. In addition to providing a basic narrative of events and movements, the goals of AP European History are to develop (a) an understanding of some of the principal themes in modern European history, (b) an ability to analyze historical evidence and historical interpretation, and (c) an ability to express historical understanding in writing. **Students will be expected to take the AP Exam in May.**

Course No.	153P
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	\$64.00-Includes AP Exam Fee

## Advanced Placement Macro Economics/Micro Economics

The AP course in Economics is to give students a thorough understanding of the principals of Economics that apply to an economic system as a whole. Such a course places particular emphasis on the study of national income and price-level determination, and also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. The following is a brief list of these topics that a teacher may choose to explore:

- I. Basic Economic Concepts
- II. Measurement of Economic Performance
- III. National Income and Price Determination
- IV. Financial Sector
- V. Inflation, Unemployment and Stabilization Policies
- VI. Economic Growth and Productivity
- VII. Open Economy: International Trade and Finance

**Students will be expected to take the AP Exam in May.**

Course No.	170P
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	\$64.00-Includes AP Exam Fee

# SOCIAL STUDIES COURSES



## Advanced Placement Psychology

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 bases of behavior, sensation and perception, learning and cognition, 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. **Students will be expected to take the AP Exam in May.**

Course No.	173P
Grade	11-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	\$68.00-Includes AP Exam Fee

## Advanced Placement U.S. Government & Politics

This is a college-level course that stresses ideas, issues and changes in our U.S. Government. Independent study skills in writing essay examinations and short research papers will be emphasized. This course will have a strong emphasis on politics and the comparing and contrasting of contemporary trends in political science. Upon successful completion of the Advanced Placement Test, college credit may be earned. **Students will be expected to take the AP Exam in May.**

Course No.	167P
Grade	11-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	\$64.00-Includes AP Exam Fee

## Advanced Placement U.S. History

This is a college-level course, which stresses ideas and issues in our historical development. Independent study skills in writing essay examinations and analysis of primary source documents will be emphasized. Upon successful completion of the Advanced Placement Test, college credit may be earned. **Students will be expected to take the AP Exam in May.**

Course No.	160P
Grade	11-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	\$64.00-Includes AP Exam Fee

# SOCIAL STUDIES COURSES



## Advanced Placement World History

AP World History focuses on the four major Historical Thinking Skills and five central course themes: 1) Interaction between Humans and the Environment, 2) Development and Integration of Cultures, 3) State-Building, Expansion and Conflict, 4) Creation, Expansion, and Interaction of Economic Systems, and 5) Development and Transformation of Social Structures. The course provides global coverage of Africa, the Americas, Asia, Oceania, Australia, and Europe. The course allows students to develop strong written arguments showcasing a thesis and relevant historical evidence. **Students will be expected to take the AP Exam in May.**

Course No.	150P
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	\$64.00-Includes AP Exam Fee

## Financial Literacy

The Financial Literacy course will cover six important themes that will prepare students for life outside of high school: - Financial responsibility and decision-making - Planning and money management - Being an informed consumer - Credit and debt - Risk management and insurance This course also focuses upon the mandatory components of financial literacy as required by State law SB 311. **Mandatory requirement for class of 2026 and beyond.**

Course No.	172
Grade	10-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	None

## Social Psychology

This course deals with the accurate description, prediction, and control of human behavior. It is also the study of some elements of human relationships. Through class discussion, experiments, demonstrations, and lectures, the student will understand how past experiences influence behavior and perceptions of individuals and groups.

Course No.	173
Grade	11-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	None

## Topics in Social Studies

A special topic, which focuses on the unique interests of students and teachers in each building, may be offered. A variety of methods and resources may be utilized, depending on the subject matter of each course. Topics and course titles vary in each building.

Normandy:  
1450A-Current Events/Global Issues  
1450B - Sports in American History  
1450C - Cold War Vietnam War  
1450D-The History of Cleveland

Valley Forge:  
1450A-Current Events/Global Issues  
1450B - Street Law  
1450C - Cold War/Vietnam War  
1450D-The History of Cleveland

Course No.	145
Grade	10-12
Credit	1/2
Periods Per Week	5
Length of Course	Semester
Prerequisite	None
Fee	None

# SOCIAL STUDIES COURSES



## U.S. Government

This course offers practical information, which emphasizes understanding the Constitution, the voting process, and the financing of government services. Additional units outline how the various levels of government function and how foreign policy is determined.

Course No.	167
Grade	11-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	\$15.00

## U.S. History

American history is studied from the 1876 Industrial Period to the present in chronological sequence. This course will provide students with knowledge and understanding of our country's past, as well as the skills of critical thinking and analysis that are necessary for good citizenship in our society.

Course No.	113
Grade	9
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	None

## U.S. History - Honors

American history is studied from the 1876 Industrial Period to the present in chronological sequence. Students will analyze primary source documents, write historical essays, and develop critical thinking skills necessary for success in future AP classes.

Course No.	113H
Grade	9
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	None

## World History

This is a survey course that traces history from the Enlightenment to the modern era. This course focuses on the concepts, events and individuals that helped to develop the world in which we live.

Course No.	150
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	None

# WORLD LANGUAGES COURSES



## Note:

- Three years of a world language is strongly recommended for admittance to many programs within universities.
- Students who complete advanced coursework and assessments in World Languages may be eligible to obtain the Seal of Biliteracy. Students interested in receiving this seal at graduation should meet with their school counselor to discuss details of the process.

For information on the Seal of Biliteracy, please visit the Ohio Department of Education website <https://education.ohio.gov> or [CLICKING HERE](#)

## American Sign Language I

This course is an introduction to both the expressive and receptive nature of American Sign Language (ASL), a visual language that consists of hand sign, body language, and facial expressions as well as a manual alphabet. Topics include the vocabulary and grammatical structure of ASL, deaf culture, and the history of sign language.

Course No.	255
Grade	9-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	\$15.00

## American Sign Language II

This course continues the work begun in ASL I. Students will continue to develop visual receptive skills, with a focus on visual memory, visual discrimination, and gestural expressive skills, and learn basic ASL vocabulary and grammatical structures. American deaf culture and history will be expanded upon.

Course No.	256
Grade	9-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	ASL I
Fee	\$13.00

## American Sign Language III

American Sign Language III stresses fluency of expressive and receptive skills for conversational competence and introduces increasingly complex grammatical aspects. This course includes continued study of the deaf culture and will be conducted primarily in American Sign Language. Conversations and active participation are necessary components of this course.

Course No.	257
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	ASL II
Fee	\$14.00



# WORLD LANGUAGES COURSES



## French I

This course develops vocabulary patterns and sentence structure for basic conversation. These are presented and reinforced with a variety of oral language activities and games. Short readings and personal writings are introduced. The emphasis of this class is on developing communication skills through reading, writing, speaking and listening in French while also learning about French history and culture.

Course No.	258
Grade	9-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	\$15.00

## French II

This course builds upon the concepts learned in French I. Expanded vocabulary and basic grammar are developed to improve communication skills. The emphasis on this class is on developing these skills through reading, writing, speaking, and listening in French. Conversation and active participation are emphasized.

Course No.	259
Grade	9-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	French I
Fee	\$15.00

## French III

This course focuses on improved fluency in speaking, writing and understanding French. The emphasis of the class is on perfecting communication skills through reading, speaking, writing and listening in French. Conversations and active participation are necessary components of this course. The class will be conducted primarily in French.

Course No.	262
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	French II
Fee	\$15.00

## French IV Honors

This course continues to develop fluency and accuracy in written and spoken French. Students will demonstrate linguistic and cultural competence in conversation and presentations. While the emphasis is on communication, this course also includes continued study of French history and culture. This course includes selected short stories, compositions, projects, advanced grammar review and current topics. The class will be conducted primarily in French and active participation is required.

Course No.	263H
Grade	11-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	French III
Fee	\$15.00

# WORLD LANGUAGES COURSES



## French V Advanced Placement

This course is designed to prepare students for success on the Advanced Placement French exam and the demands of college level coursework. This course is conducted primarily in French. Success on an AP exam may result in eligibility for college credit. **Students will be expected to take the AP Exam in May.**

Course No.	264P
Grade	12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	French IV
Fee	\$40.00-Includes AP Exam Fee

## Spanish I

This course develops vocabulary and sentence structures for basic conversation. The information is presented and reinforced with a variety of oral and written language activities and games. Short readings and writings are also introduced. The emphasis of the class is on developing communication skills through reading, writing, speaking and listening in Spanish, while also learning history and Latino culture.

Course No.	283
Grade	9-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	None
Fee	\$15.00

## Spanish II

Building on the concepts in Spanish 1, this course uses expanded vocabulary and grammar to develop and improve communication skills. The emphasis of the class is on developing these skills through reading, writing, speaking and listening in Spanish. Conversation and active participation are emphasized. The study of history and Latino culture will continue.

Course No.	284
Grade	9-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Spanish I
Fee	\$15.00

## Spanish III

This course focuses on improved fluency in speaking, writing and understanding Spanish. The emphasis of the class is on perfecting communication skills through reading, speaking, writing and listening in Spanish. Conversations and active participation are necessary components of this course. The class will be conducted primarily in Spanish.

Course No.	287
Grade	10-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Spanish II
Fee	\$15.00

# WORLD LANGUAGES COURSES



## Spanish IV Honors

This course continues to develop fluency and accuracy in spoken and written Spanish. Students will demonstrate linguistic and cultural competence in conversation and presentations. While emphasizing critical thinking, there is continued reading and writing centered on concepts of the Spanish culture. The class will be conducted primarily in Spanish and active participation is required. **Students will be expected to take the AP Exam in May.**

Course No.	288H
Grade	11-12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Spanish III
Fee	\$15.00

## Spanish V Advanced Placement

This course is designed to prepare students for success on the Advanced Placement Spanish exam and the demands of college level coursework. This course is conducted primarily in Spanish. Success on an AP exam may result in eligibility for college credit. **Students will be expected to take the AP Exam in May.**

Course No.	289P
Grade	12
Credit	1
Periods Per Week	5
Length of Course	Year
Prerequisite	Spanish IV
Fee	\$40.00-Includes AP Exam Fee