



# 2025-2026 Program of Study



# Program Guide



## PART 1

### The Future Starts Here

Middletown High School's Program of Study blends academics, technical skills, and real-world experiences. Starting in 9th grade, students choose one of six career fields, connecting their education to passions and goals. This innovative approach prepares students for success in careers, college, and life.



## PART 2

### Your Path, Your Future

Our Program of Study offers six career fields that guide students through high school. Flexible options and dedicated counselors ensure personalized guidance, while experiential learning connects academics to real-world applications, keeping education relevant and engaging.



## PART 3

### Tailored Learning Options

Core classes and electives support career-focused education while offering customization. With AP courses, College Credit Plus, and industry credentials, students can challenge themselves and deepen their expertise in areas of interest.



## PART 4

### Graduation with Purpose

Graduation requirements align with career fields, ensuring students leave ready for life after high school. Along with a diploma, students gain advanced coursework, certifications, and skills to stand out in college or careers.



PASSPORT TO  
**TOMORROW**

*Dream Today. Rise Tomorrow.*

# Table of Contents

**Fields & Skills . . . . . 2 - 3**

**Human Services & Resources . . . . . 4 - 5**

**Industrial, Manufacturing, & Engineering Systems . . . . . 6 - 7**

**Business, Marketing, & Management . . . . . 8 - 9**

**Communication & Information Systems . . . . . 10 - 11**

**Health Sciences . . . . . 12 - 13**

**Environmental & Agricultural Systems . . . . . 14 - 15**
























**Graduation Requirements . . . . . 16 - 17**

**General Information . . . . . 18 - 31**

**Course Descriptions . . . . . 32 - 61**

# 6 Career Fields

16 National Career Clusters

HUMAN SERVICES & RESOURCES	INDUSTRIAL, MANUFACTURING, & ENGINEERING SYSTEMS	BUSINESS, MARKETING, & MANAGEMENT	COMMUNICATION & INFORMATION SYSTEMS	HEALTH SCIENCES	ENVIRONMENTAL & AGRICULTURAL SYSTEMS
					
					
Human Services	Manufacturing	Marketing	Arts, A/V Tech, & Communications	Health Sciences	Agriculture, Food, & Natural Resources
					
Law, Public Safety, Corrections, & Security	Transportation, Distribution, & Logistics	Finance	Information Technology		
					
Government & Public Administration	Science, Technology, Engineering, & Mathematics	Business Management & Administration			
					
Education & Training	Architecture & Construction	Hospitality & Tourism			

## 6 CAREER FIELDS

The career fields are the six large groups. They include all of the occupations in the United States, and their titles tell you something about the focus of work in that group of occupations.

## 16 NATIONAL CAREER CLUSTERS

Each of the six career fields is divided into 1-4 sub-groups, called clusters. Each cluster is made up of a number of occupations and post-secondary majors related to the specialty of that cluster.

## PATHWAYS

Each cluster is broken down into pathways. A pathway is made up of a group of occupations that focus on a specialty within a cluster. There are 79 pathways.

# Skills



**GLOBAL CITIZEN**  
Community-minded,  
World Connections, Regional  
Awareness, Respects Diversity,  
Service Orientation, Civic Awareness



**CRITICAL THINKER  
& PROBLEM SOLVER**  
Curious, Questioner, Creative,  
Solution-oriented,  
Change-maker, Analytical



**EFFECTIVE  
COMMUNICATOR**  
Advanced Communication Skills,  
Digital Citizenship,  
Digital & Media Literacy,  
Presentation Skills



**SELF-AWARE  
LEADER**  
Confidence, Encourager,  
Servant Leadership, Responsible,  
Accountable, Interpersonal Skills,  
Inclusive, Resilient



**COLLABORATOR  
& NETWORKER**  
Self-management,  
Inclusive, Responsible, Accountable,  
Social Awareness, Self-advocate



**CAREER &  
COLLEGE READY**  
Positive Attitude, Works Independently,  
Perseverance, Goal-oriented,  
Organization Skills, Time Management  
Skills, Adaptable & Flexible, Resourceful

# Human Services & Resources



## Mission

The Mission of the MHS Human Services and Resources field is to provide students with a combination of rigorous academic courses with real-world experiential projects that tap into students' creativity, inquiry, and critical thinking skills. Students may choose a program of study in the humanities—which provides opportunities to put into action and expose students to the service-related vocations and higher education programs available to students beyond high school.

## RELATED CAREERS

- Social Worker
- Public Safety: Police, Fire, EMT
- Attorney
- Politician
- Government worker
- Teacher

## STUDENT ORGANIZATIONS

- Government
- Class Clubs
- Volunteer work
- Leadership
- Philosophy Club

## WORK BASED LEARNING & CREDENTIALING

TBD

## RELATED HIGHER EDUCATION MAJORS

### Social Worker

- Social Work
- Psychology
- Sociology
- Human Services, Administration
- Public Administration

### Public Safety (Police, Fire, EMT)

- Criminal Justice
- Fire Science
- Emergency Management
- Homeland Security
- Public Safety Administration

### Attorney

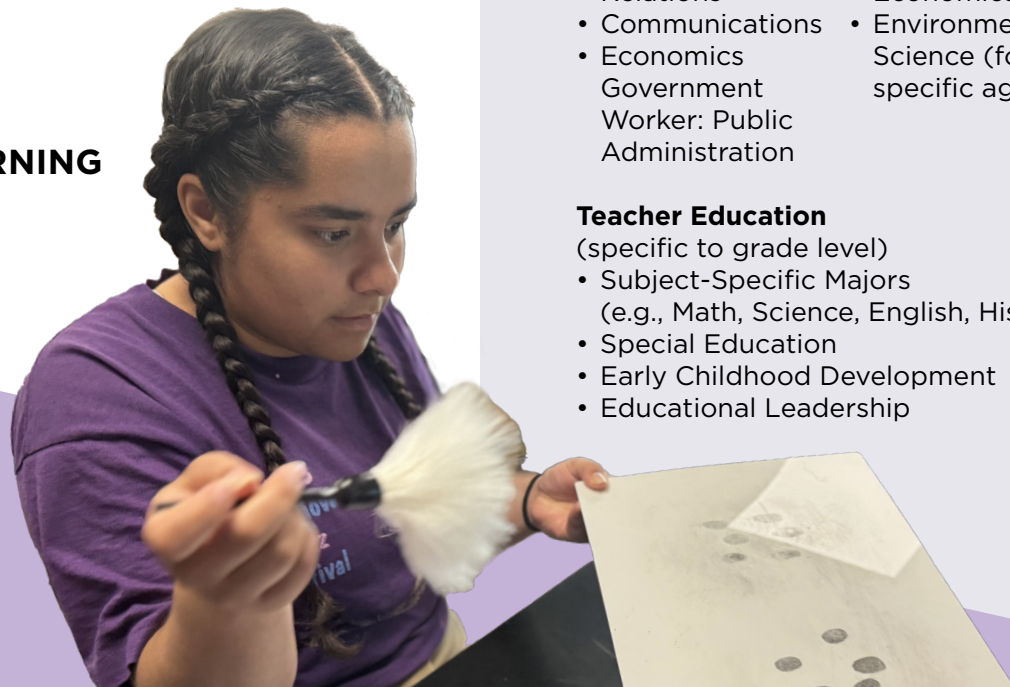
- Pre-law
- History
- Political Science
- English
- Business Administration
- Criminal Justice

### Politician

- Political Science
- Public Administration
- International Relations
- Communications
- Economics
- Government Worker: Public Administration
- Political Science
- Urban Planning
- International Relations
- Economics
- Environmental Science (for specific agencies)

### Teacher Education

- (specific to grade level)
- Subject-Specific Majors (e.g., Math, Science, English, History)
- Special Education
- Early Childhood Development
- Educational Leadership



# Human Services & Resources Field Courses



CAREER FIELD COURSES	9 <sup>TH</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
<b>Human Services</b>	Career Class (.5)			<i>Psychology (.5)</i> <i>Social Justice (.5)</i>
<b>Law, Public Safety, Corrections, &amp; Security</b>	Career Class (.5)		<i>Forensics (1)</i> <i>Investigative Journalism: True Crime (.5)</i> <i>Lawfare: Exploring the World of Law &amp; Legal Professions (.5)</i>	<i>Psychology (.5)</i> <i>Social Justice (.5)</i> <i>Conspiracy Theory (.5)</i> <i>Forensics (1)</i> <i>Investigative Journalism: True Crime (.5)</i> <i>Lawfare: Exploring the World of Law &amp; Legal Professions (.5)</i>
<b>Government &amp; Public Administration</b>	Career Class (.5)		<i>Forensics (1)</i> <i>Investigative Journalism: True Crime (.5)</i> <i>Lawfare: Exploring the World of Law &amp; Legal Professions (.5)</i>	<i>Psychology (.5)</i> <i>Social Justice (.5)</i> <i>Conspiracy Theory (.5)</i> <i>Forensics (1)</i> <i>Investigative Journalism: True Crime (.5)</i> <i>Lawfare: Exploring the World of Law &amp; Legal Professions (.5)</i>
<b>Education &amp; Training</b>	Career Class (.5)			<i>Psychology (.5)</i> <i>Social Justice (.5)</i>

*Elective courses indicated in italics fulfill the core graduation requirements.*

- Course may require a prerequisite/grade level
- College Credit Plus
- Advanced Placement
- Butler Tech

# Industrial, Manufacturing, & Engineering Systems



## Mission

The mission of the Industrial Manufacturing and Engineering Systems field is to provide training and experiences that prepare students for STEM-related careers. Areas such as Math, Science, Construction, Manufacturing, and Transportation are addressed. Rigorous STEM courses are offered preparing students for further study, apprenticeships, and entry-level work experiences.

## RELATED CAREERS

- Robotics
- Mechatronics
- Safety
- Engineering
- Teaching
- Builder
- Electrician
- Plumber
- HVAC
- Carpenter
- Welding
- Masonry

## STUDENT ORGANIZATIONS

Science Club

## WORK BASED LEARNING & CREDENTIALING

TBD



## RELATED HIGHER EDUCATION MAJORS

### Robotics & Mechatronics

- Robotics Engineering
- Mechatronics Engineering
- Mechanical Engineering
- Electrical Engineering
- Automation Engineering

### Safety & Engineering

- Occupational Safety and Health
- Environmental Health and Safety
- Industrial Engineering
- Civil Engineering
- Mechanical Engineering

### Construction Trades (Builder, Carpenter, Masonry)

- Construction Management
- Civil Engineering Technology
- Carpentry Technology
- Masonry Technology
- Architectural Drafting and Design

### Skilled Trades (Electrician, Plumber, HVAC)

- Electrical Technology
- Plumbing Technology
- HVAC Technology
- Building Systems Technology
- Mechanical Engineering Technology

### Teacher

- Education (specific to grade level)
- Subject-Specific Majors (e.g., Math, Science, English, History)
- Special Education
- Early Childhood Development
- Educational Leadership



# Industrial, Manufacturing, & Engineering Systems Field Courses



CAREER FIELD COURSES	9 <sup>TH</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
<b>Manufacturing</b>	Career Class (.5)	Intro to Engineering Design (1) <b>BT</b>	Principles of Engineering (1) <b>BT *</b>	Computer Integrated Manufacturing (1) <b>BT *</b>
	Engineering Essentials (.5) <b>BT</b>	Principles of Engineering (1) <b>BT *</b>	Manufacturing Operations (1) <b>BT *</b>	
	Intro to Engineering Design (1) <b>BT</b>		Computer Integrated Manufacturing (1) <b>BT *</b>	
<b>Transportation, Distribution, &amp; Logistics</b>	Career Class (.5)	Business Foundations (1) <b>BT</b>	Logistics Management (1) <b>BT</b>	Logistics Management (1) <b>BT</b>
	Business Foundations (1) <b>BT</b>	Management Principles (1) <b>BT</b>	Management Principles (1) <b>BT</b>	Professional & Technical Sales (1) <b>BT *</b>
				Strategic Entrepreneurship (1) <b>BT *</b>
				Computer Integrated Manufacturing (1) <b>BT *</b>
<b>Science, Engineering</b>	Career Class (.5)	<i>Intro to Robotics (1)</i>	<i>Intro to Robotics (1)</i>	<i>Intro to Robotics (1)</i>
	Engineering Essentials (.5) <b>BT</b>	Intro to Engineering Design (1) <b>BT</b>	<i>Competitive Robotics (1) *</i>	<i>Competitive Robotics (1) *</i>
	Intro to Engineering Design (1) <b>BT</b>	Principles of Engineering (1) <b>BT *</b>	Civil Engineering & Architecture (1) <b>BT *</b>	Civil Engineering & Architecture (1) <b>BT *</b>
			Computer Integrated Manufacturing (1) <b>BT *</b>	Computer Integrated Manufacturing (1) <b>BT *</b>
			Principles of Engineering (1) <b>BT *</b>	
<b>Architecture &amp; Construction</b>	Career Class (.5)	Intro to Engineering Design (1) <b>BT</b>	Civil Engineering & Architecture (1) <b>BT *</b>	Civil Engineering & Architecture (1) <b>BT *</b>
	Engineering Essentials (.5) <b>BT</b>	Principles of Engineering (1) <b>BT *</b>	Principles of Engineering (1) <b>BT *</b>	
	Intro to Engineering Design (1) <b>BT</b>			

*Elective courses indicated in italics fulfill the core graduation requirements.*

- \*** Course may require a prerequisite/grade level
- CCP** College Credit Plus
- AP** Advanced Placement
- BT** Butler Tech

# Business, Marketing, & Management



## Mission

The mission of the MHS Business, Marketing, and Management field is to provide students with a rigorous academic course of study, including experiential learning that develops skills, teamwork, and problem-solving for industry readiness. Students may choose a program of study in business that offers exposure to best practices through various business opportunities while preparing for entrepreneurship and apprenticeships.

## RELATED CAREERS

- Business Marketing
- Business Accounting
- Business Finance
- Business Administration
- Entrepreneurship
- Apprenticeships
- Hospitality
- Retail
- Local Business Opportunities

## STUDENT ORGANIZATIONS

- DECA
- FCLA
- Leadership

## WORK BASED LEARNING & CREDENTIALING

TBD

## RELATED HIGHER EDUCATION MAJORS

### Marketing

- Marketing
- Advertising
- Business Administration
- Communications
- Public Relations
- Digital Marketing

### Finance

- Finance
- Accounting
- Economics
- Business Administration
- Financial Planning
- Actuarial Science

### Business Management & Administration

- Business Administration
- Human Resources Management
- Organizational Leadership
- Entrepreneurship
- Operations Management
- Management

### Hospitality & Tourism

- Hospitality Management
- Tourism Management
- Event Planning
- Hotel and Restaurant Management
- Travel and Tourism Management
- Culinary Arts



# Business, Marketing, & Management Field Courses



CAREER FIELD COURSES	9 <sup>TH</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
<b>Marketing</b>	Career Class (.5)	Business Foundations (1) <b>BT</b>	Management Principles (1) <b>BT</b>	Sports Marketing (1) <b>BT</b>
	Business Foundations (1) <b>BT</b>	Management Principles (1) <b>BT</b>	Sports Marketing (1) <b>BT</b>	Professional & Technical Sales (1) <b>BT</b> *
<b>Finance</b>	Career Class (.5)	Business Foundations (1) <b>BT</b>	Management Principles (1) <b>BT</b>	Professional & Technical Sales (1) <b>BT</b> *
	Business Foundations (1) <b>BT</b>	Management Principles (1) <b>BT</b>	Sports Marketing (1) <b>BT</b>	Strategic Entrepreneurship (1) <b>BT</b> *
<b>Business Management &amp; Administration</b>	Career Class (.5)	Business Foundations (1) <b>BT</b>	Management Principles (1) <b>BT</b>	Sports Marketing (1) <b>BT</b>
	Business Foundations (1) <b>BT</b>	Management Principles (1) <b>BT</b>	Sports Marketing (1) <b>BT</b>	Strategic Entrepreneurship (1) <b>BT</b> *
<b>Hospitality &amp; Tourism</b>	Career Class (.5)	Business Foundations (1) <b>BT</b>	Management Principles (1) <b>BT</b>	Contemporary Cuisine (1) <b>BT</b>
	Business Foundations (1) <b>BT</b>	Management Principles (1) <b>BT</b>	Contemporary Cuisine (1) <b>BT</b>	Baking & Pastry (1) <b>BT</b> *
		Hospitality Fundamentals (1) <b>BT</b>	Baking & Pastry (1) <b>BT</b> *	Strategic Entrepreneurship (1) <b>BT</b> *
			Hospitality Fundamentals (1) <b>BT</b>	

*Elective courses indicated in italics fulfill the core graduation requirements.*

- \* Course may require a prerequisite/grade level
- CCP College Credit Plus
- AP Advanced Placement
- BT Butler Tech

# Communication & Information Systems



## Mission

The Mission of the MHS Communication Information Systems field is to provide students with a combination of rigorous academic courses with real-world experiential projects that tap into students' creativity, inquiry, and critical thinking skills. Students may choose a program of study in the visual arts, performing arts, or humanities—each of which provides opportunities to put into action and expose students to the art-related vocations and higher education programs available to students beyond high school.

## RELATED CAREERS

- Artist
- Actor/Vocalist
- Director/Playwright
- Theatre Technician
- Writer/Journalist
- Graphic Designer
- Music Therapist/Musician
- Filmmaker
- Podcaster/Vlogger
- Translator

## STUDENT ORGANIZATIONS

- Drama Club & Thespians
- Band-Marching, Concert, Pep, & Jazz
- Chamber Orchestra
- Choir, Acapella, & Purple Pizzazz (Show Choir)
- Art Club
- Philosophy Club
- World Language Club, French Club, & Spanish Club

## WORK BASED LEARNING & CREDENTIALING

TBD

## RELATED HIGHER EDUCATION MAJORS

### Arts, A/V Technology & Communication

- Fine Arts
- Graphic Design
- Film and Media Studies
- Digital Media Production
- Communications
- Journalism
- Performing Arts
- Photography
- Public Relations

### Information Technology

- Computer Science
- Information Systems
- Cybersecurity
- Software Engineering
- Data Analytics
- Network Administration
- Game Design
- IT Management



*Elective courses indicated in italics fulfill the core graduation requirements.*

- \* Course may require a prerequisite/grade level
- CCP College Credit Plus
- AP Advanced Placement
- BT Butler Tech

# Communication & Information Systems Field Courses



CAREER FIELD COURSES	9 <sup>TH</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
Performing Arts	Career Class (.5)	Concert Band (1)	Concert Band (1)	Concert Band (1)
	Concert Band (1)	Wind Ensemble (1) *	Wind Ensemble (1) *	Wind Ensemble (1) *
	Concert Orchestra (1)	Concert Orchestra (1) *	Honors Wind Ensemble (1) *	Honors Wind Ensemble (1) *
	Symphonic Orchestra (1) *	Symphonic Orchestra (1) *	Concert Orchestra (1) *	Concert Orchestra (1) *
	Concert Choir (1)	Concert Choir (1)	Symphonic Orchestra (1) *	Symphonic Orchestra (1) *
	Drama (.5)	Concert Choir (1)	Honors Symphonic Orchestra (1) *	Honors Symphonic Orchestra (1) *
	Theatre (.5)	Acapella Choir (1) *	Concert Choir (1)	Concert Choir (1)
		Show Choir (1) *	Acapella Choir (1) *	Acapella Choir (1) *
		Drama (.5)	Honors Acapella Choir (1) *	Honors Acapella Choir (1) *
		Theatre (.5)	Show Choir (1) *	Show Choir (1) *
Visual Arts	Careers Class (.5)	Fundamentals of Art (1)	Fundamentals of Art (1)	Ceramics I (1) *
	Fundamentals of Art (1)	Art Exploration (.5)	Art Exploration (.5)	Ceramics II (1) *
	Art Exploration (.5)	Ceramics I (.5) *	Ceramics I (1) *	Drawing/Painting I (.5) *
	Digital Art I (.5)	Drawing/Painting I (.5) *	Ceramics II (1) *	Drawing/Painting II (.5) *
	Digital Art II (.5) *	Digital Art I (.5)	Drawing/Painting I (.5) *	Studio Art (1) AP *
	Photography I (.5) *	Digital Art II (.5) *	Drawing/Painting II (.5) *	Sculpture and 3D Design (.5) *
	Photography II (.5) *	Digital Media Productions (.5) *	Studio Art (1) AP *	Tattoo History and Design (.5) *
		Photography I (.5) *	Sculpture and 3D Design (.5) *	Digital Art I (.5)
		Photography II (.5) *	Tattoo History and Design (.5) *	Digital Art II (.5) *
			Digital Art I (.5)	Digital Media Productions (.5) *
			Digital Art II (.5) *	Film Digital Production (.5) *
			Digital Media Productions (.5) *	Photography I (.5) *
			Film Digital Production (.5) *	Photography II (.5) *
			Photography I (.5) *	
			Photography II (.5) *	
	Informational Technology	Career Class (.5)	Intro to Robotics (1) *	Intro to Robotics (1) *
		Cybersecurity I (1)	Competitive Robotics (1) *	Competitive Robotics (1) *
			Esports (.5)	Esports (.5)
			Cybersecurity I (1)	Cybersecurity I (1)
			Cybersecurity II (1) CCP *	Cybersecurity II (1) CCP *
				Cybersecurity III (1) *

# Health Services



## Mission

The mission of the MHS Health Sciences field is to expose students to develop their ethics of service and leadership skills. Students can focus on their area of interest, whether in health, medicine, or other service-related fields, to gain hands-on experience, learn social responsibility, and ultimately impact positive change in their world. This pathway utilizes a hands-on, project-based curriculum in which all students have the opportunity to learn and become responsible, productive, citizens of the future.

## RELATED CAREERS

- Medical Technician
- Nurse
- Doctor
- Dietician/Nutritionist
- Geneticist
- Occupational Therapist
- Psychologist
- Non-profit Manager

## STUDENT ORGANIZATIONS

- Science Club
- Med Club

## WORK BASED LEARNING & CREDENTIALING

TBD

## RELATED HIGHER EDUCATION MAJORS

.....

### Medical Technician

- Medical Laboratory Science
- Health Science
- Biomedical Technology
- Clinical Laboratory Science

### Nurse

- Nursing (e.g., Registered Nursing, Advanced Practice Nursing)
- Public Health
- Health Science

### Doctor

- Pre-Medicine
- Biology
- Chemistry
- Biochemistry
- Biomedical Science

### Dietician/Nutritionist

- Nutrition Science
- Dietetics
- Food Science
- Public Health

### Geneticist

- Genetics
- Molecular Biology
- Biochemistry
- Biotechnology

### Occupational Therapist

- Occupational Therapy
- Kinesiology
- Psychology
- Rehabilitation Science

### Psychologist

- Psychology
- Behavioral Science
- Neuroscience
- Social Work

### Non-Profit Manager

- Non-Profit Management
- Business Administration
- Public Administration
- Social Work
- Organizational Leadership

# Health Services Field Courses



CAREER FIELD COURSES	9 <sup>TH</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
<b>Health Science</b>	Career Class (.5)	Strength & Conditioning (.5)	Strength & Conditioning (.5)	Strength & Conditioning (.5)
	Hope Squad (1) *	Hope Squad (1) *	Pathways in Athletics (.5)	Pathways in Athletics (.5)
	Health Nutrition & Wellness (1) BT	Health Nutrition & Wellness (1) BT	Hope Squad (1) *	Hope Squad (1)* *
		Medical Terminology (1) BT	<i>Physiology (1)</i> *	<i>Physiology (1)*</i> *
		Exercise & Athletic Training (1) BT	Medical Terminology (1) BT	<i>Psychology (.5)</i>
			Sports Exercise Psychology (1) BT	Sports Exercise Psychology (1) BT
			Exercise & Athletic Training (1) BT	Fitness Eval & Assessment (1) BT *
			Beyond Team Sports (.5)	Athletic Injuries & Prevention (1) BT *
				Beyond Team Sports (.5)

Elective courses indicated in italics fulfill the core graduation requirements.

- \* Course may require a prerequisite/grade level
- CCP College Credit Plus
- AP Advanced Placement
- BT Butler Tech



# Environmental & Agricultural Systems



## Mission

The mission of the MHS Environmental and Agricultural field is to expose students to the ever-growing agricultural industry. Utilizing a hands-on project-based curriculum, students learn about agriculture and the environment in areas of animal sciences, plant sciences, natural resources, and agricultural mechanics. Students will build skills such as inquiry, collaboration, and innovation to better prepare them to be productive citizens of the future.

## RELATED CAREERS

- Agronomist
- Forestry
- Farmer
- Ecologist
- Environmental Engineer
- Landscape Architect
- Veterinarian
- Greenhouse/Nursery Management

## STUDENT ORGANIZATIONS

- Science Club
- Farm Club

## WORK BASED LEARNING & CREDENTIALING

TBD

## RELATED HIGHER EDUCATION MAJORS

.....

### **Agronomist**

- Agronomy
- Crop Science
- Soil Science
- Agricultural Science

### **Forestry**

- Forestry
- Environmental Science
- Natural Resource Management
- Ecology

### **Farmer**

- Agricultural Science
- Agribusiness
- Horticulture
- Sustainable Agriculture

### **Ecologist**

- Ecology
- Environmental Science
- Natural Resource Management
- Biology

### **Environmental Engineer**

- Environmental Engineering
- Civil Engineering
- Chemical Engineering
- Environmental Science

### **Landscape Architect**

- Landscape Architecture
- Environmental Design
- Horticulture Urban Planning

### **Veterinarian**

- Veterinary Medicine
- Animal Science
- Biology
- Zoology

### **Greenhouse/Nursery Management**

- Horticulture
- Plant Science
- Agricultural Science
- Greenhouse Management



# Environmental & Agricultural Systems Field Courses



CAREER FIELD COURSES	9 <sup>TH</sup> GRADE	10 <sup>TH</sup> GRADE	11 <sup>TH</sup> GRADE	12 <sup>TH</sup> GRADE
Environmental & Agricultural Systems	Career Class (.5)	Medical Terminology (1) <b>BT</b>	<i>Agricultural Science I (1)</i>	<i>Psychology (.5)</i> *
			<i>Zoology (1)</i>	<i>Agricultural Science (1)</i>
				<i>Zoology (1)</i>
				<i>Agricultural Science II (1)</i> *

Elective courses indicated in italics fulfill the core graduation requirements.

- \* Course may require a prerequisite/grade level
- CCP College Credit Plus
- AP Advanced Placement
- BT Butler Tech



# Graduation Requirements

## Ohio's graduation requirements consist of 3 key components:

- 1 Course Completion
- 2 Competency Demonstration
- 3 Readiness Demonstration

[Ohio High School Graduation Requirements](#) website for additional state information

[MHS Guidance](#) website for Student Course Planner



### Middle School Courses for High School Credit

Students can earn high school credit by successfully completing certain courses at Middletown Middle School. These courses and their respective credits are:

- **Algebra I:** .5 credit per semester
- **Honors Geometry:** .5 credit per semester
- **Spanish I:** .5 credit per semester
- **Health:** .5 credit
- **Physical Education (7th grade):** .25 credit
- **Physical Education (8th grade):** .25 credit

Please note that middle school grades will appear on the high school transcript but will not affect the high school GPA.

## 1 COURSE COMPLETION

### Ohio Revised Code section 3313.603

Ohio law outlines the course requirements all students must complete to earn a diploma. Ohio students must earn a minimum of 20 units in specific subject areas and any additional local requirements.

COURSE	CREDITS
<b>English</b>	<b>4</b>
<b>Math</b> Algebra 1 (1 credit) Algebra 2 or equivalent (1 credit)	<b>4</b>
<b>Science</b> Biological (1 credit) Physical (1 credit) Elective (1 credit)	<b>3</b>
<b>Social Studies</b> World History (.5 credit) AM History (1 credit) AM Government (.5 credit)	<b>3</b>
<b>Health</b>	<b>.5</b>
<b>Physical Education*</b> 2 semesters	<b>.5</b>
<b>Financial Literacy</b>	<b>.5</b>
<b>Fine Arts</b>	<b>1</b>
<b>Electives</b>	<b>3.5</b>
<b>Total</b>	<b>20</b>

*\*PE Waiver - Students can earn their physical education .5 credit by participating in approved MHS extracurricular activities. Students who complete two seasons of athletics, marching band, winter guard, cheerleading, or earn two Show Choir credits can apply for a waiver.*

## 2 COMPETENCY DEMONSTRATION

### Ohio Revised Code section 3313.618(B)(1)

Students must earn a 684 raw score on the English II and algebra I end-of-course tests. Students not earning competency scores must retake the test at least once. In lieu of attaining competency scores on the state tests, students can use alternative ways to demonstrate competency.

### Second, show competency

Earn a passing score on Ohio's high school algebra I and english II tests. Students who do not pass the test will be offered additional support and must retake the test at least once.

### Is testing not your strength?

After you have taken your tests, there are three additional ways to show competency!

### Option 1:

#### Demonstrate two career-focused activities:

#### 1 Foundational

- Proficient scores on WebXams
- A 12-point industry credential
- A pre-apprenticeship or acceptance into an approved apprenticeship program

#### 2 Supporting

- Work-based learning
- Earn the required score on WorkKeys.  
Earn the OhioMeansJobs Readiness Seal

### Option 2:

#### Enlist in the Military

Show evidence that you have signed a contract to enter a branch of the U.S. armed services upon graduation.

### Option 3:

#### Complete college coursework

Earn credit for one college-level math and/or college-level english course through Ohio's free College Credit Plus Program.

[ODEW End of Course State Testing Requirements](#) website for additional information.



## 3 READINESS DEMONSTRATION

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

### State of Ohio Seals

Visit [State of Ohio Seals](#) website for additional information.

### Local Seals:

#### Community Service Seal

Student must complete 12 hours in various school or community service projects such as SALT, Clean Up Middletown, Hope House, etc. or complete PEER Tutoring class.

#### Student Engagement Seal

Student must complete 6 points earned through participation in extracurricular activities such as (but not limited to) athletics, music performances, clubs, student government and community activities with 1 point earned per season/performance/year of participation.

#### Fine Arts and Performing Arts Seal

Student must complete 6 points in various fine arts classes or school/community-based music, art, theater or dance performance with 1 point earned for each semester class or 1 point for each performance with a maximum of 2 points in performance.

# General Information

## Grading System

### SEMESTER GRADING

Middletown High School (MHS) operates on a semester grading system. Credit is awarded for a course upon successful completion of each semester. The cumulative Grade Point Average (GPA) is calculated at the end of each semester based on the semester grade. A continuous 18-week grading period is used to determine credit eligibility and the semester GPA.

#### Grading Scale by Percentage

- A** 90-100%
- B** 80-89.49%
- C** 70-79.49%
- D** 60-69.49%
- F** 0-59.49%

#### Grading Scale by Points

- A** 4 points
- B** 3 points
- C** 2 points
- D** 1 point
- F** 0 points

#### GPA Calculation

- A** 3.6 - 4.00
- B** 2.6 - 3.59
- C** 1.6 - 2.59
- D** 0.6 - 1.59
- F** Below 0.6

Individual subject teachers may use various methods to determine a student's grade percentage, which is then rounded to the nearest whole number.

### CLASS RANKING

Middletown High School does not rank its students. The district uses the Latin honors system to recognize academic achievement, with summa cum laude being the highest honor.

### WEIGHTED GRADES

At Middletown High School, grades are weighted to reflect the rigor of Advanced Placement (AP), College Credit Plus (CCP), and Honors courses:

#### AP and CCP Courses

- A** 5 points
- B** 4 points
- C** 3 points

#### Honors Courses (half-weighted)

- A** 4.5 points
- B** 3.5 points
- C** 2.5 points

Grades below a "C" do not receive additional weighting. Weighted grades are factored into the Honor Roll and cumulative GPA calculations, and this information appears on students' transcripts. This system encourages students to pursue challenging courses while reflecting the additional effort in their GPA.

### EL STUDENT GRADING POLICY

It is important for the Middletown City Schools District to operate within a uniform policy of grading and issuing credits for students who are English Learners. These guidelines are intended to ensure equity and consistency in the evaluation of EL students while preserving the integrity of the grading system.

[View the Complete EL Program Manual](#)

## STUDENT PROGRESS

Parents are encouraged to regularly monitor their student's academic progress and grades through ProgressBook. This tool provides real-time updates on assignments, grades, and overall performance, helping parents stay informed and support their student's success. If your student needs extra assistance or support, please contact your student's counselor for information on additional resources.

Report cards at Middletown High School are now accessible online through ProgressBook and will no longer be mailed home. They can be viewed:

- After the first week of the second semester
- Approximately one week after the school year ends

## PROGRESS BOOK

ProgressBook is an online system at Middletown High School that enables school staff, parents, and students to view grades and classroom assignments. To access Progress Book:

- 1 Visit the school website at [middletowncityschools.com](http://middletowncityschools.com)
- 2 Click on the ProgressBook icon
- 3 Student Access: Log in using your Google Account credentials
- 4 Parent/Guardian Access: Create an account using a Registration Key provided by the school district.

## TRANSCRIPTS

Middletown High School students can obtain a copy of their transcript at no cost by visiting the Guidance Office while enrolled.

For transcripts sent directly to colleges, MHS uses SchoolLinks, a system where students receive registration information to set up their accounts.

After graduation, starting July 1, all transcript requests must be made through [parchment.com](http://parchment.com) and will incur a \$5 fee per request. This process ensures students and graduates have access to their academic records as needed.

## Educational Opportunities

Contact your school counselor today to learn more about the opportunities below.

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### COLLEGE CREDIT PLUS (CCP)

Earn college credit while still in high school! CCP allows students in grades 7-12 to take college courses for both high school and college credit. Courses can be taken at a local college or online. To participate, students must meet specific deadlines and requirements which include but are not limited to attending the CCP information session and completing the CCP Intent to Participate form by April 1st. Visit [MCS D College Credit Plus](#) for more information.

### DUAL CREDIT

The high school offers a variety of rigorous dual credit courses, allowing students to earn multiple high school credits while challenging themselves academically and exploring potential career paths. Some courses may apply to multiple high school subject credits, maximizing students' learning potential and efficiency. Additionally, students may earn college credit simultaneously through the College Credit Plus (CCP) program, potentially graduating with both a high school diploma and college credits.

### EARLY COLLEGE ACADEMY

The Early College Academy allows students to graduate with a Miami University Associate's degree and high school diploma at the same time. The Early College Academy program enrolls juniors and seniors as full-time college students. Students have the opportunity to earn an associates degree at no cost to them. Visit [Miami University Early College Academy](#) for more information.

### FLEXIBLE CREDIT OPTION

Flexible Credit allows students to earn credit through various methods, such as projects, internships, or research. This is a great option for students who want to explore their interests and gain real-world experience. See your counselor for more information.

### MIDD STATE

Midd State is a flexible learning program designed to meet the unique needs of non-traditional students. It offers a blend of online and in-person learning, allowing you to work at your own pace while receiving support from Middletown City Schools staff.

#### Key Features of Midd State

- **PERSONALIZED LEARNING**  
Tailor your education to your specific needs and goals
- **FLEXIBLE SCHEDULING**  
Balance your academic and personal commitments
- **EXPERT SUPPORT**  
Receive guidance from experienced teachers, counselors, and mentors
- **REAL-WORLD OPPORTUNITIES**  
Participate in extracurricular activities and athletics

## How Midd State Works

- **ENROLLMENT**

Register for Midd State during the school year course selection process or see your counselor for a referral

- **ORIENTATION**

Attend a mandatory orientation to learn about the program and meet your teachers

- **ONLINE LEARNING**

Utilize the Apex Learning system to access core and elective courses

- **IN-PERSON SUPPORT**

Participate in regular check-ins, tutoring sessions, and mentoring

- **GRADUATION REQUIREMENTS**

Fulfill all Middletown High School and the State of Ohio graduation requirements, including End of Course Assessments

## BUTLER TECH CAREER TECHNICAL EDUCATION

Butler Tech offers several career technical programs at multiple campus locations. Programs prepare students for the technical occupations of the future. Butler Tech provides the following:

- **3-YEAR PROGRAMS**

As a sophomore, immerse yourself in a comprehensive, in-depth learning experience

- **2-YEAR PROGRAMS**

As a Junior, gain specialized skills and knowledge in a chosen career field

- **1-YEAR SENIOR PROGRAMS**

As a Senior, focus on industry certifications and career readiness in your senior year

To apply, research programs, submit your application in the fall, and participate in the lottery placement. Visit [Butlertech.org](http://Butlertech.org) for more information.

## WARREN COUNTY CAREER TECHNICAL EDUCATION

Warren County Career Center (WCCC) offers a variety of career-technical programs similar to Butler Tech. If you're not accepted into your desired program at Butler Tech, you can apply to WCCC in the Spring. Additionally, if WCCC offers a program that Butler Tech doesn't, sophomore students can apply directly to WCCC without applying to Butler Tech. Visit [mywcc.org](http://mywcc.org) for more information.

## FOREIGN EXCHANGE PROGRAM

Students interested in participating in any foreign exchange program should contact their counselor.

## EARLY GRADUATION

Students who can complete the academic requirements for graduation prior to the eighth semester of high school are eligible to apply for early graduation. Students who desire to graduate prior to their scheduled graduation date and terminate their attendance in Middletown High School prior to the eighth semester must complete the application. Students and parents/guardians are responsible for understanding how early graduation could impact their ability to play collegiate sports and should contact the college athletic department before making this decision. View the [Early Graduation Application](#).

## LATE ARRIVAL/EARLY RELEASE

The Late Entry/Early Release Option is an earned privilege available to Seniors who are on track to graduate concerning credits and state testing. Seniors may be released up to a maximum of 2 periods per school day. The actual time of day they are released may vary according to the student's school schedule (early release, late arrival).

- This privilege may be revoked at any time due to grades, attendance, behavior, or administrative discretion. Also, the parent/legal guardian may revoke this for their student at any time. When this privilege is revoked, students will be placed in study halls for the remainder of the semester.
- Requesting a release option does not guarantee that the student will receive early release/late entry. The scheduling of the release option does not take precedence over the scheduling of any classes. Class sections will not be changed in order to accommodate early release. Release is not available until the student is notified with an official schedule that their release has been approved.
- Students are responsible for their transportation. Middletown City School District will not provide transportation.
- Students who participate are not permitted to remain in the building or on the school property (or any other school property throughout the district) during their approved release time without prior approval.
- Athletes are responsible for scheduling (and passing) the minimum number of classes in order to be eligible to participate in MHS athletics according to the OHSAA and Middletown City Schools' athletic guidelines.
- Middletown City School District cares about the safety and well-being of its students, and requires a parent/guardian to authorize the release with their signature. Permission form must be completed and signed by parent/guardian to qualify for a Release Option. Middletown City School District is not responsible for the safety or well-being of the student during their approved release time.



# Scheduling

Students should select courses that align with their future goals of enrollment, employment, enlistment, or a combination. Course selection should also consider the student's abilities and interests.

Counselors will review student records, teacher recommendations, and student post-secondary goals to assist with course selection. Students should discuss their plans with their teachers and parents/guardians prior to meeting with their counselor.

Class schedules are created based on graduation requirements, availability, and class size. Requests for specific teachers cannot be accommodated. The administration reserves the right to make scheduling decisions based on individual needs and test scores.

## OBTAINING SCHEDULES

Students will be given their finalized course requests in March. Final schedules are available the first day of school.

## ADDING A COURSE

Students may add a course within the first 10 days of each semester to ensure they meet the required class hours for credit. Any missed coursework must be completed within two weeks.

## DROPPING A COURSE

Students should carefully plan their course schedules with their teachers and counselors to minimize course drops. Course changes may be necessary due to failing grades in prerequisite courses. In such cases, the counselor will make schedule adjustments and inform parents. Underclassmen cannot drop a course which would reduce their schedule to fewer than six graded periods.

## COURSE DROP PROCEDURES

### Early Withdrawal

Students may withdraw from a class by the end of the 9th week of the semester. Dropped courses will not appear on the permanent record.

### Late Withdrawal

Courses dropped after the 9th week will receive an "F" grade and be included in the GPA calculation.

### Disciplinary Removal

Students removed from a class due to disciplinary reasons will receive an "F" grade.

## GRADE REPLACEMENT

Students can repeat a course with a grade of C or below, either during the regular school year or through online learning. A higher grade from the repeated course can replace the original grade, but it cannot lower the original grade. If a student moves to a different level within the same subject with teacher approval, the grade from the previous class will be carried over to the new class. This includes letter grades and percentages, even for weighted classes.

## AUDIT

Students may audit a course with a teacher and parent/guardian's permission. This means they'll complete all coursework but won't receive credit. The decision to audit must be made by the end of the 9th week of the semester and could be helpful for students who want to learn but may struggle with grades. However, students must maintain satisfactory progress and carry a minimum of six graded courses per semester.

## TRANSFER STUDENTS

Students who transfer to Middletown High School from another district will be eligible to receive weighted credit in all courses that are comparable to the Honors, AP, or CCP courses that Middletown offers. Honors and AP courses not offered at Middletown will remain on the student's transcript unweighted (converted to a 4-point scale) but with their original title. Visit the [MHS Guidance website](#) for additional information.

## COURSE FEES

Currently, Middletown City Schools does not charge tuition fees. However, students are responsible for costs associated with lost or damaged school property, including Chromebooks, Wi-Fi hotspots, and athletic/extracurricular fees. Fees may also apply to specific courses, such as AP classes, or programs offered by Butler Tech or Warren County Career Center.

## SUMMER SCHOOL

Middletown City Schools may offer summer school for credit recovery and limited first-time credit opportunities each year.

## ADVANCED PLACEMENT AND HONORS COURSES

This policy for Advanced Placement (AP) and Honors courses establishes expectations, prerequisites, and support mechanisms to ensure students are prepared for the rigor associated with these classes.

- AP courses reflect rigorous, college-level curriculum, offering potential college credit based on mandatory end of course exam scores. AP exams, mandatory for enrolled students to receive college credit, are held each May. The exam fee is approximately \$88, but financial assistance is available for students in need.
- Honors courses are designed to provide students with a more rigorous academic experience compared to standard courses. Honors courses serve as preparatory classes, aligning with standards.

## ENROLLMENT AND REQUIREMENTS

### Selection Criteria

- Teacher recommendations
- Minimum overall GPA of 3.0 in academic subjects and in the specific course area

### Alternative Enrollment

Students not meeting the criteria can enroll after

- Meeting with a counselor or teacher to review course content
- Submitting a completed waiver form

### Academic Expectations

Students are expected to maintain an A or B average. If grades fall below a C and show no improvement, students may be transferred to a standard course after consultation.

### Course Drop Protocol

Teacher, student, or parent can initiate discussions on dropping the course if standards are unmet. The student may choose to continue in the course after understanding the expectations.

## STUDENT AIDES AND PEER MENTORS

Students in Grades 10-12 at Middletown High School have the option to be a student aide or peer mentor. This initiative allows students to gain valuable experience while contributing to the school community. Students will be awarded 30 hours of community service toward earning the Community Service Seal or be used for other opportunities such as scholarships with a letter upon request from their counselor.

**Student Aide** replaces their scheduled study hall with an aide position in one of the following areas: an office, the media center, or the technology office.

**Peer Mentor** replaces their scheduled study hall with a peer tutor position in one of the following areas: P.E.O.P.E.L Art, Choir, Physical Education, and Middle Common Grounds. The position will be listed on the student's transcript with an "AU" designation for audit, indicating that it is not for credit.

### Application and Requirements

- Application Process: Students must fill out an application to apply
- Schedule Change: A schedule change must be approved by the Guidance Counselor

### Eligibility Criteria

- Good academic standing and meeting graduation requirements
- Maintain all passing grades from the previous semester
- Cumulative GPA of at least 2.0
- Good standing in attendance and discipline

## WORK-BASED LEARNING

Work-based learning, in partnership with Middletown High School and local businesses and industries, offers students a coordinated sequence of real-world experiences. These learning activities, which can take place during or after the school day, help young people explore various careers and make informed decisions about their future paths. Visit the [Ohio Department of Education and Workforce](#) for an overview.

## Academic Awards

### HONOR ROLL

Each semester students earning a GPA of 3.4 and above will be placed on the MHS Honor Roll

### CUM LAUDE

A student's final graduating cumulative GPA of 3.5-3.74

### MAGNA CUM LAUDE

A student's final graduating cumulative GPA of 3.75-3.99

### SUMMA CUM LAUDE

A student's final graduating cumulative GPA of 4.00 and above

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### PRESIDENT AWARD FOR EDUCATIONAL EXCELLENCE

The President's Award for Educational Excellence recognizes academic achievement at Middletown High School. To qualify, students must meet the following criteria:

#### Grade Point Average

A minimum 3.5 cumulative non-weighted GPA on a 4.0 scale. (7 semesters)

#### National Testing

- **ACT:** Minimum reading and math scores of 22 (remediation-free/college-ready)
- **SAT:** Minimum reading score of 480 and math score of 530 (remediation-free/college-ready)

### PRESIDENT'S AWARD FOR EDUCATIONAL ACHIEVEMENT

The President's Award for Educational Achievement recognizes students who demonstrate significant academic growth, improvement, commitment, or intellectual development. This award honors students who strive for their best, often overcoming challenges. To qualify, Middletown High School students must meet the following criteria:

#### Grade Point Average

A minimum 3.0 cumulative GPA on a 4.0 scale, with a notable increase from junior to senior year

#### National Testing

- **ACT:** Minimum reading or math score of 22, or a minimum composite score of 22 (remediation-free/college-ready)
- **SAT:** Minimum reading score of 480 or math score of 530 (remediation-free/college-ready)

### NATIONAL HONOR SOCIETY

The Middletown Chapter of the National Honor Society recognizes students who excel in scholarship, leadership, service, and character. Students who meet the criteria may be invited to join the National Honor Society. Visit the [National Honor Society website](#) for more information.

# Extracurricular Activities Guidelines

## HONORS DIPLOMA OPTIONS

Middletown City Schools offers a variety of honors diplomas, including the Academic Honors Diploma, as recognized by the Ohio Department of Education and Workforce. For more information on diploma options, please visit the [Honors Diploma website](#).

## ACADEMIC HONORS DIPLOMA

### [Academic Honors Diploma Requirements](#)

Requirements	State Minimum
Math	Fourth math must be > Algebra 2
Science	One additional unit Advanced Science
Social Studies	One additional unit Social Studies
World Languages	Three sequential units of one world language or no less than 2 sequential units of two world languages studied.
GPA	3.5 on a 4.0 scale
ACT/SAT	ACT: Score of 27 or higher, SAT: Score of 1280 or higher
Seal Requirement	Earn two additional diploma seals, not including the Honors Diploma Seal
Experiential Learning	Field Experience & Portfolio, OhioMeansJobs Readiness Seal*, or Work-Based Learning

\*Students can use OMJ Readiness Seal in 2 additional seal requirements if it is not used in Experiential Learning.

## ELIGIBILITY

By board policy, eligibility criteria for students in grades 7-12 include the following: A minimum of 1.55 GPA or above on a 4.0 system, the GPA is based on the previous semester's grades. A student who does not achieve a 1.55 GPA in the previous semester is ineligible to participate during the semester. The OHSAA eligibility requirements further mandate that:

- Students entering 9th grade must have received passing grades in a minimum of five (5) of the classes in which they were enrolled in the immediately preceding grading period.
- Students in grades 9-12 must have passed five 1 credit courses, or 2.5 credits in the immediately preceding grading semester. The five courses may be a combination of high school and college courses.

Please refer to the [Middie Athletic Handbook](#) for further information and regulations.

## NCAA DIVISION I ACADEMIC REQUIREMENTS

Students that plan on playing sports at a Division I or II school should register with NCAA Eligibility Center [eligibilitycenter.org](http://eligibilitycenter.org) just prior to their senior year of high school.

## NAIA

A student's eligibility to play at an NAIA school is determined upon a student's graduation from high school. Students need to register with the NAIA Eligibility Center, [PlayNAIA.org](http://PlayNAIA.org) prior to their senior year in high school if interested in playing sports at an NAIA college.

## MHS Post-Secondary Planning Guide

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### Helping You Plan for Your Future:

This guide outlines the steps you can take throughout high school to prepare for your next chapter, whether that's **enrollment, enlistment, entrepreneurship, or employment.**

We understand the importance of planning, so we've included resources and opportunities to explore all your options. We encourage you to **communicate with your counselor** throughout the process.

### GRADE 9 FOUNDATION & EXPLORATION

- Good attendance is crucial for academic success. Missing school can lead to falling behind, which can make it harder to achieve your goals.
- This year marks the start of your official academic record. Monitor your ProgressBook account to stay informed about assignments and grades. Strong grades open doors to colleges, employers, and future training programs.
- Get to know your counselor and MAP teacher. They're here to support your smooth transition to high school.
- Take advantage of academic support, utilize Schoology for updates, and explore your interests through career assessments and extracurricular activities.
- Start exploring potential careers and colleges using SchoolLinks. In your 9th-grade career course, you will focus on identifying your career field of interest.

## GRADE 10 CHALLENGE & FOCUS

- Regular attendance is essential for building strong study habits and maintaining good grades. Missing school can disrupt your learning and make it difficult to keep up with assignments.
- Continue working with your counselor to track academic progress. Monitor your ProgressBook account to stay informed about assignments and grades.
- Select courses that align with your chosen career field.
- Keep up academic performance while participating in activities you enjoy.
- Use Schoology for updates and explore career options using SchoolLinks and online resources like [higher.ed.ohio.gov](http://higher.ed.ohio.gov) and [ohio.means.jobs.ohio.gov](http://ohio.means.jobs.ohio.gov)
- Visit Butler Tech's Career Day to explore technical programs.
- Consider volunteering in your community.
- Research colleges and attend local college fairs.
- Talk to your parents about college funding options.
- Learn new things - read widely to expand your knowledge and reading skills.
- Attend the College Credit Plus (CCP) meeting to learn if it's a good fit for your junior year.

## GRADE 11 BUILDING YOUR PATH

- Attending school regularly is vital for maintaining your academic momentum and preparing for college or career. Missing school can impact your grades and limit your opportunities.
- Regular communication with your counselor becomes crucial.
- Continue selecting courses that align with your chosen career field.
- Maintain strong academic performance. Monitor your ProgressBook account to stay informed about assignments and grades.
- Utilize Schoology for updates and continue career research using SchoolLinks.
- Match your interests to potential careers using online resources.
- Develop a college list with 10-12 colleges that appeal to you.
- Register for the PSAT in October (which qualifies you for National Merit Scholarship).
- Register online for the ACT in spring. You can use 2 free ACT waivers starting in junior year. Aim to take the ACT twice during this year.
- Participate in college representative visits, funding seminars, and other school programs.
- Continue volunteering in your community.
- Attend college representative visits at MHS.
- Re-attend the College Credit Plus meeting to see if it's right for your senior year.
- Visit and tour colleges (consider summer visits).

# General Information CONTINUED

## **SUMMER BETWEEN GRADES 11 & 12 ACTION TIME!**

- Good attendance during the school year is crucial for a successful transition to post-secondary education or employment.
- Plan your summer – prioritize visiting colleges and scheduling admissions interviews.
- Review college application deadlines to ensure you meet them.
- Consider summer jobs related to your career interests.
- Volunteer in your community.

## **GRADE 12 APPLYING & FINALIZING**

- Consistent attendance in your final year of high school is essential for maintaining academic momentum.
- Stay connected with your counselor.
- Continue selecting courses that align with your chosen career field or post-secondary plans.
- Maintain a strong academic program in your final year.
- Register and take the SAT in the fall (use your 2 free waivers if available). Consider taking the ACT again.
- Use SchooLinks to narrow down your college choices and submit applications.
- Colleges consider your first-semester senior year grades, so maintain strong performance.
- Attend FAFSA meetings to take advantage of early filing for financial aid.
- Complete college visits early in the year.
- Check the MHS website for guidance updates, use Schoology for academics and announcements, and utilize your counselor's Remind App for important information.

- Prepare college applications - meet deadlines – aim to apply by mid-November.
- Be aware of early deadlines for special programs or scholarships.
- Inform your counselor of your post-graduation plans.
- Explore military options by talking to local recruiters and consulting your counselor.
- If you plan to enter the workforce after graduation, take the following steps:

### **1 START YOUR JOB SEARCH EARLY:**

Use online job boards, networking, and your school's career center

### **2 DEVELOP YOUR RESUME AND COVER LETTER:**

Highlight your skills, experiences, and academic achievements

### **3 PRACTICE INTERVIEW SKILLS:**

Role-play with a friend or family member, or use online resources

### **4 OBTAIN ANY NECESSARY CERTIFICATIONS OR LICENSES:**

Research specific requirements for your chosen field

### **5 BUILD YOUR PROFESSIONAL NETWORK:**

Connect with professionals in your desired industry

- Graduate with confidence, knowing you've invested time in planning for your future.
- Use SchooLinks to request your final transcript to be sent to your chosen college, the military, or job placement.

**This guide is a starting point.**

We encourage you to explore all your options and talk to your counselor about the resources available at MHS to help you achieve your goals!



# Post-Secondary Assessments

## PSAT

The PSAT is a practice SAT exam and serves as the qualifying test for the National Merit Scholarship. It is typically taken by juniors in October, with the specific test date announced at the beginning of the school year.

- **REGISTRATION:** Information will be provided to juniors in the fall
- **FEE:** The College Board charges a fee of approximately \$18 for the test

Taking the PSAT is an important step for students aiming to qualify for scholarships and to gain practice for the SAT.

## ASVAB

The Armed Services Vocational Aptitude Battery (ASVAB) is a multiple-choice test that helps students and military applicants identify their strengths and interests and find a career that matches them. The ASVAB is used to determine if someone is qualified to enlist in the U.S. Armed Forces. The Armed Forces Qualification Test (AFQT) is a score derived from four of the ASVAB subtests. A score of at least 31 on the AFQT indicates readiness in English and math. Check out the [ASVAB website](#) for more information.

## WORK-KEYS

All full-time adult education career technical school programs, and some additional courses, require students to take the WorkKeys assessment as a pre-enrollment requirement. The WorkKeys® system measures essential workplace skills. These skills are assessed through three components: Applied Math, Workplace Documents, and Graphic Literacy. Successful completion of these assessments can lead to the ACT National Career Readiness Certificate.

## ACT/SAT

Both the ACT and SAT are accepted by all four-year colleges and universities in the U.S., though some colleges have adopted test-optional policies. Students should verify the requirements with each college they're considering.

### Recommendations

- **ACT:** Take at least three times—February, at MHS, summer after junior year, and again in fall of senior year
- **SAT:** Take twice during the fall of senior year

### Fee Waivers

Middletown students are eligible for two fee waivers for each test (ACT and SAT) during junior or senior year. Students should request waivers from their counselor at least two months before the test date.

### Test Dates

- **ACT:** Visit [actstudent.org](http://actstudent.org) or the school's guidance webpage for deadlines and dates. Secure your waiver from the counselor.
- **SAT:** Visit [collegeboard.org](http://collegeboard.org) or the school's guidance webpage for deadlines and dates. Secure your waiver from the counselor.

This approach helps students prepare effectively while making the most of the available resources.

# Course Descriptions

## Key



Required for Graduation



Business, Marketing, & Management



Health Sciences



Human Services & Resources



Communications & Information Systems



Environmental & Agricultural Systems



Industrial, Manufacturing, & Engineering Systems

## Art

### FUNDAMENTALS OF ART



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-10**

This personalized art course offers a comprehensive exploration of both two-dimensional (semester one) and three-dimensional (semester two) media. Through hands-on projects and collaborations with local artists and businesses, students will develop essential art skills, critical thinking abilities, and a deep appreciation for art across cultures. This course is ideal for art enthusiasts.

### ART EXPLORATION



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-10**

This course satisfies half of the fine arts graduation requirement and combines art theory with practice. Students will explore art through reading, writing, and creating 2D projects. This course offers a comprehensive introduction to diverse art forms, providing a broad overview of artistic techniques and styles.

### CERAMICS I



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

**Prerequisite: Successful completion of two semesters of introductory art courses**

This ceramics course offers a comprehensive exploration of clay, blending technical skills, historical context, and artistic expression. Students will learn in a supportive studio environment and develop the skills necessary for future ceramic projects.

### CERAMICS II



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Successful completion of Ceramics I**

Ceramics II is an advanced course that allows students to deepen their understanding of ceramics and experiment with new techniques. Through personalized instruction and a supportive studio environment, students will create meaningful artwork and develop a strong portfolio to prepare them for future artistic endeavors.

## DRAWING/PAINTING I



ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12

**Prerequisite:** Successful completion of an introductory course

Drawing/Painting I offers a comprehensive art education that builds upon the skills learned in Fundamentals of Art. Through a blend of technical instruction and creative exploration, students will refine their abilities in two-dimensional media and develop a strong foundation for future artistic pursuits.

## DRAWING/PAINTING II



ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12

**Prerequisite:** Successful completion of Drawing/Painting I

In Drawing/Painting II, students will connect their artwork with real-world practices and trends through collaborative experiences. This personalized, competency-based course deepens students' skills in various media and techniques, allowing them to refine their artistic voice and engage with contemporary issues.

## DIGITAL ART I



ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12

Digital Art I offers personalized learning to master essential digital art techniques using Photoshop. Students develop practical skills and gain real-world experience, preparing them for a variety of career paths. This course fulfills half of the fine arts graduation requirement and is essential for students who wish to continue their studies in digital art.

## DIGITAL ART II



ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12

**Prerequisite:** Successful completion of Digital Art I

Digital Art II provides a comprehensive exploration of digital media, allowing students to develop complex design skills and create meaningful artwork. Students will expand their Photoshop skills from Digital Art I and learn Illustrator. Through partnerships with local businesses and colleges, students will gain practical experience and prepare for a dynamic future in the field of digital arts.

## DIGITAL MEDIA PRODUCTIONS



ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12

**Prerequisite:** Successful completion of Digital Art I

Digital Media Productions equips students with the skills to create compelling digital content. Through hands-on projects, students learn to use a variety of digital tools and techniques, including video production, podcasting, and digital marketing. This course prepares students for success in the ever-evolving digital media industry.

## PHOTOGRAPHY I



ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12

**Prerequisite:** Successful completion of Digital Art I

This course offers students a foundation in photography, digital photography, and related computer applications, including photo editing. It includes instruction on practical application and marketable skills of photography. Emphasizing creative expression and problem-solving, the program includes hands-on experiences and explores applications for photography as a career.

# Course Descriptions CONTINUED

## PHOTOGRAPHY II



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

**Prerequisite: Successful completion of Digital Art I and Photography I (MMS credit applies)**

Photography II expands on the foundational skills learned in Photography I. Students will explore advanced techniques in lighting, composition, and digital post-production. Through creative projects, students will refine their artistic vision and develop a strong portfolio to showcase their work.

## TATTOO HISTORY AND DESIGN



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Successful completion of two semesters of art credit**

The Tattoo Design Class will provide students with a thorough understanding of the history and techniques of tattoo art while aligning with Middletown High School's career readiness initiatives. The course will blend theoretical knowledge with practical skills, preparing students for careers in visual arts, design, and related fields.

## DIGITAL FILM PRODUCTION



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Successful completion of Digital Art I and Digital Media Productions**

The Digital Film Production course offers students a hands-on opportunity to learn the art and science of filmmaking. From pre-production to post-production, students will gain experience with industry-standard software and develop critical thinking, creativity, and collaboration skills. This course is designed to prepare students for future success in the world of digital media.

## SCULPTURE AND 3D DESIGN



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Successful completion of two semesters of introductory art courses**

The 3D Design course introduces students to the world of sculpture and design. By working with a variety of materials, students will develop their creativity, problem-solving skills, and technical abilities. This course offers a unique opportunity to create innovative and thought-provoking three-dimensional artworks.

## AP STUDIO ART



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Successful completion of Fundamentals of Art and one advanced art course (Ceramics or Drawing/Painting), or have instructor permission**

AP Studio Art offers personalized learning for passionate art students seeking college credit. Students develop their artistic skills through critiques, peer reviews, and real-world experiences, creating a strong portfolio. This course prepares students for success in higher education.

## FUNDAMENTALS OF ART MENTORS/PEOPEL PROGRAM



**TWO SEMESTERS | AU/NO CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

The Fundamentals of Art mentor/PEOPEL program provides training to support students with exceptional abilities in a personalized art learning environment. Mentors gain valuable life skills and leadership experience while fostering inclusive learning experiences and earning the Community Service Seal.

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## English Language Arts

### ENGLISH I



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 9**

English I offers a personalized learning experience focusing on reading, writing, speaking, and critical thinking. Students will analyze various literary genres and connect their studies to real-world situations. This course prepares students by providing strong support systems and opportunities for future success.

### HONORS ENGLISH I



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 9**

Advanced English I offers a rigorous curriculum for accelerated learners. This course focuses on refining language skills and cultivating critical thinking. Students will analyze various genres, produce high-quality writing, and engage in real-world learning experiences designed to boost higher-level thinking.

### ENGLISH II



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 10**

English II is a personalized course designed to enhance reading, writing, speaking, and listening skills. Students will analyze various literary genres, develop critical thinking, and produce a range of written work, including persuasive essays and research papers designed to prepare for the state-required End of Course exam and future success.

### HONORS ENGLISH II



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 10**

Honors English II is a rigorous course offering personalized learning with a focus on critical thinking and analysis. Higher-level learners will explore various genres, write complex essays, and complete a research project. Through active participation and real-world experiences, students will develop strong communication skills and prepare for the state-required End of Course exam.

### ENGLISH III



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 11**

English III focuses learning on American literature and its historical context. Students will engage in a variety of reading and writing assignments, including in depth literary analysis and research. Students will develop strong communication skills and prepare for future success. This course equips students with the skills needed for post-secondary education and careers.

# Course Descriptions CONTINUED

## HONORS ENGLISH III



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 11**

Honors English III is a rigorous course focusing on American literature. Building on previous knowledge, students will engage in advanced analysis and critical thinking. This course emphasizes student-centered learning and real-world experiences, preparing students for post-secondary success.

## ENGLISH IV



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 12**

English IV offers a comprehensive exploration of British literature, its historical context, and its impact on society. Students will engage in reading comprehension, critical analysis, and research, developing the skills needed for future success in higher education and careers.

## HONORS ENGLISH IV



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 12**

Honors English IV offers a rigorous curriculum focused on British literature, using advanced literary analysis and critical thinking. Building on previous knowledge, students will engage with complex texts and develop sophisticated writing skills for future success in higher education and careers.

## INVESTIGATIVE JOURNALISM: TRUE CRIME



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

This course aims to cultivate responsible investigative journalists by teaching practical skills and ethical principles through the lens of Ohio English Language Arts standards. Students will conduct in-depth investigations, from choosing a subject and gathering information to presenting their findings in engaging multimedia formats.

## PUBLIC SPEAKING



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

This course aims to help students develop effective communication skills through the lens of Ohio English Language Arts standards. Students will learn confidence in public speaking through research, organizing, and delivery of compelling presentations using a variety of practical exercises. The course emphasizes goal-oriented tasks and student choice, fostering ability and engagement in public speaking.

## CREATIVE WRITING



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

This course, aligned with Ohio English Language Arts standards, nurtures students' creative and analytical writing skills. Through a blend of direct instruction, technology, and student-led projects, students will explore various genres, from fiction and poetry to argumentative essays. The course emphasizes goal-setting, Universal Design for Learning, and student choice, fostering engagement and critical thinking. A culminating portfolio assessment showcases students' growth and mastery of the course content.

## THE GRAPHIC NOVEL



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

This course, aligned with Ohio English Language Arts standards, explores the medium of graphic novels. Students will analyze various graphic novels, study their structure, and examine their literary and historical significance. They will also research the history of comics and practice writing skills through analytical essays. The course culminates in the creation of original graphic narratives.

## FUNCTIONAL ENGLISH



**TWO SEMESTERS | .5 CREDIT PER SEMESTER**

This course provides personalized instruction to help students with disabilities develop essential life skills. Through small group and individual activities, students will improve their reading, writing, and communication abilities. The focus is on practical skills that can be applied to real-world situations, such as home, work, and community settings.

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## English as a Second Language

### ENGLISH FOR ENGLISH LANGUAGE LEARNERS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

ESL is a tailored program that guides English learners in developing reading, writing, speaking, and listening skills at their own pace. By focusing on real-world language use and cultural understanding, students meet Ohio's rigorous Language Arts standards.

### ESL FOUNDATIONS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

The ESL Foundations course is a program designed to help newcomers to the U.S. develop essential English skills. Students progress at their own pace and receive support to apply English skills in real-world situations. This course fulfills graduation requirements and prepares students for future success.

## ESL STUDY SKILLS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

The ESL Study Skills class helps English Language Learners develop the skills they need to succeed academically. This course provides tailored instruction in study skills and test preparation. Through a student-centered approach and real-world experiences, students build confidence and prepare for future success.

## ENGLISH LANGUAGE DEVELOPMENT LEVELS 1-4



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

This ELL course is designed to help students master English language arts at their own pace. Students are placed in appropriate levels based on their OELPA scores and receive personalized support to overcome language barriers, develop reading, writing, speaking, and listening skills, and progress through levels aligned with ELPA-21 standards

## Mathematics

### INTRO TO ALGEBRA I



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 9**

Intro to Algebra I is a year-long support class designed to help 9th-grade students master the foundational concepts of algebra. Through personalized learning and real-world experiences, students will develop a strong mathematical foundation and prepare for future success.

# Course Descriptions CONTINUED

## ALGEBRA I



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 9**

Algebra I is a year-long course that provides a personalized learning experience focused on algebraic properties, concepts, and operations. Through real-world applications and a student-centered approach, students will develop essential problem-solving and critical-thinking skills. Students will earn one full credit towards the mathematics requirement and be well-prepared to take Geometry next year. Plus, students will be ready for the state-required End of Course exam.

## GEOMETRY



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-11**

**Prerequisite: Successful completion of Algebra I**

Through personalized learning and real-world applications, students will explore 2-D and 3-D geometric figures, transformations, and trigonometric ratios. This course aligns with Ohio State Standards, fulfills a full credit towards graduation, and prepares students for the state-required End of Course exam.

## APPLIED GEOMETRY



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-11**

Applied Geometry is a foundational geometry course designed for Ohio students, aligned with Ohio Learning Standards. This course emphasizes real-world applications of geometric concepts, including properties of shapes, measurement, spatial reasoning, and the relationships between angles and lines. Through hands-on activities and collaborative learning, students will develop critical thinking and problem-solving skills essential for understanding and applying geometry in everyday contexts. Successful completion of this course prepares students for subsequent geometry/mathematical coursework.

38 | MIDDLETOWN HIGH SCHOOL | PROGRAM OF STUDY

## HONORS GEOMETRY



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-10**

**Prerequisite: Successful completion of Algebra I and teacher recommendation**

This course provides a personalized learning experience focused on complex geometric concepts, including 2-D and 3-D figures, transformations, and trigonometry. Through real-world applications and a student-centered approach, students will develop strong problem-solving and critical thinking skills. This course prepares students for future success in higher-level math courses and aligns with Ohio State Standards.

## ALGEBRA II



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Successful completion of Algebra I**

Through personalized learning and real-world applications, students will explore families of functions, number systems, and algebraic modeling. This course aligns with Ohio State Standards and prepares students for future success.

## HONORS ALGEBRA II



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-11**

**Prerequisite: Successful completion of Algebra I and teacher recommendation**

Honors Algebra II is a challenging year-long course designed for students seeking advanced mathematical knowledge. Through personalized learning and real-world applications, students will explore functional relationships, number systems, and algebraic modeling. This course prepares students for higher-level math courses, such as Honors Pre-Calculus and AP Calculus.



## MATH MODELING & REASONING



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

Math Modeling & Reasoning is a year-long course that focuses on real-world problem-solving and mathematical modeling. Through personalized learning and hands-on experiences, students will develop strong critical thinking and problem-solving skills. This course meets the Algebra II graduation requirement and prepares students for college-level math or entry into the workforce.

## DATA SCIENCE FOUNDATIONS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

Data Science Foundations is a course that combines quantitative reasoning, statistics, and computer science. Through personalized learning and real-world experiences, students will learn to use data to make predictions and decisions. This course fulfills the Algebra II graduation requirement and prepares students for future success in higher education and professional careers.

## PRECALCULUS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Successful completion of Algebra II**

Pre-Calculus is a year-long course designed to prepare students for college-level mathematics. Through personalized learning and real-world experiences, students will strengthen their foundational knowledge in functions, algebra, geometry, data analysis, and probability. By the end of the course, students will be well-prepared for college-level math courses and future success.

## HONORS PRE-CALCULUS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Successful completion  
of Algebra II and teacher recommendation**

Honors Pre-Calculus is a rigorous year-long course designed for advanced math students. Building on Algebra II, this course delves into trigonometry, functional relationships, and other advanced topics. Through personalized learning and real-world applications, students will develop strong problem-solving and critical thinking skills.

## FINANCIAL ALGEBRA



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 12**

Financial Algebra is a year-long course that combines algebraic principles with real-world financial applications. Through personalized learning and hands-on experiences, students will develop essential problem-solving skills and prepare for future financial success. This course equips students with the knowledge and skills needed to make informed financial decisions.

## HONORS CALCULUS AB



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Successful completion of PreCalculus**

Honors Calculus AB is a rigorous course designed for high-achieving students seeking a challenge. Building on Honors Pre-Calculus, this course covers fundamental calculus concepts, including limits, derivatives, and integrals. Through personalized learning and real-world applications, students will develop strong critical thinking and problem-solving skills. This course prepares students for college-level mathematics and aligns with graduation requirements.

# Course Descriptions CONTINUED

## AP CALCULUS AB



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Successful completion of PreCalculus**

AP Calculus AB is a rigorous course designed to prepare students for college-level mathematics. This course covers fundamental calculus concepts, including limits, derivatives, and integrals. Through personalized learning and real-world applications, students will develop strong critical thinking and problem-solving skills. Students are required to take the AP Calculus exam.

## HONORS STATISTICS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

Honors Statistics is a year-long course that provides a comprehensive understanding of statistical concepts. Through personalized learning and real-world experiences, students will explore data analysis, statistical inference, and probability.

## AP STATISTICS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

AP Statistics is a rigorous year-long course that provides a deep dive into data analysis and interpretation. Through personalized learning and real-world experiences, students will explore statistical concepts, including data exploration, planning studies, and statistical inference. Students are required to take the AP Statistics exam.

## FUNCTIONAL MATH



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

Functional Math is a personalized course designed to help students develop practical life skills. Through small group and individual instruction, students will learn essential math skills, such as time management, money management, and measurement. This course aligns with graduation requirements and prepares students for future success by equipping them with the skills needed for independent living.

## FOUNDATIONS IN PERSONAL FINANCE



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

Foundations in Personal Finance is a personalized course designed to help students with IEPs develop essential financial skills. Through real-world applications and strong support systems, students will learn how to write checks, budget, and understand compound interest. This course aligns with graduation requirements and prepares students for future financial success.

## Health and Physical Education

### PHYSICAL EDUCATION



**ONE SEMESTER | .25 CREDITS PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

Physical Education offers personalized learning through sports and activities. Students will actively participate and develop skills and fitness knowledge for their lives. By engaging in physical activity, students improve their overall well-being and prepare for a healthy future.

## HEALTH



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

Health class teaches students about their overall health, and wellness, and explores healthcare careers. Through real-world learning, students gain practical skills like first aid and substance abuse prevention. By meeting National Standards, this course prepares students for a healthy future.

## STRENGTH & CONDITIONING



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

**Prerequisite: Successful completion  
of PE graduation requirement**

Strength & Conditioning helps students get fit and explore careers in fitness. Through hands-on training, in the weight room, students develop strength, endurance, and flexibility. They'll gain insights into the fitness industry and learn to create personalized fitness plans for lifelong wellness.

## PATHWAYS IN ATHLETICS



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

Pathways in Athletics explores the world of sports. Through guest speakers, field trips, and real-world experiences, students learn about the history, culture, business of sports, and skills needed to succeed in life. They also gain insights into potential career paths in the sports industry.

## BEYOND TEAM SPORTS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

**Prerequisite: Successful completion  
of PE graduation requirement**

This active upper-level Physical Education course promotes lifelong fitness, combats obesity, and supports students' social and emotional health. Through individual and team sports, students develop skills for personal growth and future opportunities. By the end of the course, students will be prepared to lead healthy, active lives and apply fitness skills to their future goals.

## PHYSICAL EDUCATION MENTORING/PEOPEL PROGRAM



**ONE SEMESTER | AU/NO CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

The mentoring/PEOPEL program offers a unique opportunity to mentor exceptional students. Through personalized training, students develop leadership and teamwork skills while making a positive impact on their community. By participating, students can earn the Community Service Seal and prepare for future success.

## BT NUTRITION & WELLNESS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

Students will increase their knowledge of comprehensive health and wellness. Students will be able to identify the components of fitness and communicate the relationship between physical fitness, physical performance, injury prevention, and nutritional intake. Students will evaluate an individual's state of nutrition based on the impact of personal choices and social, scientific, psychological, and environmental influences. Further, students will calculate an individual's kilocalorie burn rate and recommend an ideal diet and physical fitness plan.

# Course Descriptions CONTINUED

## BT MEDICAL TERMINOLOGY



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

This course focuses on the applications of the rules for constructing and defining medical terms with an emphasis on building a working medical vocabulary. Topics include using the appropriate abbreviations and symbols for anatomical, physiological, and pathological classifications and the associated medical specialties and procedures. Students will decipher medical terms by identifying and using word elements with an emphasis on derivation, meaning, and pronunciation. Further, students will interpret and translate medical records and documents. Students will learn anatomical words, participate in hands-on activities and have interactions with healthcare professionals.

## BT EXERCISE & ATHLETIC TRAINING



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

In this course, students will apply procedures and techniques used in athletic training and in the care and rehabilitation of athletic injuries and therapeutic exercise. Topics include injury prevention, conditioning, and wound care techniques of the musculoskeletal system. Students will learn techniques in the analysis of mechanical factors related to human movement. In addition, current trends, technology, legal considerations, and the role of exercise science in other health fields will be emphasized.

## BT SPORTS EXERCISE PSYCHOLOGY



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

In this class, students apply practical and theoretical information as it relates to the psychology of sport. Students analyze the reciprocal relations among physical activity, exercise behavior, and biochemical and physiological adaptation. Topics include theories of behavior change, exercise psychology interventions, and the relationship between exercise and mental health. Students will develop strategies for promoting optimal performance in athletes.

## BT ATHLETIC INJURY & PREVENTION



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

**Prerequisite: Successful completion  
of Exercise & Athletic Training**

Students will identify signs and symptoms of injury and apply emergency procedures and techniques used in the immediate care of athletic-related trauma. Students will learn clinical and field evaluative processes, injury prevention techniques, conditioning techniques, treatment, taping, bracing, and rehabilitation of musculoskeletal injuries and conditions. Students will design and implement conditioning programs, including nutritional considerations and ergogenic aids. Emphasis is placed on the synthesis of information gathered through injury history, observation, and manual muscle testing.

## BT FITNESS EVALUATION & ASSESSMENT



TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12

**Prerequisite: Successful completion of Health Nutrition & Wellness**

This course is designed for students to complete comprehensive fitness evaluations and develop individualized training programs. Students will administer lab and field tests of cardiovascular endurance, body composition, joint flexibility and muscular strength, power, and endurance. Emphasis is placed on assessing body composition, neuromuscular flexibility, agility, balance, coordination, and proprioception. Students will have an opportunity to take a personal training certification exam at the end of this course to become personal trainers. Students who pass the course with a C or better and pass the WebXam state test will be eligible for CTAG credit.

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## Social Studies

### WORLD STUDIES



TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 9

World Studies is a course that explores the history of the world from 1750 to today. Through personalized learning and real-world experiences, students will develop a strong understanding of different cultures, economies, and governments. This course aligns with graduation requirements and prepares students for future success in higher education or careers.

## HONORS WORLD STUDIES



TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 9

**Prerequisite: Designed for advanced students with a teacher's recommendation**

Advanced World Studies offers a rigorous, college-preparatory course that delves deeper into world history. Through personalized learning and real-world experiences, students develop critical thinking skills and a strong understanding of historical events. This course prepares students for future academic and career success.

## AMERICAN HISTORY



TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 10

This American History course explores major events from 1865 to the present, shaping our nation's history. Through personalized learning and real-world experiences, students will develop a strong understanding of American history and its impact on the present. This course aligns with graduation requirements and prepares students for future success in higher education or careers.

## HONORS AMERICAN HISTORY



TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 10

**Prerequisite: Designed for advanced students with a teacher's recommendation**

Honors American History offers a rigorous, college-preparatory course that delves deeper into U.S. history from 1865 to the present. Through personalized learning and real-world experiences, students develop critical thinking skills and a strong understanding of historical events. This course prepares students for future academic and career success.

# Course Descriptions CONTINUED

## AP AMERICAN HISTORY



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 10**

**Prerequisite: Successful completion  
of World Studies**

AP American History is a rigorous course that covers the history of the United States from the age of exploration to the present. Through personalized learning and real-world experiences, students will develop critical thinking and writing skills. This course prepares students for the AP exam and future success in higher education or careers.

## AMERICAN GOVERNMENT



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 11**

American Government is a course that explores the structure and functions of the United States government. Through personalized learning and real-world experiences, students will develop a strong understanding of the legislative, executive, and judicial branches. This course aligns with graduation requirements and prepares students for future success in higher education, careers, or the military.

## HONORS AMERICAN GOVERNMENT



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 11**

**Prerequisite: Designed for advanced students  
with a teacher's recommendation**

Honors American Government offers a comprehensive exploration of the structure and functions of the U.S. government. Through personalized learning and real-world experiences, students develop a strong understanding of American politics and governance. This course fulfills graduation requirements and prepares students for future success in higher education or careers.

## AP AMERICAN GOVERNMENT



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 11**

**Prerequisite: AP American History (C or better)**

AP American Government offers a rigorous, college-level course that explores the structure and functions of the U.S. government. Through personalized learning and real-world experiences, students develop a deep understanding of American politics and governance. Students are required to take the AP exam.

## ECONOMICS/FINANCIAL LITERACY



**ONE SEMESTER | .5 CREDIT  
OPEN TO STUDENTS IN GRADE 11**

**Dual Credit Social Studies/Financial Lit**

Financial Literacy/Economics provides a foundation in economic principles and personal finance. Through personalized learning and real-world experiences, students develop the skills and knowledge needed to make informed financial decisions. This course aligns with new graduation standards and offers Flex Credit options, preparing students for future success in higher education, careers, or the military.

## HONORS ECONOMICS /FINANCIAL LITERACY



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 11**

Financial Literacy/Honors Economics is a semester course designed to provide students with a strong foundation in financial literacy and economic concepts. Through personalized learning and real-world experiences, students will develop critical thinking and problem-solving skills. This course aligns with graduation requirements and prepares students for future success in higher education or careers.

## PSYCHOLOGY



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 12**

Psychology is a semester-long course that explores the complexities of human behavior and mental processes. Through personalized learning and real-world applications, students will develop a strong understanding of fundamental psychological principles. This course prepares students for future success in Health Science and other careers.

## CONSPIRACY THEORY



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 12**

The Conspiracy Theory course is a semester-long exploration of historical narratives and critical thinking. Through personalized learning and real-world experiences, students will develop the skills to analyze information and debunk inaccurate theories. This course prepares students for future success in higher education or careers by fostering critical thinking and problem-solving skills.

## SOCIAL JUSTICE



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 12**

The Social Justice course is a semester-long exploration of equality and power dynamics in American society. Through personalized learning and real-world experiences, students will develop critical thinking and communication skills.

## LAWFARE



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

Lawfare is a comprehensive, semester-long course providing an in-depth introduction to the field of law and the diverse careers within the legal profession. This course will explore the fundamental principles of law, legal systems, and the various roles and responsibilities of legal professionals. It aims to equip students with the knowledge and skills necessary to pursue careers in the legal field or make informed decisions about their future academic and professional paths.

## AP EUROPEAN HISTORY



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 12**

AP European History is a rigorous course that explores the cultural, economic, political, and social developments of Europe since 1450. Through personalized learning and real-world experiences, students will develop critical thinking and historical analysis skills. Students are required to take the AP Exam.

## FUNCTIONAL WORLD STUDIES



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

Functional World Studies is a course designed to help students develop practical life skills. Through personalized learning and real-world experiences, students will gain a deeper understanding of social studies concepts and how they apply them to everyday life.

# Course Descriptions CONTINUED

## FUNCTIONAL AMERICAN HISTORY



TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12

Functional American History is a course designed to help students develop a deeper understanding of American history from 1865 to the present. Through personalized learning and real-world applications, students will gain valuable insights into historical events and their impact on contemporary society.

## FUNCTIONAL AMERICAN GOVERNMENT



TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12

Functional American Government is a course designed to help students understand the workings of the U.S. government. Through personalized learning and real-world experiences, students will develop a deeper understanding of the government's impact on daily life.

## Science

### PHYSICAL SCIENCE



TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 9

Physical Science provides a foundational understanding of matter, energy, and motion, incorporating concepts from chemistry, physics, and space science. The Physical Science course equips students with essential skills for future pathways, including higher education and careers.

## HONORS PHYSICAL SCIENCE



TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 9

**Prerequisite: Designed for advanced math students with a Science teacher's recommendation.**

Honors Physical Science is a challenging course for motivated students seeking a deeper understanding of physical science. Through personalized learning, students develop strong problem-solving and critical-thinking skills. This course prepares students for future success in STEM fields and sets the stage for additional Honors Science classes.

## BIOLOGY



TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 10

Biology provides a comprehensive exploration of the living world, covering topics like cells, genetics, evolution, and biodiversity. Through personalized learning and hands-on experiences, students develop critical thinking skills and a solid foundation for future studies in science, preparing them for success in higher education or careers. This course fulfills essential graduation requirements and prepares students for the state-required end-of-course exam.

## HONORS BIOLOGY



TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 9-10

**Prerequisite: Designed for advanced math students with a Science teacher's recommendation.**

Honors Biology offers an in-depth exploration of life sciences, including cells, genetics, evolution, and the diversity of life. Through a personalized, competency-based approach, students engage in hands-on investigations and explore the historical and ethical dimensions of scientific theories. This course prepares students for the state-required end-of-course exam and sets the stage for future success in higher education and STEM fields.



## HONORS BIOLOGY II



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Honors Biology (C or better)  
and Chemistry/Honors Chemistry (C or better)**

Honors Biology II is a rigorous second-year biology course that offers a college-level exploration of molecular and cellular biology, organismal biology, and population biology. Through personalized learning and real-world applications, students will develop a deep understanding of biological concepts and prepare for future success in life science and medical careers.

## AP BIOLOGY



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Honors Biology (C or better)  
and Chemistry/Honors Chemistry (C or better)**

AP Biology is a rigorous second-year biology course that integrates college-level content and research opportunities. Through personalized learning and real-world experiences, students will explore the intricacies of molecular, cellular, organismal, and population biology, preparing them for a future in life science and medical careers. Students are required to take the AP Biology exam.

## CHEMISTRY



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

**Prerequisite: Algebra I (C or better)**

Chemistry is a year-long course that explores the fundamental principles of matter and its interactions. Through personalized learning and real-world applications, students will develop a strong understanding of chemical concepts. Chemistry develops critical thinking, problem-solving, and analytical skills preparing students for success in college, the military, and many other fields.

## HONORS CHEMISTRY



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

**Prerequisite: Algebra II (C or better)  
and concurrent Honors Algebra II.**

Honors Chemistry is a rigorous year-long course designed for advanced science students. This course covers college-level chemistry concepts and emphasizes experimentation and problem-solving. Through personalized learning and real-world applications, students will develop strong critical thinking and problem-solving skills. Chemistry develops critical thinking, problem-solving, and analytical skills preparing students for success in college, the military, and many other fields.

## HONORS CHEMISTRY II



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Honors Chemistry (C or better)  
or Chemistry (B or better)**

Honors Chemistry II offers a rigorous, college-level chemistry curriculum for advanced students. While not taking the AP exam, students engage in high-level exploration, focusing on experimentation and problem-solving. This course prepares students for future success in higher education and STEM fields.

## AP CHEMISTRY



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Honors Chemistry (C or better)  
or Chemistry (B or better)**

AP Chemistry is a rigorous year-long course designed for advanced science students. This course covers college-level chemistry concepts and emphasizes experimentation and problem-solving. Through a student-centered approach and hands-on experiences, students will develop strong critical thinking and problem-solving skills. This course prepares students for future success in higher education and STEM fields. Students are required to take the AP Chemistry exam.

# Course Descriptions CONTINUED

## PHYSICS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

**Prerequisite: Geometry (C or better)  
and concurrent Algebra II or higher**

Physics is a course that explores the fundamental principles of energy and motion. Through hands-on projects and real-world applications, students will develop a strong understanding of mechanics, force, work, power, sound, light, and electricity. This course prepares students for future success in higher education, careers, or the military.

## HONORS PHYSICS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Algebra II (C or better)**

Through real-world applications and hands-on projects, students will explore concepts like motion, forces, energy, and fluids. While not taking the AP exam, this lab-based, college-level course prepares students for success in higher education or STEM careers.

## AP PHYSICS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Algebra II (C or better)**

AP Physics explores real-world applications and hands-on projects, students will study concepts like motion, forces, energy, and fluids. This challenging, college-level course provides a solid foundation in physics, preparing you for advanced studies in STEM related higher education or careers. Students are required to take the AP Physics exam.

## INTRODUCTION TO ROBOTICS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

**Prerequisite: Algebra I (B or better)  
and concurrent/completed Geometry**

Intro to Robotics is a hands-on course that will equip you with the skills to succeed in the digital age. Through personalized learning, you'll gain experience in Python coding, Raspberry Pi, game development, web design, and robotics. Attendance is mandatory as most work will be done in class. This course prepares students for future success in post-secondary opportunities. To preview this course, visit [42electronics.com](http://42electronics.com)

## COMPETITIVE ROBOTICS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

**Prerequisite: Enrolled in Honors Geometry  
or higher level math courses**

Competitive Robotics provides a hands-on introduction to robotics engineering, preparing students for the FIRST Tech Challenge competition. Through team-based projects, students will develop essential engineering skills, including mechanical design, electrical systems, and software programming. Students will design, build, and program robots to tackle complex challenges and compete at a high level. Students will be required to participate in at least 2 FTC competitions (2 Saturdays, December to March). Credit may be earned multiple years.

## ZOOLOGY



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

Zoology provides a comprehensive exploration of animal biology, covering topics like animal classification, evolution, and ecology. Through hands-on lab experiences, students gain a deeper understanding of various animal phyla and their significance to human societies. This course prepares students for future success in zoology and related fields.

## PHYSIOLOGY



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Successful completion  
of Biology or Honors Biology**

Physiology provides a comprehensive exploration of human anatomy and physiology, focusing on the structure and function of key systems. Through hands-on lab experiences, including dissection, students gain a deeper understanding of the human body. This course prepares students for future careers in healthcare or biological sciences.

## AGRICULTURAL SCIENCE I



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

Agricultural Science I is a course that provides a comprehensive understanding of plant and animal cultivation, environmental sustainability, and agribusiness. Through real-world learning experiences and partnerships with local businesses and higher education institutions, students will gain practical skills and knowledge. This course prepares students for future success in agriculture or related fields.

## AGRICULTURAL SCIENCE II



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Successful completion  
of Agricultural Science I**

Agricultural Science II dives further into the world of agriculture, exploring sustainable crop cultivation, animal management, environmental stewardship, and cutting-edge agricultural technologies. Through hands-on activities and field trips, students gain practical experience to reinforce key concepts. Agricultural Science II prepares students for future success in agriculture or related fields.

## FORENSICS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Successful completion of Biology**

Forensic Science is a course that introduces students to the exciting field of crime scene investigation. Through personalized learning and hands-on experiences, students will gain knowledge in fingerprint analysis, DNA profiling, toxicology, and other forensic techniques. This course prepares students for future success in higher education or careers in forensic science.

## FUNCTIONAL PHYSICAL SCIENCE



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

This course provides small group and individual instruction and activities to increase independence and functional life skills. Physical Science provides a foundational understanding of matter, energy, and motion, incorporating concepts from chemistry, physics, and space science. This course focuses on functional science concepts relevant to each student's needs and life experiences.

# Course Descriptions CONTINUED

## FUNCTIONAL BIOLOGY



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

This course provides small group and individual instruction and activities to increase independence and functional life skills. Biology explores the living world, covering topics like cells, genetics, evolution, and biodiversity. This course focuses on functional science concepts relevant to each student's needs and life experiences.

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## Music

### CONCERT BAND



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

The Concert Band program provides a year-long immersive experience in ensemble performance. Through personalized learning and collaboration, students refine their skills and teamwork. With 2-3 required evening concerts annually, students gain invaluable practical experience in public performance, preparing them for advanced ensembles.

### WIND ENSEMBLE



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

#### **Prerequisite: Audition**

The Wind Ensemble is a selective year-long course for instrumental music students. Through personalized instruction and mentorship, students refine their skills and prepare for future success. This course allows for multiple years of credit, fostering continuous growth and excellence.

### HONORS WIND ENSEMBLE



**TWO SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

#### **Prerequisite: By Application Only**

The Honors Wind Ensemble is a rigorous course for dedicated junior and senior musicians. By meeting additional requirements like private lessons and competitions, students can earn weighted honors credit while developing advanced musical skills. This course offers personalized support and prepares students for future success in music and other career fields.

### CONCERT ORCHESTRA



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

#### **Prerequisite: 8th-grade orchestra or director approval**

Concert Orchestra provides a personalized learning experience, allowing students to master orchestral compositions from various eras. Through performances, students develop their musical skills and gain valuable performance experience. By participating in this course, students can prepare for advanced musical endeavors.

### SYMPHONIC ORCHESTRA



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

#### **Prerequisite: Audition**

The Symphonic Orchestra provides a personalized learning experience, focusing on musical skill development through practice and performance. By participating in multiple concerts annually, students gain valuable real-world experience. The supportive environment prepares students for future success in music or other fields. This course allows for multiple years of credit, fostering continuous growth and excellence.

## HONORS SYMPHONIC ORCHESTRA



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

### **Prerequisite: By Application Only**

Honors Symphonic Orchestra offers a rigorous, personalized learning experience for advanced musicians. Honors Symphonic Orchestra offers a rigorous, personalized learning experience for advanced musicians. Through private lessons, competitions, and additional ensembles, students enhance their musical abilities and prepare for future success. Real-world experiences like concerts and competitions equip students with valuable skills for future careers.

## CONCERT CHOIR



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

This choir is open to all students, regardless of grade level or experience. We perform a variety of music, from popular songs to classical masterpieces. Through consistent practice and dedicated participation in rehearsals, students will develop essential musical skills such as pitch matching, rhythm, and sight-reading. By performing in concerts, students gain valuable stage experience and learn the importance of teamwork and collaboration.

## ACAPELLA CHOIR



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

### **Prerequisite: By Audition Only**

The Acapella Choir is a highly selective ensemble that focuses on personalized learning and performance excellence. Through rigorous auditions and a student-centered environment, members develop their musical skills by performing challenging classical and popular music. With real-world performance opportunities and strong support systems, Acapella Choir prepares students for future success in music or other fields.

## HONORS ACAPELLA CHOIR



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

### **Prerequisite: By Application Only**

Honors Acapella Choir is a rigorous, year-long course designed for advanced vocalists seeking a challenging musical experience. This course offers personalized instruction, allowing students to refine their vocal technique, enhance their musicality, and develop their artistry. Through participation in competitions, masterclasses, and performances, students gain valuable experience to build a strong foundation for future success in music or related fields.

## SHOW CHOIR



**TWO SEMESTERS, | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

### **Prerequisite: Audition**

Show Choir is a high-energy ensemble that performs popular music, vocal jazz, and ballads. Students in this group are expected to participate in a variety of performances, including school concerts and community events. To succeed in Show Choir, students must be committed to regular rehearsals, rigorous practice, and a strong work ethic. This course allows for multiple years of credit, fostering continuous growth and excellence.

## CHOIR MENTORS



**TWO SEMESTERS | AU/NO CREDIT  
OPEN TO STUDENTS IN GRADES 10-12**

The Choir PEOPEL/Mentoring program offers students a chance to develop leadership and communication skills while helping peers with diverse learning needs. By working with these peers, students gain valuable experience and make a positive impact. This experience is recognized on transcripts, highlighting the student's commitment to community service and potential benefits for future endeavors.

# Course Descriptions CONTINUED

## World Language

### SPANISH I



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

Spanish I is an introductory course designed to help students learn Spanish through personalized and competency-based learning. Through real-world experiences and authentic materials, students will develop their speaking, listening, reading, and writing skills. This course prepares students for future success in higher education, careers, or travel.

### SPANISH II



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

**Prerequisite: Spanish I (C or better)**

Spanish II is a continuation of Spanish I, building on the foundation of language skills developed in the first year. Through personalized learning and real-world experiences, students will enhance their speaking, listening, reading, and writing abilities. This course prepares students for future success in higher education, careers, or travel.

### SPANISH III



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

**Prerequisite: Spanish II (C or better)**

Spanish III builds on the foundation of language skills developed in the first two years. Through personalized learning and real-world experiences, students will further enhance their speaking, listening, reading, and writing abilities. This course prepares students for future success in higher education, careers, or travel.

### HONORS SPANISH IV



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Spanish III (C or better)**

Honors Spanish IV is a rigorous continuation of Spanish III, designed for advanced language learners. Through personalized learning and authentic materials, students will further refine their speaking, listening, reading, and writing skills. This course prepares students for future success in higher education or careers.

### HONORS SPANISH V



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 12**

**Prerequisite: Spanish IV (C or better)**

Honors Spanish V is a rigorous course designed to further enhance students' Spanish language proficiency. Through personalized learning and real-world experiences, students will develop advanced language skills, including reading, writing, speaking, and listening. This course prepares students for future success in higher education or careers.

### CCP SPANISH 2201



**ONE SEMESTER | 1.0 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 12**

**Prerequisite: Spanish IV (C or better)**

CCP Spanish is offered in partnership with Sinclair Community College. The course reviews grammar learned at the elementary level of college Spanish and offers selected readings in Hispanic literature. Oral proficiency and listening comprehension skills are highly emphasized. Students in this course will earn college credit.

## CCP SPANISH 2202



**ONE SEMESTER | 1.0 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 12**

**Prerequisite: Spanish IV (C or better)**

CCP Spanish is offered in partnership with Sinclair Community College. The course reviews grammar learned at the elementary level of college Spanish and offers selected readings in Hispanic literature. Oral proficiency and listening comprehension skills are highly emphasized. Students in this course will earn college credit.

## SPANISH HERITAGE



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-11**

Spanish Heritage is a year-long course designed for students who speak Spanish at home. Through personalized learning and real-world experiences, students will enhance their Spanish language skills and celebrate their heritage. This course aligns with graduation requirements and prepares students for future success in higher education, careers, and the military.

## FRENCH I



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

French I is a year-long course designed to introduce students to the French language. Through personalized and competency-based learning, students will develop their speaking, listening, reading, and writing skills. By engaging with real-world materials and cultural experiences, students will gain a deeper understanding of French culture. This course prepares students for future success in higher education, careers, or travel.

## FRENCH II



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

**Prerequisite: French I (C or better)**

French II is a continuation of French I, building upon the foundation of language skills developed in the first year. Through personalized learning and real-world experiences, students will further enhance their speaking, listening, reading, and writing abilities. This course prepares students for future success in higher education, careers, or travel.

## FRENCH III



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: French II (C or better)**

French III is a continuation of French II, building upon the foundation of language skills developed in the first two years. Through personalized learning and real-world experiences, students will further enhance their speaking, listening, reading, and writing abilities. This course prepares students for future success in higher education, careers, or travel.

## HONORS FRENCH IV



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 12**

**Prerequisite: French III (C or better)**

Honors French IV is a rigorous course designed to further enhance students' French language proficiency. Through personalized learning and authentic materials, students will develop advanced language skills and cultural understanding. This course prepares students for future success in higher education or careers.

# Course Descriptions CONTINUED

## Other

### DRAMA



**ONE SEMESTER | .5 CREDIT  
OPEN TO STUDENTS IN GRADES 9-12**

The Drama course offers a personalized and competency-based approach to acting, improvisation, and technical theater. Through hands-on experiences and real-world connections, students develop skills and prepare for future success in higher education, careers, or the military. This course aligns with graduation requirements and provides a strong foundation for creative expression and performance.

### THEATRE



**ONE SEMESTER | .5 CREDIT  
OPEN TO STUDENTS IN GRADES 9-12**

The theater course is designed to explore the evolution of theater as an art and examine its impact on various time periods and cultures. Students will read plays from various genres and analyze the work in the context of its time and culture.

### YEARBOOK



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

**Prerequisite: By Application Only**

Yearbook is a hands-on course that teaches students the skills needed to create a school yearbook. Through personalized learning and real-world experiences, students will develop skills in graphic design, photography, and project management. This course aligns with graduation requirements and prepares students for future success in various fields.

### HOPE SQUAD



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

**Prerequisite: By peer nomination or application**

Hope Squad is a course designed to empower peer leaders to change the stigma around mental health. Through personalized learning and real-world experiences, students will develop the skills to identify signs of distress and provide support to their peers. This course aligns with graduation requirements and prepares students for future success in various fields.

### AFRICAN AMERICAN LITERATURE & POP CULTURE



**ONE SEMESTER | .5 CREDIT  
OPEN TO STUDENTS IN GRADES 11-12**

African American Literature & Pop Culture is a course that explores the intersection of African American literature and contemporary pop culture. Through personalized learning and real-world experiences, students will gain a deeper understanding of the historical and cultural significance of these works. This course prepares students for future success in higher education or careers.

### ESPORTS



**ONE SEMESTER | .5 CREDIT  
OPEN TO STUDENTS IN GRADES 11-12**

The Esports course offers a personalized and competency-based learning experience in competitive gaming. Through hands-on experiences and real-world connections, students will develop gaming skills and gain insights into the esports industry. This course prepares students for future success in higher education, careers, or the military.



## CYBERSECURITY I



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 10-12**

Cybersecurity I is an introductory course that provides students with a foundation in cybersecurity concepts. Through hands-on experiences and real-world applications, students will develop skills in network security, cryptography, and risk identification. Students are expected to complete online learning modules as independent work and will participate in simulations and authentic cyber security applications during class. This course prepares students for future success in a career in cybersecurity.

## CCP CYBERSECURITY II



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

### **Prerequisite: Cybersecurity I**

Students will continue working toward the certifications necessary to be career-ready in the Cyber Security field. Students will continue to deepen their understanding of the topics covered in Cyber I and expand to digital forensics and other related security topics. Students in Cyber II are expected to participate in Cyber Patriot and the National Cyber League. Students will be expected to complete CompTIA Security+ and plan their cybersecurity future with industry mentors. Students in this course will earn college credit.

## CYBERSECURITY III



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 12**

### **Prerequisite: Cybersecurity I & II**

This course allows students to focus on a specific area of expertise and to work closely with industry professionals to develop their skills and knowledge. Potential topics include cyber forensics, infrastructure security and defense, policy and risk mitigation, secure software development, pen testing, ethical hacking, etc. Students in Cyber III will develop their leadership skills by leading competition teams and collaborating with the Ready 100 Partners to deepen industry partnerships.

## FUNCTIONAL LIFE SKILLS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

Functional Life Skills is a course designed to help students develop essential life skills. Through personalized learning and real-world experiences, students will learn about nutrition, budgeting, home management, and other practical skills. This course prepares students for future success in higher education, careers, or independent living. This class is offered on a Satisfactory/Unsatisfactory basis.

## FUNCTIONAL CAREER SKILLS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

Functional Career Skills is a course designed to help students develop essential life skills, including time management, stress management, and goal setting. Through personalized learning and real-world experiences, students will learn how to apply these skills to their personal and professional lives. This course aligns with graduation requirements and prepares students for future success. This class is offered on a Satisfactory/Unsatisfactory basis.

# Course Descriptions CONTINUED

## STUDY SKILLS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

The Study Skills course is designed to help students develop essential study skills and time management strategies while working on individualized goals. Through personalized learning and support, students will learn how to effectively study, take notes, and prepare for tests. This course prepares students for future success. This class is offered on a Satisfactory/Unsatisfactory basis.

## WORK BASED LEARNING



**PERSONALIZED  
OPEN TO STUDENTS IN GRADES 9-12**

The Work Study program offers a personalized and competency-based learning experience through real-world work experiences. By working with local businesses and organizations, students gain practical skills and prepare for future success in higher education, careers, or the military. This program aligns with graduation requirements and provides valuable support and guidance throughout the process. This class is offered on a Satisfactory/Unsatisfactory basis.

## TRANSITION PROGRAM



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 11-12**

The Middletown High School Transition classroom focuses on the teaching skills needed for competitive employment and independent living. Students participate in a modified curriculum that works on extended standards through essential life skills. This curriculum includes community-based experiences intended to support a successful transition into the world of work and more independent living.

## MIDDIE COMMON GROUNDS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADES 9-12**

Middie Common Grounds is a program focused on hands-on learning in employment, independent living, and post-secondary planning. It provides structured internships to help students build self-confidence, independence, and social skills through applied academics and community involvement. Students participate in job training, volunteer activities, and community-based instruction tailored to their goals and needs.

## MIDDIE COMMON GROUNDS MENTORS



**TWO SEMESTERS | AU/NO CREDIT  
OPEN TO STUDENTS IN GRADES 10-12**

**Prerequisite: By Application Only**

Middie Common Grounds (Mentor/PEOPEL) is a hands-on coffee shop program that equips all students with essential job skills. Students gain real-world experience in customer service, cash handling, and teamwork. Mentors develop leadership skills and earn community service hours.

## Career

### CAREER FIELDS & PATHWAYS



**ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 9**

Career Fields & Pathways is a personalized, half-credit course designed to set 9th graders up for success in high school and beyond. This course helps students explore all career fields, with a special focus on high-growth industries and provides a clear understanding of Ohio's graduation requirements. Whether exploring career pathways or gaining insights into the job market, students will build a strong foundation for a successful future.

## ADVANCED CAREER FIELDS & PATHWAYS



ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 9

Advanced Career Fields & Pathways is a personalized, half-credit course designed to set 9th graders up for success in high school and beyond, with an added focus on college preparation. This course helps students explore all career fields, with a special emphasis on high-growth industries and provides a clear understanding of Ohio's graduation requirements. Additionally, students will engage in ACT preparation to ensure they are ready for future academic testing, further enhancing their readiness for post-secondary success.

## ADVANCED COLLEGE PREP



ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 10

Advanced College Prep provides an early start on planning for life beyond high school. Students will explore career pathways, master the college admissions process—including college selection, financial aid, and test preparation—and build confidence for future success. In this student-driven course, participants will refine their Individual Academic Career Plans (IACP) using SchoolLinks, aligning their goals with actionable steps. By the end of the course, students will gain the tools and insights needed to chart a purposeful and successful future.

## CAREER & COLLEGE READINESS



ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 11

Career & College Readiness empowers juniors to plan for their future. Through personalized learning and real-world experiences, students explore career paths, master the college admissions process, and prepare for the ACT. This course helps students refine their Individual Academic Career Plans (IACP) and build confidence for their future.

**Please note:** students who completed Advanced College Prep as sophomores are not eligible to take this course.

## CAREER EXPERIENCES: LEADERSHIP & COMMUNITY ENGAGEMENT



ONE SEMESTER | .5 CREDIT PER SEMESTER  
OPEN TO STUDENTS IN GRADE 12

Career Experience empowers students with leadership skills and real-world experiences. Through job shadowing, internships, and community engagement, students explore various career paths and develop essential life skills. This course prepares students for future success by earning the OhioMeansJobs Readiness Seal.

# Course Descriptions CONTINUED

## Business, Marketing, and Management

### BT BUSINESS FOUNDATIONS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER OPEN TO STUDENTS IN GRADES 9-10**

**Prerequisite:**

Business Foundations is the recommended first course in the Business and Administrative Services, Finance, Logistics and Supply Chain Management, and Marketing Career Field pathways. Learners will develop foundational professional skills, in addition to exploring fundamental business activities and concepts. This course also includes introductory learning outcomes from each of the four related pathways.

### BT MANAGEMENT PRINCIPLES



**TWO SEMESTERS | .5 CREDIT PER SEMESTER OPEN TO STUDENTS IN GRADES 10-11**

**Prerequisite:**

Management Principles explores how businesses plan, organize, and lead functions of management to direct staff towards goal achievement. Learners will develop knowledge and skills in relationship management, business governance, change, and project management. This course also includes competencies in strategic planning and data and information management to promote problem-solving and decision-making skills.

### BT SPORTS MARKETING



**TWO SEMESTERS | .5 CREDIT PER SEMESTER OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Successful completion of Business Foundations**

Students will obtain fundamental knowledge and skills in marketing communications, marketing management, marketing research, merchandising, and professional selling. They will acquire knowledge of marketing strategies, market identification techniques, employability skills, and business ethics. Technology, leadership, and communications will be incorporated into classroom activities.

### BT STRATEGIC ENTREPRENEURSHIP



**TWO SEMESTERS | .5 CREDIT PER SEMESTER OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Successful completion of one business course**

Students will use innovation skills to generate ideas for new products and services, evaluate the feasibility of ideas, and develop a strategy for commercialization. They will use technology to select target markets, profile target customers, define the venture's mission, and create business plans. Establishing a brand, setting prices, promoting products, and managing customer relationships will be emphasized.

## BT PROFESSIONAL & TECHNICAL SALES



**TWO SEMESTERS | .5 CREDIT PER SEMESTER OPEN TO STUDENTS IN GRADES 12**

**Prerequisite: Successful completion of two business courses**

Professional and Technical Sales will explore sales processes and techniques used in a business-to-business environment. Learners will develop knowledge and skills to develop and maintain positive business relationships, in addition to negotiating and adjusting prices and sales terms. This course also includes learning outcomes in marketing and business communications, including marketing research, information management, and social media communications.

## BT HOSPITALITY FUNDAMENTALS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER OPEN TO STUDENTS IN GRADES 10-11**

This first course in the career field will introduce students to culinary arts, food service operations, lodging, travel, and tourism. Students will obtain knowledge of customer service principles and examine the impact of cultural, historical, social, and technological developments on key segments of the industry. They will also apply safety and sanitation techniques to prevent and control injuries, illnesses, and diseases in the workplace. Business law, employability skills, leadership, and communications will be addressed.

## BT CONTEMPORARY CUISINE



**TWO SEMESTERS | .5 CREDIT PER SEMESTER OPEN TO STUDENTS IN GRADES 10-12**

**Prerequisite:**

Students will prepare regional and international food products and beverages according to standardized recipes. This course addresses the savory side of the food industry. We cover appetizers, cold and hot sandwiches, eggs, salads, meat, poultry, seafood, soups, sauces, and food product creation. They will research and develop marketable new recipes, plan and design menus, and calculate food requirements and costs. Food science, inventory management, food presentation, and safety and sanitation will also be addressed.

## BT BAKING & PASTRY ARTS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER OPEN TO STUDENTS IN GRADES 10-12**

This course will cover pies, pastry, tarts, custards, mousses, soufflé, pastry cream, crème anglaise, frozen desserts, cookies, genoise, sponge, and angel food cakes. Students will apply food science principles to prepare and bake bread, desserts, and pastries. They will also use specialized decorating and presentation techniques to decorate cakes, cookies, pastries, and other baked goods. Students will select quality ingredients, determine food costs, and research and develop marketable new recipes and food concepts. Personal safety, food safety, and equipment safety will be emphasized.

## Engineering

### BT ENGINEERING ESSENTIALS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER OPEN TO STUDENTS IN GRADES 9-10**

This is a 9th-grade PLTW (Project Lead the Way) course that introduces students to engineering concepts that are applicable across multiple engineering disciplines and empowers them to build technical skills through the use of a variety of engineering tools. Students learn and apply the engineering design process to develop mechanical, electronic, process, and logistical solutions to relevant problems across a variety of industry sectors, including health care, public service, and product development and manufacturing.

### BT INTRODUCTION TO ENGINEERING DESIGN



**ONE SEMESTER | .5 CREDIT PER SEMESTER OPEN TO STUDENTS IN GRADES 9-11**

Introduction to Engineering Design (IED) is a high school engineering course in the PLTW Engineering Program. In IED, students explore engineering tools and apply a common approach to the solution of engineering problems, an engineering design process. Utilizing the activity-project-problem-based (APB) teaching and learning pedagogy, students progress from completing structured activities to solving open-ended projects and problems that require them to plan, document, communicate, and develop other professional skills.

### BT PRINCIPLES OF ENGINEERING



**TWO SEMESTERS | .5 CREDIT PER SEMESTER OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: successful completion of Geometry and Introduction to Engineering Design**

This course introduces students to engineering concepts that are applicable to a variety of engineering disciplines. Students apply the engineering design process to solve real-world problems across a breadth of engineering fields such as mechanical, robotics, infrastructure, environmental sustainability, and product design and development.

### BT COMPUTER INTEGRATED MANUFACTURING



**TWO SEMESTERS | .5 CREDIT PER SEMESTER OPEN TO STUDENTS IN GRADES 11-12**

**Prerequisite: Successful completion of Introduction to Engineering Design**

Computer Integrated Manufacturing is one of the specialization courses in the PLTW Engineering program. The course deepens the skills and knowledge of an engineering student within the context of efficiently creating the products all around us. Students build upon their Computer Aided Design (CAD) experience through the use of Computer Aided Manufacturing (CAM) software. CAM transforms a digital design into a program that a Computer Numerical Controlled (CNC) mill uses to transform a block of raw material into a product designed by a student.

## BT CIVIL ENGINEERING AND ARCHITECTURE



**TWO SEMESTERS | .5 CREDIT PER SEMESTER OPEN TO STUDENTS IN GRADES 11-12**

### **Prerequisite: Successful completion of Introduction to Engineering Design**

Civil Engineering and Architecture (CEA) is a high school-level specialization course in the PLTW Engineering Program. In CEA students are introduced to important aspects of building and site design and development. They apply math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3D architectural design software. Utilizing the activity-project-problem-based (APB) teaching and learning pedagogy, students will progress from completing structured activities to solving open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills.

## BT MANUFACTURING OPERATIONS



**TWO SEMESTERS | .5 CREDIT PER SEMESTER OPEN TO STUDENTS IN GRADES 10-12**

Students will apply knowledge and skills required in the application of standard manufacturing practices including planning, design, and visualization. Students will learn and apply skills related to interpreting drawings, creating documentation, and performing measurements. Additionally, students will use principles and techniques of Computer Numerical Control (CNC), employ scheduling, and practice project evaluation.

## BT LOGISTICS MANAGEMENT



**TWO SEMESTERS | .5 CREDIT PER SEMESTER OPEN TO STUDENTS IN GRADES 10-12**

Students will determine how to facilitate the flow of goods from the point of origin to the point of consumption. Students will utilize technology to track supply chains and measure their effectiveness and efficiency. They also will identify opportunities to improve service levels, quality, and costs through supply chains and select strategies for improving customer and supplier relationships. International business, business process analysis, project management, internal control, and compliance will be emphasized.



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