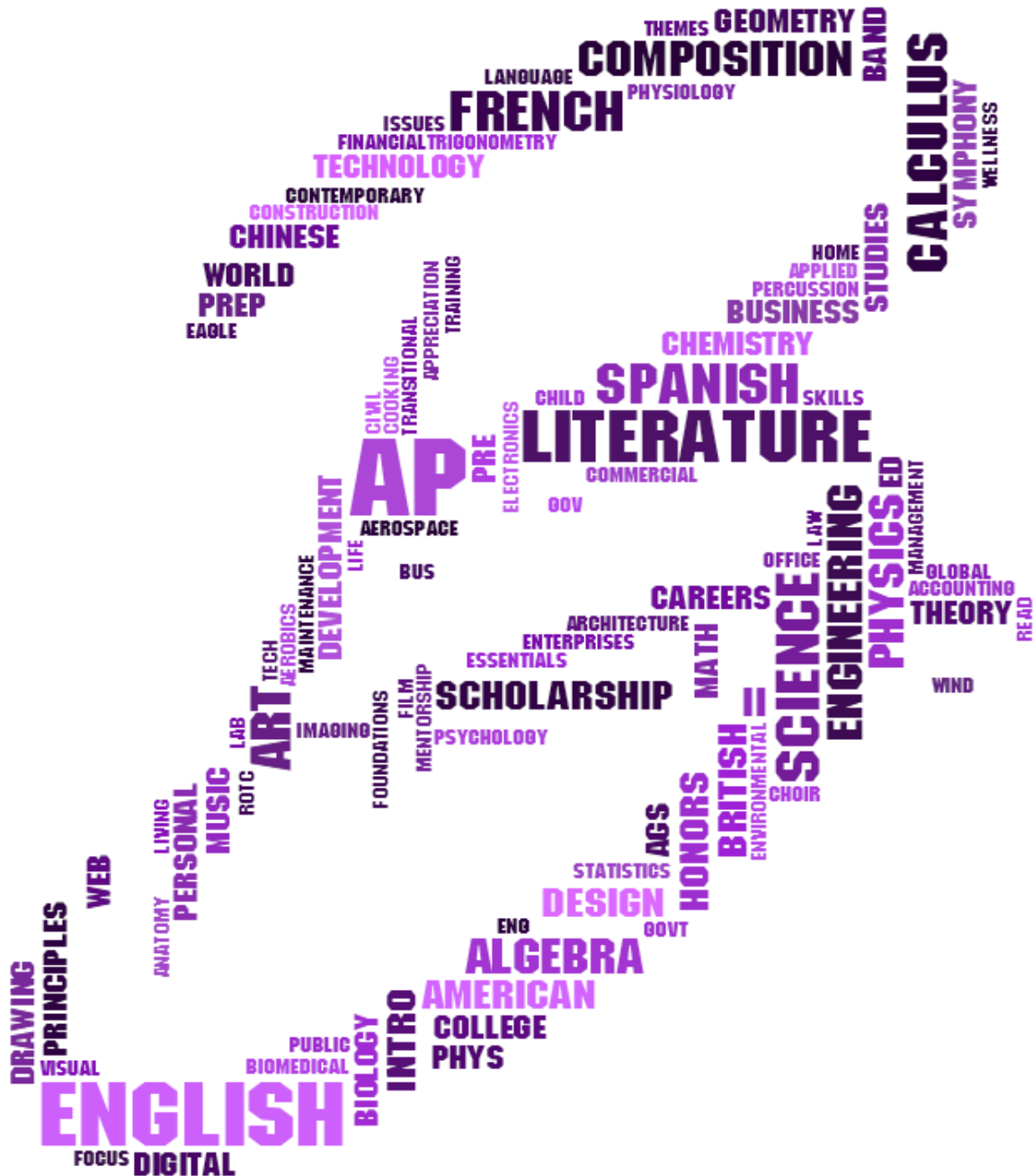


2023 - 2024

# Course Selection Guide



# Bellbrook High School

# CONTENTS

PRINCIPAL'S MESSAGE	p. 2
SCHOOL COUNSELOR'S MESSAGE	p. 3
SCHOOL DAY	p. 4
COURSES	p. 4
GRADUATION REQUIREMENTS	p. 4
HONOR ROLL	p. 5
DIPLOMA OF HONORS	p. 5
NEW STUDENT ENROLLMENT	p. 7
ACADEMIC AWARD QUALIFICATIONS	p. 7
GRADING SCALE	p. 7
REPEATING A COURSE	p. 7
COLLEGE CREDIT PLUS	p. 8
STATE TESTING	p. 8
SCHEDULE CHANGE POLICY	p. 8
WITHDRAWAL FROM A COURSE	p. 9
NCAA ELIGIBILITY	p. 9
FOREIGN EXCHANGE STUDENTS	p. 9
CREDIT FLEXIBILITY	p. 9

## COURSE DESCRIPTIONS

ART DEPARTMENT	p. 10
BUSINESS DEPARTMENT	p. 12
COMPUTER SCIENCE DEPARTMENT	p. 15
ENGLISH DEPARTMENT	p. 18
FAMILY CONSUMER SCIENCE	p. 23
HEALTH & PHYSICAL EDUCATION DEPARTMENT	p. 25
MATHEMATICS DEPARTMENT	p. 28
MUSIC DEPARTMENT	p. 32
PRE-ENGINEERING DEPARTMENT	p. 34
SCIENCE DEPARTMENT	p. 37
SOCIAL STUDIES DEPARTMENT	p. 41
WORLD LANGUAGES	p. 43
AEROSPACE (AFJROTC)	p. 45
GREENE COUNTY CAREER CENTER	p. 48

### BHS CONTACTS

#### **MAIN OFFICE 848-3737**

#### ADMINISTRATION

Principal  
David Hann  
Ext. 2999

Assistant Principal  
Nikki LaSota  
Ext. 2921

Assistant Principal  
Todd Whalen  
Ext. 2922

#### COUNSELING DEPARTMENT

Counselor  
P-Z  
Debra Sanderman  
Ext. 2913

Counselor  
H-O  
Andy Hartley  
Ext. 2912

Counselor  
A-G  
Khris Scohy  
Ext. 2911

Admin. Assistant  
Kiki Kramer  
Ext. 2902

#### MAIN OFFICE STAFF

Admin. Assistant  
Lee Gregory  
Ext. 2903

Admin. Assistant  
Robin Cordonnier  
Ext. 2901

# Principal's Message

Dear Bellbrook High School Parents and Students,

This guide was designed to provide the necessary information for selecting the proper courses for next school year and describes, in detail, the many academic opportunities offered at Bellbrook High School. We recommend that parents and students take the time to review this information together. Careful planning and thoughtful decision-making will help build a solid educational foundation for the future. Do not hesitate to ask questions before registration. Your teachers, school counselors and administrators are here to help you select the proper classes for next year. If you have questions about specific courses, please discuss them with the appropriate teacher.

I encourage you to get involved and take advantage of all facets of our academic program. Enjoy your high school experience and best wishes for success at BHS. For your convenience, this document can also be found at <http://www.sugarcreek.k12.oh.us/Scheduling.aspx>

Please feel free to contact any staff member with individual questions or concerns.

Sincerely,

Dave Hann  
Principal  
Bellbrook High School

## School Counselors' Message

Professional school counselors strive to deliver a comprehensive school counseling program encouraging all students' academic, career and social/emotional development and to help every student reach his/her full potential. At Bellbrook High School, we recognize the importance of providing each student with a complete and thorough academic preparation, as well as supporting the development of his/her emotional, interpersonal and social growth. We strive, through our programs and services, to provide timely dissemination of information and foster close working relationships among students, parents, teachers and school administrators. A partial listing of the services we provide includes:

- Guidance in career and postsecondary options
- Assistance in decision-making processes
- Acting as an advocate for the students of Bellbrook High School
- Assisting in communications between parents, students, teachers and administrators
- Identifying community resources available for families and individuals
- Sponsoring meetings and providing e-mails and mailings dispensing important information to members of our school and community
- Offering individual and group counseling services
- Providing assistance with the completion of college and scholarship applications and sending transcripts
- Maintaining student records and grade cards

Counselors are available to meet with students on a drop-in basis or by appointment. Many questions and concerns, especially of the informational type, can be answered informally without an appointment. If your assigned counselor is not available when you call or stop in, please email your counselor or sign up on the clipboard outside each counselor's door.

If you are new to our district and are seeking enrollment for your student, please contact Central Office, 937-848-5001, to schedule an appointment with the district registrar. Meeting at a mutually agreed upon time will allow for your family to have the attention needed to design an educational plan and to answer any questions that you may have. Page 5 of this booklet provides information on the items needed for enrollment. Having the required documents at the time of enrollment will expedite the process. After enrolling at Central Office, you will be required to meet one-on-one with your assigned counselor to finalize your schedule.

We look forward to meeting students and parents alike and working with you throughout your student's high school career.

Sincerely yours,

**Debra Sanderman**  
Counselor

**Andy Hartley**  
Counselor

**Khris Scohy**  
Counselor

**Kiki Kramer**  
Admin. Assistant

## School Day

Each student must be scheduled for a minimum of six full periods and passing at least five 1 credit courses or the equivalent if participating in any OHSAA athletics or school activities.

## Courses

Courses meet daily for 18 (semester) or 36 (year) weeks. Report cards are issued each nine weeks.

## GRADUATION REQUIREMENTS

In order to graduate from Bellbrook High School, the student must fulfill **ALL** credit and course requirements and meet the requirements of *Ohio's Graduation Requirements*. [Ohio Graduation Requirements](#)

### **BELLBROOK ADVANCED DIPLOMA**

In order to earn the Bellbrook High School Advanced Diploma students must earn a minimum of 24 credits and meet the following requirements:

English	4 credits
Math	4 credits
Social Studies	3 credits
Science	3 credits
Health (1 course)	.5 credit
PE (2 courses)	.5 credit
Fine Arts	1 credit
Personal Finance	.5 credit
Electives	7.5 credits

### **BELLBROOK STANDARD DIPLOMA**

In order to earn the Bellbrook High School Standard Diploma, students must earn a minimum of 22 credits and meet the following requirements:

English	4 credits
Math	4 credits
Social Studies	3 credits
Science	3 credits
Health (1 course)	.5 credit
PE (2 courses)	.5 credit
Fine Arts	1 credit
Personal Finance	.5 credit
Electives	5.5 credits

## **Graduation with Honors**

The following procedures will be used to determine Valedictorian/Salutatorian status:

Beginning with the class of 2024, the graduate with the highest cumulative weighted GPA shall be designated as the Valedictorian. The graduate with the second highest cumulative weighted GPA shall be designated as the Salutatorian. To be eligible for Valedictorian or Salutatorian honors, a student must qualify for the Bellbrook High School Advanced Diploma and have been enrolled and attended Bellbrook High School during their 5th, 6th, 7th, and 8th semesters.

Upon graduation, students at Bellbrook High School will receive an academic classification of Summa Cum Laude (3.75-4.0), Magna Cum Laude (3.5-3.74), or Cum Laude (3.25-3.49). GPAs for Latin Honors are unweighted.

### **HONOR ROLL REQUIREMENTS**

A three-tiered Honor Roll is published each grading period based upon the following:

1. All A's
2. Honors (A's and B's, 3.5+ unweighted GPA with no C's)
3. Honorable Mention (3.0+ unweighted GPA)

### **DIPLOMA OF HONORS GUIDELINES**

Academic Honors Diploma Criteria: The student who completes the college preparatory curriculum in high school shall meet at least six of the following seven criteria to meet the guidelines for the honors diploma:

1. Earn 4 Units of Mathematics including at least Algebra 1, Algebra 2, Geometry, and another higher level course or a four-year sequence of courses which contains equivalent content
2. Earn at least 4 units of science: MUST include Life, Physical and Advanced Science
3. Earn 4 units of Social Studies
4. Earn either 3 units of one foreign language or 2 units of each of 2 foreign languages
5. Earn 1 unit of Fine Arts
6. Maintain an overall high school unweighted grade point average of at least 3.5 on a 4.0 scale up to the last grading period of the senior year
7. Obtain a composite score of 27 on the ACT or an equivalent composite score on the SAT (1280)

Arts Honors Diploma Criteria: Students must meet nine of the ten criteria and meet general graduation requirements to qualify for honors diplomas.

1. Earn 4 Units of Mathematics including at least Algebra 1, Algebra 2, Geometry, and another higher level course or a four-year sequence of courses which contains equivalent content
2. Earn at least 4 units of science: MUST include Life, Physical and Advanced Science
3. Earn 4 units of Social Studies
4. Earn either 3 units of one foreign language or 2 units of each of 2 foreign languages
5. Earn 4 units of Fine Arts
6. Earn 2 units of electives with a focus in fine arts
7. Maintain an overall high school unweighted grade point average of at least 3.5 on a 4.0 scale up to the last grading period of the senior year
8. Obtain a composite score of 27 on the ACT or an equivalent composite score on the SAT (1280)
9. Complete a field experience and document the experience in a portfolio specific to the student's area of focus
10. Develop a comprehensive portfolio of work based on the student's field experience or a topic that is related to

the student's area of focus

STEM Honors Diploma Criteria: Students must meet nine of the ten criteria and meet general graduation requirements to qualify for honors diplomas.

1. Earn 5 Units of Mathematics including at least Algebra 1, Algebra 2, Geometry, and another higher level course or a four-year sequence of courses which contains equivalent content
2. Earn at least 5 units of science: MUST include Life, Physical and 2 Advanced Sciences
3. Earn 4 units of Social Studies
4. Earn either 3 units of one foreign language or 2 units of each of 2 foreign languages
5. Earn 1 unit of Fine Arts
6. Earn 2 units of electives with a focus in STEM
7. Maintain an overall high school unweighted grade point average of at least 3.5 on a 4.0 scale up to the last grading period of the senior year
8. Obtain a composite score of 27 on the ACT or an equivalent composite score on the SAT (1280)
9. Complete a field experience and document the experience in a portfolio specific to the student's area of focus
10. Develop a comprehensive portfolio of work based on the student's field experience or a topic that is related to the student's area of focus

Social Science and Civic Engagement Criteria: Students must meet nine of the ten criteria and meet general graduation requirements to qualify for honors diplomas.

1. Earn 5 Units of Mathematics including at least Algebra 1, Algebra 2, Geometry, and another higher level course or a four-year sequence of courses which contains equivalent content
2. Earn 3 units of Science including at least 1 unit of advanced science
3. Earn 5 units of Social Studies
4. Earn either 3 units of one foreign language or 2 units of each of 2 foreign languages
5. Earn 1 unit of Fine Arts
6. Earn 2 units of electives with a focus in social sciences and/or civics
7. Maintain an overall high school unweighted grade point average of at least 3.5 on a 4.0 scale up to the last grading period of the senior year
8. Obtain a composite score of 27 on the ACT or an equivalent composite score on the SAT (1280)
9. Complete a field experience and document the experience in a portfolio specific to the student's area of focus
10. Develop a comprehensive portfolio of work based on the student's field experience or a topic that is related to the student's area of focus

*\*GCCC students must also meet vocational requirements.*

## New Student Enrollment

The following items are required at the time of enrollment:

1. BHS enrollment application completed and signed by the parent or legal guardian (available online at [www.sugarcreek.k12.oh.us](http://www.sugarcreek.k12.oh.us))
2. 2 proofs of residency
3. Original official birth certificate
4. Copy of current custody papers (if applicable)
5. Request for official "Transcript/Health Records" (from previous school) signed by parent.

## Academic Award Qualifications

Beginning with the Class of 2024, Valedictorian and Salutatorian awards will be based on the student's cumulative 7th semester weighted GPA.

### Bellbrook HS Grading Scale

A+	97.5-100	D+	67.5-69.4
A	92.5-97.4	D	62.5-67.4
A-	89.5-92.4	D-	59.5-62.4
B+	87.5-89.4	F	Below 59.4
B	82.5-87.4	I	Incomplete
B-	79.5-82.4	P	Pass
C+	77.5-79.4	WD	Withdraw
C	72.5-77.4	WDF	Withdraw w. F
C-	69.5-72.4		

## Repeating a Course

A student is permitted to repeat a course previously passed. Credit will only be granted once; only the last grade earned will be counted in the GPA. Both grades will appear on the transcript.



## **College Credit Plus**

Ninth through twelfth grade students are eligible to participate in the College Credit Plus (CCP) program. All students must carry the required minimum number of credits (per semester). The total number of credits will be the combination of the high school credits and the equivalent credits taken at the participating college. Credits earned through this program can be transferred to many colleges/universities. The purpose of the program is to enrich regular high school curricula and to offer the opportunity to experience college level coursework while earning college credits.

Note: Poor performance in college CCP classes may negatively affect college GPA and financial aid. Students who do not meet the minimum GPA requirements will be placed on CCP probation or dismissed from the program. Students who fail a CCP course are required to pay the cost of tuition for the failed course.

### **COLLEGE CLASSES AT ANY UNIVERSITY:**

Ninth through twelfth grade students can enroll at an eligible postsecondary institution while still enrolled in high school. These institutions include community college, post-secondary vocational technical institutions, state universities, and many private colleges and universities.

Program Eligibility: The student must be accepted by the college. It is the student's responsibility to meet the college's application and enrollment deadlines. Each college has specific admission requirements and deadlines that **MUST** be met.

### **COLLEGE CLASSES AT BELLBROOK HIGH SCHOOL:**

Designated courses allow students to complete college credit while simultaneously earning high school credit. These courses are taught on the BHS campus by BHS staff members as adjunct faculty. Students must meet qualification criteria set forth by the partner university. Prerequisites and credit hours vary by course. Students must complete an application and registration paperwork for each course. These courses are negotiated with the colleges each year, based on staff and enrollment.

## **State Testing**

### **OHIO END OF COURSE EXAMS (EOC)**

All students will take end of course exams in Algebra I, Geometry, ELA II, Biology, American History and US Government. Students must earn a passing score on Algebra I and ELA II, as well as meet additional guidelines outlined by the State of Ohio, including earning graduation seals.

### **STATE-FUNDED ACT**

In addition, all 11th grade students will take an ACT test during a selected school day, funded by the State.

## **Schedule Change Policy**

Courses chosen during the scheduling process in the spring are treated as final selections. Several factors are considered when making student schedules; number of faculty required to offer courses, number of times to offer class, number of books and supplies to order. These factors are based on the number of students registered for the class. Therefore, we cannot make schedule changes after the schedule is established. Any requests for schedule changes initiated by students or parents must be accomplished before the course begins. Schedules will not be changed for social reasons or for requesting a specific teacher. Schedule changes will **ONLY** be made for the following reasons: 1) computer error, 2) pre-requisite failure, or 3) administrator directive.

### **Withdrawal from a Course**

From the first day of school up to and including 6 weeks, a student may withdraw from a course and add a study hall, provided that the student will still be enrolled in 6 units. After 6 weeks, a WDF will be placed on the student's transcript. Any other requests will be determined by the administrators on an individual basis.

### **NCAA Initial Eligibility**

Any student planning to enroll as a freshman in college and wishing to participate in Division I or Division II athletics must be certified by the NCAA Initial Eligibility Clearinghouse. The Clearinghouse ensures consistent application of the eligibility rules at all member institutions. Students must access the website [www.eligibilitycenter.org](http://www.eligibilitycenter.org) to receive instructions and forms and review a list of NCAA approved courses.

### **Foreign Exchange Students**

Exchange students are eligible for acceptance as students at Bellbrook High School, pending administrative approval. All exchange students will receive a Certificate of Attendance. Bellbrook High School will accept no more than 2 exchange students per academic year.

### **Credit Flexibility**

Credit flexibility applies to any alternative coursework, custom learning activity, assessment and/or performance that demonstrates proficiency qualified to be awarded equivalent credit toward graduation as applied for and approved in advance by the district, per board policy. Any interested student must submit a Credit Flexibility Plan Proposal for consideration by the Credit Flexibility Committee (Deadline Nov 1st for spring semester and May 1st for the summer or fall semester).

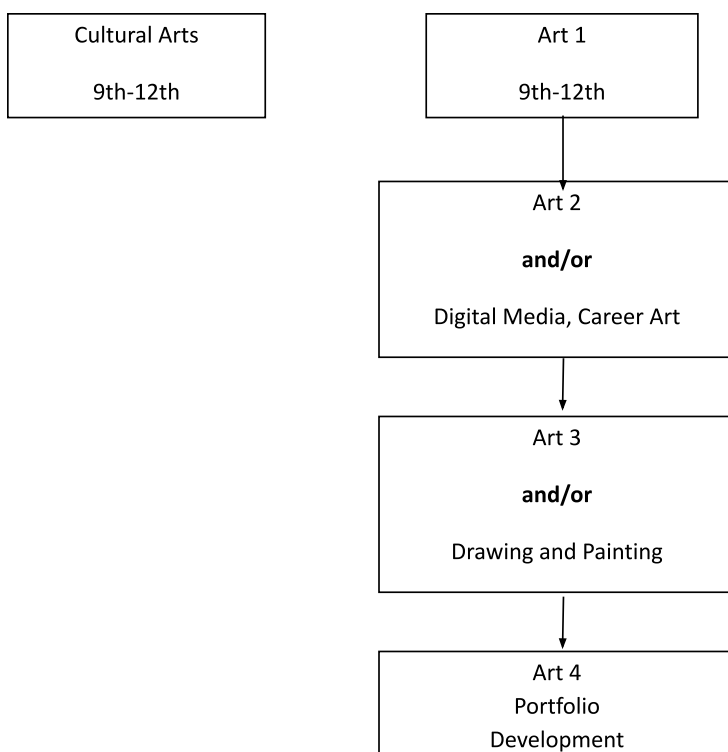
# Courses by Department:

## *Art Department*

1 credit of fine art required for graduation

<u>Course</u>	<u>Credit</u>	<u>Level</u>	<u>Prerequisites</u>	<u>Fee*</u>
Art 1	½	9-12	None	\$20
Art 2	½	9-12	Art 1	\$20
Art 3	1	11-12	“B” in Art 2 and teacher rec	\$20
Art 4	1	11-12	“B” in Art 3 and teacher rec	\$25
Cultural Arts	½	9-12	None	\$20
Digital Media	½	10-12	Art 1 or Teacher recommendation	\$30
Drawing and Painting	½	10-12	Art 1 & Art 2 or Teacher rec.	\$20
Career Art	½	10-12	Art 1	\$25

***\*Approximate Cost***



## Art 1

This is an introductory course to the visual arts. The content covers a variety of concepts and drawing media, painting and color theory, art elements and principles of design, ceramics and techniques in perspective. Students learn about famous artists and influential art movements.

This course is a prerequisite course for Art 2, Drawing and Painting, Career Art, and Digital Media classes.

## Art 2

This course is designed to further develop the concepts and skills learned in Art 1 and is available for second level art students. Students will use the skills and techniques learned previously to enhance artwork in two and three-dimensional projects using a variety of different media. The two-dimensional media includes graphite, charcoal, pastels, colored pencil, acrylic, watercolor, and ink techniques. Three-dimensional work explored in this class includes ceramics, and non-traditional sculpture materials. The students will develop an ability to make effective choices concerning media, techniques, subject matter, methods of interpretation, and compositional design.

This course is a prerequisite for Art 3.

## Art 3 & 4

These courses are meant for advanced art students who have completed Art 1 and Art 2. Skills learned in Art 1 and Art 2 are incorporated and enhanced through these courses. Each student will use their prior knowledge in the previous courses to investigate more thoroughly two-dimensional and three-dimensional projects, while working on their art portfolios. Students must show initiative and good work habits in addition to being interested in art.

## Cultural Arts

This course focuses on the arts and crafts within different world cultures.

Cultures include: Aboriginal, Maori, Japanese, Chinese, Tibet, Mexican, and Native American.

Mediums used: Clay, yarn, watercolor, paper mache, acrylic paint, colored pencil, printing, and wire.

## Digital Media

This course will include: *History of Photography* (Camera obscura, film, and digital), *Photo Editing* (White balance, contrast, exposure, tuning, vignettes, toning), *Social Media* (Students will design a brand and manage this brand on social media by creating a social media strategy. Ethics, responsibility and the relationship between social media and society will also be discussed.) and *Video* (Storyboarding, shooting, editing, presentation and formal critique).

## Drawing and Painting

This course will focus on developing the students drawing and painting skills. A variety of media will be used to give the student a more in depth study of both drawing and painting. Many pieces will be able to be incorporated into an art school submission portfolio. This course is meant for serious art students that are considering pursuing a career in the field of art.

## Career Art

This semester course is designed to expose students to careers related to visual arts, grow creativity, and develop communication skills through writing and talking about art. In this course students will explore visual arts related careers such as tattoo artist, cake designer, food truck operator, fashion designer, comic book artist, graffiti artist, graphic designer, SFX artist, jewelry designer, and more!

## ***Business Department***

.5 credits Personal Finance required for graduation

<u>Courses</u>	<u>Credit</u>	<u>Level</u>	<u>Prerequisites</u>	<u>Fee*</u>
Computer Essentials	½	9-10	None	None
Business Foundations	½	9-10	None	None
Microsoft Office	½	10-12	Keyboarding skills	\$35
Web Design I	½	9-12	None	None
Web Design II	½	9-12	B- or better in Web 1	None
Personal Financial Literacy	½	9-12	None	None
Bus. & Personal Law	½	11-12	None	None
Accounting I	½	10-12	None	\$35
Accounting II	½	10-12	C+ or better in Acct. 1	\$35
Supply Chain Mgmt.**	½	11-12	None	\$15
Economics	½	11-12	None	None
PBL Marketing	½	11-12	None	\$5

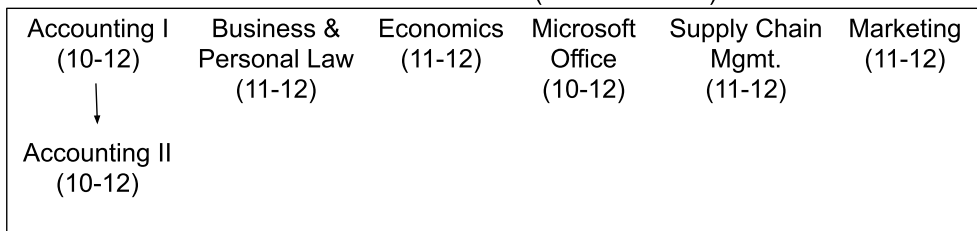
**\*\*CCP Course**

**\*Approximate Cost**

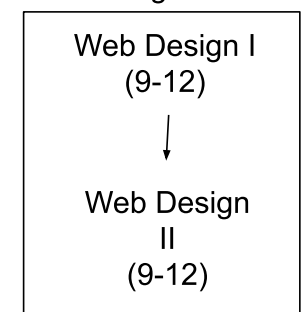
### Introductory Business Courses (9-12th Grade)

Business Foundations	Computer Essentials	Personal Financial Literacy
----------------------	---------------------	-----------------------------

### Advanced Business Courses (10-12th Grade)



### Web Design Courses



### **Computer Essentials**

This class will improve the student's current keyboarding skill level as well as instruct students in file management skills for the computer, basics of word processing, spreadsheets, presentation software, multimedia software and skills in using the Internet. This class is for students who feel they need to improve their basic keyboarding and computer skills.

### **Business Foundations**

This course introduces students to many facets of the world of business, management, finance, and marketing. Study areas include our economic system, entrepreneurship, management, marketing, and the global marketplace. Many activities will be computer based. Students will use a computer simulation on entrepreneurship to experience running a small business. This course is designed to explore business as a career path. *While it is not a prerequisite, it is suggested that this course be taken prior to enrolling in any college prep business class.*

### **Microsoft Office**

Students will learn the core skills for Word (word processing), Excel (spreadsheets), Access (database), and PowerPoint (presentation) software applications. This is a "must" class for today's students who are expected to have basic computer skills as they progress from high school to college or the workplace. Students must be able to follow directions, pay attention to detail, and work independently. *While it is not a prerequisite, it is suggested that Computer Essentials be taken prior to enrolling in this class.* \*New for 2021-2022 this course will prepare students for the Microsoft Office Specialist (MOS) Exams (this is optional and is not included in the course).

### **Web Design I**

This semester-long course will build the foundation and coding skills needed to create websites utilizing Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS). Students will also learn how to use a visual web editor.

### **Web Design II**

Students who have successfully completed Web Design I will extend their knowledge in this subject. Students will focus on creating standards-based, responsive websites that are accessible. *Prerequisite: B- or better in Web Design 1.*

### **Personal Financial Literacy**

This *State of Ohio Graduation Requirement* is a semester course that will build understanding in fundamental areas necessary to develop sound habits developing and protecting personal wealth. Topics covered are: Working and Earning, Budgeting, Banking, Saving and Investing, Credit, and Insurance.

### **Business and Personal Law**

Learning about the law is a part of learning about life in our complex society. Laws that affect us in our everyday lives and in our jobs are expanding and changing more than ever before. Whether or not the pursuit of a business-related career is our goal, as a future worker and consumer in society, we should have a basic understanding of our legal system and civil, criminal, and contract law. This course helps students identify legal issues and problems that arise in everyday situations, such as commercial, consumer, and landlord/tenant issues. This is a challenging, college preparatory class.

### Accounting I

Accounting is the language of business. This semester class introduces basic accounting procedures used in the operation of a business. Material presented in this class provides a foundation for students who plan on pursuing a business major in college or working in a business office. The accounting cycles for a sole proprietorship service business are covered. In addition to working papers, students use Excel and an automated accounting program that gives the “look and feel” of software used in business today. This is a college prep class and is an excellent foundation for college-bound business or accounting majors.

### Accounting II

The second semester accounting class continues basic accounting for a retail merchandising corporation and accounting control systems. Computerized accounting is stressed and the course includes a business simulation done with accounting software. This class is an excellent springboard for college-bound business or accounting majors or as skill preparation for an accounting clerk or general office/secretarial position. *Prerequisite: C+ or better in Accounting 1.*

### Economics

This course will include topics of but is not limited to, the following: economic systems, private and public sector issues, economic indicators, international trade, supply, demand and the impact of market forces on them. This is a challenging, college preparatory class.

### Supply Chain Management\*\*

This course provides an in-depth study of Supply Chain Management (SCM) functions and the application of effective SCM strategies and practices to achieve improved operations in manufacturing and service organizations. It focuses on analysis of real-world SCM challenges, strategies and techniques. \*\*This is a College Credit Plus (CC+) class.

### Project-Based Learning (PBL) Marketing

This Project-Based semester course will expose students to marketing principles and provide opportunities for students to engage in real-world, hands-on marketing projects where they propose solutions to real community problems. This course will focus on student collaboration within the class, with school-wide peers, and community members. Opportunities will be provided for students to consult with experts in the field of marketing, social media and entrepreneurship.

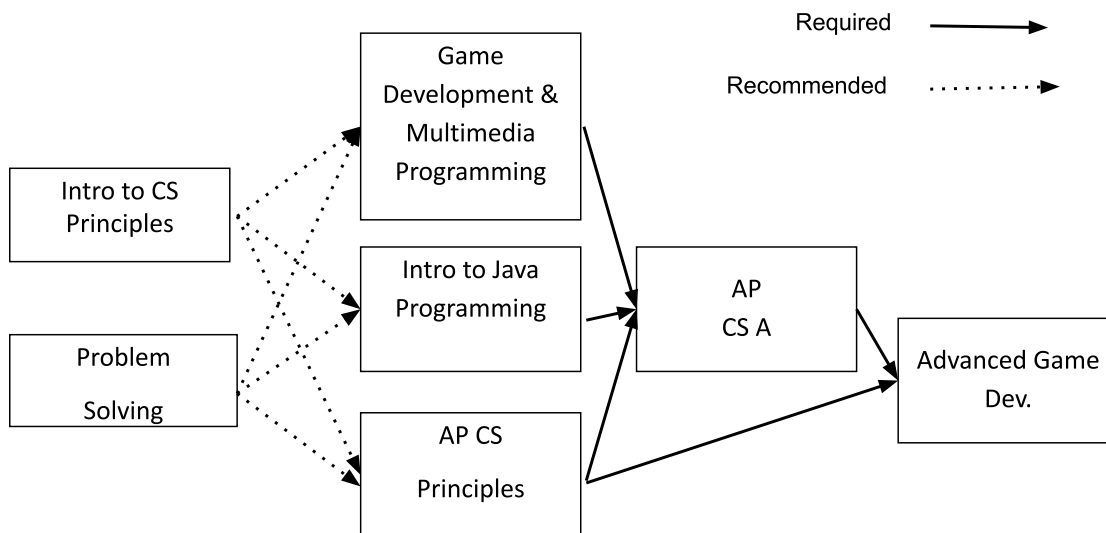
## ***Computer Science Department***

(each Computer Science course counts as a Math elective credit)

Computer Science courses offered at Bellbrook High School fall into two categories: computer science principles and computer science programming. Students who have successfully completed a principles course will graduate with a functional level of computer literacy. These students will also be able to think computationally, including the ability to decompose a problem, recognize patterns in data, use abstraction, and develop algorithms. Students who have successfully completed a programming course will graduate with the ability to analyze problems and then design, develop, and test an algorithmic solution using an iterative process.

While Computer Science courses count as a Math elective, it is highly recommended that all students take a math course for all four years of high school in order to meet the math graduation requirement. Pre-engineering students (PLTW) should consider including AP Computer Science A in their course of study. Seniors who are tech savvy and are interested in a STEM related career might be more interested in Game Development & Multimedia Programming. ALL students are recommended for one of the Computer Science Principles courses (Intro to Computer Science Principles or AP Computer Science Principles). AP Computer Science Principles meets the general education computer science requirement for over 950 colleges and universities.

<b><u>Course</u></b>	<b><u>Credit</u></b>	<b><u>Level</u></b>	<b><u>Prerequisites</u></b>	<b><u>Fee*</u></b>
Intro to Comp Sci Princ.	½	9-12	None	None
Intro to JAVA Programming	½	9-12	None	None
AP CS A	1	11-12	See Course Description	None
AP CS Principles	1	9-12	None	None
Game Development	1	9-12	None	None
Adv. Game Development	1	11-12	AP CS A or AP CS Principles	None





### Intro to Computer Science Principles - Semester

Intro to Computer Science Principles is designed to give students a broad overview of Computer Science and the role it plays in our daily lives with a broad focus on Digital Citizenship. Specific topics being covered include Technology and Society, History and Development of Hardware and Software, The Internet and Social Media, Algorithmic Thinking and Logic, and Intro to Computer Programming. While it is not a prerequisite, it is suggested that this course be taken prior to Intro to Java Programming.

### Intro to Java Programming- Semester

Intro to Java Programming is designed to serve as a prerequisite to the AP Computer Science A course. Students will explore basic programming techniques and program design using the Java programming language. Specific topics being covered include logical program design, elements of logical structure, Boolean logic, and object oriented programming. This course meets the prerequisite requirement for AP Computer Science A.

### AP Computer Science A

The AP Computer Science A course is designed to be comparable to a college/university level, entry year computer science class using the JAVA programming language and will prepare students for the AP Computer Science A Exam. ***This course is specifically recommended for students planning to pursue a degree/career in a STEM related field.*** Specific topics being covered include Object Oriented Programming, Advanced Control Statements, Searching and Sorting Algorithms, Inheritance and Polymorphism, and Recursive Algorithms. Students must begin this class with a moderate understanding of logical program design, elements of logical program structure, and should be able to write programs using numeric and string variables, Boolean logic, conditional branching, and looping statements. ***Therefore, completion of one of the following prerequisite options is REQUIRED for enrollment in this course!***

#### ***PreRequisite Options:***

- ***Intro to Java Programming (semester course)***
- ***Game Development and Multimedia Programming***
- ***AP Computer Science Principles***
- ***Engineering or Computer Science course combined with a Java summer assignment***
- ***Completion of a comparable course OR 70% or above on a Java placement test***

### AP Computer Science Principles

AP Computer Science Principles is a multidisciplinary course designed to introduce students to the creative aspects of technology and the uses of technology within ALL areas of study. This course prepares students for the AP Computer Science Principles exam; students can earn credit from over 950 colleges and universities\* for the required first-year general education computer science course. Topics include algorithmic thinking, “Big Data”, the Internet, cybersecurity concerns, and more. Students will explore current innovations in a wide range of developing technologies and will choose their own area of interest (i.e. music, art, game design, robotics, etc.) for a capstone project. This course is recommended for students in grades 9-12.

\* For a list of colleges and universities that accept APCSP, visit

<https://advancesinap.collegeboard.org/stem/computer-science-principles/higher-ed-support>

### *Game Development and Multimedia Programming*

Game Development and Multimedia Programming is designed for students who want to learn how to write computer code and who are interested in game development and multimedia applications. Students will use Alice, Scratch, Python, and a variety of other languages to create and modify games, music, graphics, animation, and robotics applications while learning the basics of algorithm design and program development.

### *Advanced Game Development*

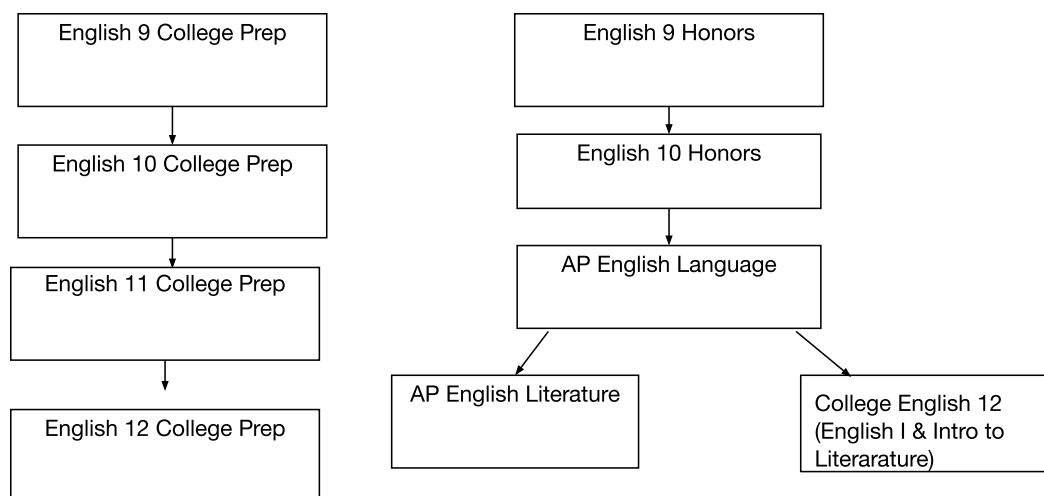
Advanced Game Development is available to any student who has successfully completed at least one of the AP Computer Science courses (AP Computer Science A and/or AP Computer Science Principles). In this course, students will apply the knowledge learned in the AP courses while developing practical skills that will be required in a university or industry environment. Students will brainstorm original ideas, develop and propose an implementation plan for a project, work collaboratively with a partner/team to implement the project using professional quality game development tools, and present project results to a panel of reviewers. **Successful completion of AP Computer Science A and/or AP Computer Science Principles is REQUIRED for enrollment into this course.**

## ***English Department***

4 Credits required for graduation

<b><u>Courses</u></b>	<b><u>Credit</u></b>	<b><u>Level</u></b>	<b><u>Prerequisites</u></b>	<b><u>Fee*</u></b>
English 9/ 9 CP	1	9	Teacher recommendation	TBD
English 9 Honors	1	9	Teacher recommendation and summer reading	None
English 10/ 10 CP	1	10	English 9 College Prep	\$25
English 10 Honors	1	10	English 9 Honors, teacher recommendation and summer reading	\$25
English 11/11 CP	1	11	English 10 College Prep	None
AP English Language	1	11	English 10 Honors and college ready test scores	None
English 12/12 CP	1	12	English 11 College Prep	None
AP English Literature	1	12	AP English Language, or English 11-CP teacher recommendation and summer reading	None

***\*Approximate Cost***



### English 9 CP

This course includes reading selections that explore a variety of engaging themes through various genres including speeches, poems, dramas, essays, short stories, novels, and multimedia selections. Composition skills include narrative, short literary analysis, informational non-fiction, and source-based argument. Test preparation strategies and skills will also be covered.

### English 9 Honors

Students who plan to take the AP courses in the 11th and 12th grades should take this course. In addition to the regular 9th grade curriculum, a strong emphasis is placed on reading and analyzing full works beyond the text excerpts. An introduction to the analytical writing skills required of AP students is also provided. Teacher recommendation is required.

### English 9

English 9 will focus on Ohio's Learning Standards for ELA standards. Students will be exposed to a variety of literary and informational texts with an emphasis on improving reading skills and vocabulary. Writing instruction will focus on informational and explanatory tasks. Additional scaffolding will be used to support students' development of writing skills. Test preparation strategies and skills will also be covered.

Prerequisite: Teacher recommendation

### English 10 College Prep

This course includes reading selections that explore a variety of engaging themes through various genres including speeches, poems, dramas, essays, short stories, novels, and multimedia selections. World and European literature are highlighted. Students will write a variety of essays including narrative, argument, informative and synthesis, as well as practice research skills.

### English 10 Honors

This course is a continuation of pre-AP preparation with World and European literature and non-fiction as basic sources. Students will engage in a variety of themes and genres including speeches, dramas, short stories, novels, and film. Students will write a variety of essays including narrative, argument, research, and synthesis, along with a continued study of literary analysis. Teacher recommendation and English 9 College Prep or Honors are required.

### English 10

English 10 will focus on Ohio's Learning Standards for ELA. This course includes reading selections that explore a variety of engaging themes through various genres including speeches, poems, dramas, essays, short stories, novels, and multimedia selections. The emphasis will be on improving reading skills and vocabulary. Writing instruction will focus on informational and explanatory tasks. Additional scaffolding will be used to support students' development of writing skills. Test preparation strategies and skills will also be covered.

Prerequisite: Teacher recommendation

### English 11 College Prep

Junior English is an American literature and composition course that continues and adds to college readiness skills. Reading selections cover major literary and historical movements, and are based on classic American essays, poems, journals, short stories, novels, and multimedia/film. Students will write a variety of essays including narrative, argument, and synthesis, including a comprehensive research paper.

### *AP English Language\**

The AP English Language and Composition course focuses on the development and revision of evidence-based analytic and argumentative writing, the rhetorical analysis of nonfiction texts, and the decisions writers make as they compose and revise. Students evaluate, synthesize, and cite research to support their arguments. Additionally, they read and analyze rhetorical elements and their effects in nonfiction texts—including images as forms of text— from a range of disciplines and historical periods. An AP English Language and Composition course cultivates the reading and writing skills that students need for college success and for intellectually responsible civic engagement. The course guides students in becoming curious, critical, and responsive readers of diverse texts and becoming flexible, reflective writers of texts addressed to diverse audiences for diverse purposes. The reading and writing students do in the course deepens and expands their understanding of how written language functions rhetorically: to communicate writers' intentions and elicit readers' responses in particular situations.

College Course Equivalent: The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum.

Prerequisites:

Students should be able to read and comprehend college-level texts and write grammatically correct, complete sentences. At BHS, teacher recommendations are based on an A or B average in English 9 and 10 (Honors preferred) and standardized test scores.

### *English 11*

English 11 will focus on Ohio's Learning Standards for ELA. This course includes reading selections that cover major literary and historical movements and are based on American essays, poems, journals, short stories, novels, and multimedia/film. The emphasis will be on improving reading skills and vocabulary. Writing assignments may include narratives, argument essays, research projects, and literary analysis tasks. Additional scaffolding will be used to support students' development of writing skills.

Prerequisite: Teacher recommendation

### *English 12 College Prep*

English 12-CP is a yearlong class designed for college-bound seniors. This combined literature and composition class will stress concepts and skills needed for collegiate success. Readings will cover a variety of classic and modern works. Writing assignments will cover essay responses, research writing, college entrance essays, and a continuation of previous literary analysis.

### *AP English Literature and Composition\**

This course is, first and foremost, a critical thinking class which seeks to give students analytical tools as well as transferable skills for college and career readiness. This class is designed for students who exhibit above average ability and exceptionally high interest in English and who have demonstrated exemplary achievement and ability to work independently.

The AP English Literature and Composition course focuses on reading, analyzing, and writing about imaginative literature (fiction, poetry, drama) from various periods. Students engage in close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, and symbolism. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works. AP English Literature and Composition aligns to an introductory college-level literature and writing curriculum.

AP Lit. students are required to read selected works over the summer which will be useful for the class and/or the AP test. Students who are unable to complete the summer reading will not be allowed to take the class.

\*Prerequisite: Teacher recommendation and an A or B average in AP English Language or an A or B+ average in English 11-CP are highly recommended.

### English 12

English 12 will focus on Ohio's Learning Standards for ELA. Readings will cover a variety of classic and modern literature as well as practical nonfiction texts. The emphasis will be on improving reading skills and vocabulary. Writing assignments may include essay responses, research writing, college entrance essays, career planning tasks, and a continuation of previous literary analysis. Additional scaffolding will be used to support students' development of writing skills.

Prerequisite: Teacher recommendation

**Special Note on Summer Reading...**The English Department will only require Summer Reading for **Honors and AP** for the 2023-2024 school year. Please listen for announcements and/or check the school website for information.

### ***English Department Electives***

May not be used to meet the graduation requirements of 4 credits

<u>Course</u>	<u>Credit</u>	<u>Level</u>	<u>Prerequisites</u>	<u>Fee*</u>
Public Speaking	.5	9-12	None	None
Yearbook	1	10-12	Teacher rec/application	None
Journalism	.5	10-12	Teacher rec./application	None
Intro. to Film Theory	.5	11-12	None	None
Young Adult Literature	.5	9-12	None	Cost of Books

\*Approx. Cost

### Public Speaking

This semester course provides experiences in which the student will gain poise and confidence as he/she learns the basic elements of vocal and physical delivery skills, speech content and organization, informal and impromptu speaking, extemporaneous speaking, demonstrations, oratory and persuasion, group discussion and debate. This foundation in public speaking class may be taken at any time in the student's high school experience. Student performance is stressed.

### Yearbook

This year-long course will produce the yearbook. Course work involves writing, computer skills, photography and design. **Students are accepted by application only.**

### Journalism

This semester course produces the school online newspaper and, depending on student interest, a school podcast. Students work as a staff to learn and apply journalism concepts in writing and media production. They also discuss and analyze current events and media. Students can participate in the journalism staff for multiple semesters but must apply each year.

### *Introduction to Film Theory and Criticism*

This one semester class will introduce students to the language of film, including the literary, dramatic, and cinematic aspects. Students will study various genres and view movies from the early age of cinema to present day. Discussion, written responses, and a paper are required of all students. This class is open to juniors and seniors only.

### *YA Literature*

This semester-long course acts as a supplement to students' required English classes. It is designed to increase the level of student reading as well as their engagement with and analysis of texts. The class uses contemporary Young Adult Literature (YA) novels to study important literary concepts and practice skills. Assignments include projects, presentations, seminars, and written responses. Students will be responsible for obtaining their own books. Texts may include *The Hunger Games*, *All American Boys*, and *The Sun is Also a Star*.

## ***Family and Consumer Science Department***

<b><u>Courses</u></b>	<b><u>Credit</u></b>	<b><u>Level</u></b>	<b><u>Prerequisite</u></b>
Culinary Fundamentals	5/8	9-12	None
Global Foods	5/8	9-12	Culinary
Nutrition and Wellness	5/8	9-12	Culinary
Personal Wellness (Adulting 101)	5/8	9-12	None
Child Development	5/8	9-12	None
Interior Design, Furnishings and Management	5/8	9-12	None

\*\* There are no fees for GCCC courses

Family and Consumer Science courses will empower individuals to take action for the well-being of themselves and others in the home, workplace and community. The students will learn how to manage the challenges of living and working in a diverse global society, while developing competences for problem solving, financial literacy, and relationship building. Interpersonal skills, citizenship and leadership are also explored along with the concept of balancing work and family. The material covered in these courses provides a foundation for all career fields. Students will be required to participate in a **Culminating Course Project** (Action Project ) where the student will demonstrate content knowledge by applying the course material to their home, career and community. Students may have fees attached to their classes if they would like to participate in FCCLA.

### **Culinary Fundamentals**

In this course, students will apply fundamental culinary techniques, such as knife handling skills and the recognition, selection and proper use of tools and equipment. An emphasis will be placed in mise en place, the management of time, ingredients and equipment. Students will apply standard recipe conversions using proper scaling and measurement techniques. \*This is a prerequisite for Global Foods and Nutrition and Wellness.

### **Global Foods**

In this course, students will compare cuisines, ingredients and preferred cooking methods of various cultures. The influence of traditions and regional and cultural perspectives on food choices and culinary practices will be emphasized. Students will examine the ideas and conditions that affect the availability and quality of food in the global market, and apply advanced cooking techniques, including the use of specialty and advanced equipment in the preparation of food dishes. \*Students must take and pass Culinary Fundamentals before taking this course.

### **Nutrition and Wellness**

In this course, students will use principles of nutrition to ensure a healthy body throughout the lifecycle. An emphasis will be placed on planning and preparing meals with an understanding of nutrients and their benefits, portion control and dietary needs. Additional information will include steroid and supplemental use, body weight management and the implementation of physical activity to maintain a healthy lifestyle. \*Students must take Culinary Fundamentals before taking this course.



### **Personal Wellness (Adulting 101)**

In this course, students will analyze personal, physical, emotional, social, and intellectual growth for a healthy lifestyle. An emphasis will be placed on lifespan wellness by managing stress through relaxation, physical activity and sleep. Additional topics will include human growth development, mental health management, personal hygiene and preparing for emergency medical situations.

### **Child Development**

In this course, students will study the principles of child growth and development throughout the lifespan. An emphasis will be placed on intellectual, physical, social and emotional development. Additional topics will include childhood diseases, immunizations, and theories of development, learning styles and evaluating childcare services.

### **Interior Design, Furnishings and Management**

In this course, students will examine design principles used in residential interiors. An emphasis will be placed on incorporating anthropometrics, ergonomics and psychological responses. Additional topics will include the selection and organization of furnishings, floors and wall coverings in living spaces, kitchens and baths.

## ***Health & Physical Education Department***

1 credit required for graduation

<b><u>Courses</u></b>	<b><u>Credit</u></b>	<b><u>Level</u></b>	<b><u>Prerequisites</u></b>	<b><u>Fee</u></b>
Health	½	9-12	None	\$8.00
Phys. Ed. I	¼	9-12	None	None
Phys. Ed. II	¼	9-12	None	None
Speed and Agility	¼	9-12	None	None
Strength Training	¼	9-12	None	None
Girls' Strength Training	¼	9-12	None	None
Dance	¼	9-12	None	None
Mind & Body Wellness	¼	9-12	None	None
Leadership Development	½	9-12	None	None

### **Health**

This course is required of all students. It includes material which will help the student mature physically, mentally, and socially. All students are taught Adult CPR/AED.

***In order to comply with the Ohio Department of Education, all Physical Education students will complete the Physical Education Academic Content Standards & Assessments.***

### **Physical Education I: Physical Activity & Fitness**

Students will focus on developing an appreciation of fitness and self-confidence while participating in physical activity. Emphasis will be placed on the following components of fitness: Cardiovascular Fitness, Muscular Strength & Endurance, and Flexibility. Course units include, but are not limited to: stations, a weightlifting unit, strength & cardio circuits, and a walk/run program.

### **Physical Education II: Sports & Fitness**

This course focuses on team and lifetime-based sports and fitness. Students will learn the skills necessary to become successful participants in invasion games and lifetime activities with a focus on sport-specific strategies, skills, and personal responsibility. Students will also improve personal fitness through activities that will enhance student knowledge of lifetime fitness components.

### *Strength Training*

This course will give students the necessary knowledge and skills to effectively implement a weight exercise program for life. The students will learn different types of training, the muscles that are involved, and the biological changes that occur. This class will meet every day for one semester.

### *Girls Strength Training*

This course will give students knowledge, proper etiquette, technique, and routine of a weight exercise program. This class will assist students in improving their posture and increasing muscular strength and flexibility. This class will meet every day for one semester.

### *Speed and Agility Training*

This course will give students the opportunity to develop and enhance their speed, agility, coordination, and footwork with daily speed and agility exercises. This course will also incorporate flexibility training to improve total range of motion. This class will meet every day for one semester.

### *Dance*

Dance class is designed for those that enjoy dance and want to get into shape. It will include dance, dance technique, and dance aerobics. This class will enhance physical and mental strength as well as balance and coordination. Students will choreograph several dance routines throughout the semester. Dance will meet every day for one semester.

### *Mind & Body Wellness*

This course will allow students to focus on the mind-body connection for achieving wellness. It will introduce the fundamentals of yoga and pilates to incorporate a daily practice. This class will also introduce and practice Meditation. This course will allow students to practice mindfulness while increasing strength and flexibility. The combination of Yoga, Pilates, and Meditation will encourage students to continue on a path to lifelong wellness. Mind & Body Wellness will meet every day for one semester.

### *Leadership Development*

This course will give students the opportunity to learn, develop and exhibit effective leadership traits. The students will learn habits, traits, routines and practices used by highly effective leaders from required readings, group activities, discussions, presentations, and guest speakers. This class will meet every day for one semester.

## *Physical Education Waiver Option*

This PE waiver is available to students (grades 9-12) participating in Bellbrook High School Interscholastic Sports, Cheerleading, the Marching Band/Flag Corp, and JROTC. Daily participation paralleling an official sport season must be successfully completed and approved by each respective coach/director.

To qualify for the Physical Education Waiver, a student must complete two full-seasons in one or more qualifying activities. Once successfully completed, the two Physical Education classes (1/4 credit each) required to meet BHS graduation requirement will be waived. Additionally,

- A student cannot mix one PE class with one activity to meet the BHS graduation requirement. A student must successfully complete two activities or successfully complete two PE classes to meet the graduation requirements.
- No credit is earned toward graduation requirements for participation in the activities. Students opting for the PE waiver will be required to fulfill the minimum 24 credits for graduation by successfully completing another class offering.

- The PE waiver does NOT include Health. All students are required to successfully complete Health class to meet the graduation requirements.

### **Frequently Asked Questions**

**For Physical Education, may other activities (non-school-sponsored athletics, etc.) which involve physical activity on the part of students be counted toward two semesters of physical Education?**

No. Ohio Revised Code specifically limits the participation to interscholastic athletics, marching band, cheerleading, or JROTC. There is no authority granted to a board of education to include any additional participation.

**Are there any other requirements students must meet beyond the two full seasons of participation in interscholastic athletics, marching band, cheerleading, or JROTC?**

Yes. Excused students also must complete one-half unit in another curricular area. While one-half unit of Physical Education requires a minimum of 120 hours of instruction, one-half unit in all other curricular areas requires a minimum of 60 hours of instruction.

**For Physical Education, what is the impact of being “cut”, quitting, or being injured and unable to play?**

Ohio Revised Code requires participation “for at least two full seasons”. The season during which a student was “cut” or quit the activity, or injured and unable to participate could not be used to fulfill the two season requirement.

**If a student participates in only one full season of an approved activity, can the student be excused from .25 units of Physical Education and thus have taken only .25 units of Physical Education to complete his or her Physical Education graduation requirement?**

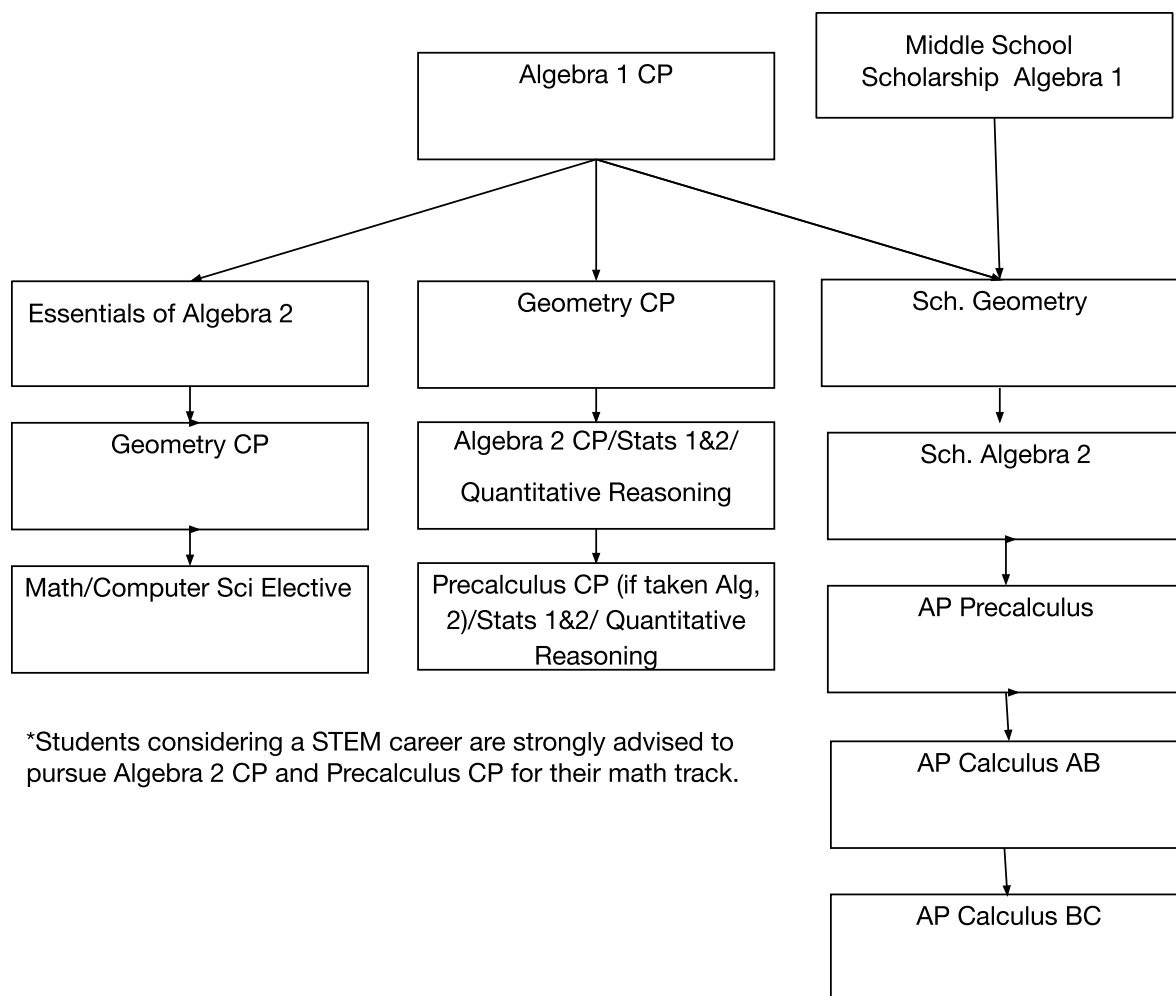
No. Ohio Revised Code requires participation for at least two full seasons. There is no provision in the law that would permit any type of partial excuse.

## ***Mathematics Department***

4 credits required for graduation

When selecting which course is the best fit for a student, math teachers take into consideration such factors as a student's grade, his/her work ethic and study skills, and grades in prior math courses. We understand that sometimes families decide to override the math teacher's recommendation. Unless a student is credit-deficient or unless there is an extenuating circumstance, students will not be permitted to take two year-long math courses simultaneously. Parents are encouraged to meet with their child's math teacher to discuss course placement, if there is a concern or question.

<b><u>Courses</u></b>	<b><u>Credit</u></b>	<b><u>Level</u></b>	<b><u>Prerequisites</u></b>	<b><u>Fee</u></b>
Algebra 1 CP	1	9	None	None
Geometry CP	1	9-10	Algebra 1 CP	None
Sch. Geometry	1	9-10	A in Alg. 1 CP	None
Ess. of Algebra 2	1	10-12	Teacher Rec	None
Algebra 2 CP	1	10-11	Geometry CP	None
Sch. Algebra 2	1	10-11	Sch. Geometry	None
Quantit. Reasoning	1	10-12	Geometry CP	None
Pre-Calculus CP	1	11-12	Alg. 2 CP	None
AP Pre-Calculus	1	10-12	Sch. Alg. 2	None
AP Calculus AB	1	11-12	Sch. Pre-Calc	None
AP Statistics	1	11-12	Teacher Rec	None
AP Calculus BC	1	12	AP Calc AB	None
Statistics 1	½	11-12	Statistics I	None
Statistics 2	½	11-12	None	None



### Algebra 1 CP

This class is a traditional Algebra 1 college prep course that covers base properties, axioms, and problem solving. This course is designed as an introductory college prep course that will eventually lead to Precalculus and Calculus courses. A graphing calculator in the TI- Family (i.e. TI-83+, TI-84 color) is recommended but not required. A scientific calculator is required.

### Geometry CP

This is a traditional college prep course. This course highlights geometric figures (their relationships—both logically and quantitatively) and applications to lines, angles, and polygons. Also included is an introduction to coordinate geometry, areas, ratio and proportion, constructions, trigonometry, and probability. A graphing calculator in the TI- Family (i.e. TI-83+, TI-84 color) is recommended but not required. A scientific calculator is required., and Algebra I CP is a prerequisite.

### Scholarship Geometry

This course covers the same material as geometry but at a faster pace. There is more emphasis on proof. A graphing calculator in the TI- Family (i.e. TI-83+, TI-84 color) is recommended but not required. A scientific calculator is required, and Scholarship Algebra I is a prerequisite (or teacher recommendation).

## Essentials of Algebra 2

This course is designed to teach the essential concepts of Algebra 2 including polynomials, exponential functions, and basic trigonometry concepts. The course will be taught in a more hands-on way using a variety of activities and technologies. A basic scientific calculator (i.e. TI-30X) is required. Teacher recommendation is required for placement in this course.

## Algebra 2 CP

This course is designed to build on algebraic and geometric concepts. Students will develop advanced algebra skills such as systems of equations, advanced polynomials, imaginary and complex numbers, quadratics, rational functions, exponentials, logarithms, trigonometric functions, and statistics. A solid understanding of Algebra I and Geometry is necessary for successful completion of this course. A graphing calculator in the TI family (TI-83 Plus, TI-84 Color) and a scientific calculator are required; students should have completed Geometry CP prior to enrolling in this course.

## Scholarship Algebra 2

This course is designed for the focused and serious student that plans to have a college major in a field that uses higher level mathematics and to prepare students to take the Advanced Placement Calculus Series. This course is designed to build on algebraic and geometric concepts. Students will develop advanced algebra skills such as systems of equations, advanced polynomials, imaginary and complex numbers, quadratics, rational functions, exponentials, logarithms, and trigonometric functions as well as an introduction to basic statistics. The topics are covered at a higher level than the traditional algebra 2 course. Prerequisites: Scholarship Geometry and/or teacher recommendation. A graphing calculator in the TI- Family (i.e. TI-83+, TI-84 color) and a scientific calculator are required.

## Quantitative Reasoning

This course prepares students to investigate contemporary issues mathematically and to apply the mathematics learned in earlier courses to answer questions that are relevant to their civic and personal lives. The applications should provide an opportunity for deeper understanding and extension of the material from earlier courses. This course should also show the connections between different mathematics topics and between the mathematics and the areas in which applied. This course is an Algebra II equivalent for graduation purposes.

## Pre-Calculus CP

This course is designed as a transition course between algebraic principles and geometric formulas. In addition to the family of functions introduced in Algebra 2, students will also explore more advanced topics including advanced trigonometry, the unit circle, advanced trig functions and identities, matrices and vectors, polar coordinates and complex numbers, conics, and logarithmic and exponential functions. This course is intended for students who wish to take calculus and who have successfully completed Algebra 2 CP. A graphing calculator in the TI- Family (i.e. TI-83+, TI-84 color) is required. A B- or higher in Algebra 2 CP is recommended, along with teacher recommendation.

## AP Pre-Calculus

This rigorous course is intended for serious students planning to major in a college field requiring higher levels of mathematics. As such, AP Pre-calculus is designed to build on concepts learned in Scholarship Algebra II while continuing to develop mathematical and problem solving skills. In addition to the family functions introduced in Algebra 2, students will also explore more advanced topics including advanced trigonometry, the unit circle, advanced trig functions and identities, matrices and vectors, polar coordinates and complex numbers, conics, and logarithmic and exponential functions. A graphing calculator in the TI- Family (i.e. TI-83+, TI-84 color) is required. A B- or higher in Scholarship

Algebra 2 is recommended, along with teacher recommendation. This course prepare students for the AP Pre-calculus Exam.

### **AP Calculus AB**

This course is for advanced students in preparation for college. The course covers limits, derivatives, and integrals. This course is designed to lead to the Advancement Placement Calculus BC class. A graphing calculator in the TI- Family (i.e. TI-83+, TI-84 color) is required. Successful completion of precalculus or scholarship precalculus is required.

### **AP Calculus BC**

In BC Calculus, students will explore the concepts, methods, and applications of differential and integral calculus, including topics such as parametric polar, and vector functions and series. Students are required to have a graphing calculator in the TI-family (TI-83 or 84), and successful completion of AB Calculus is required.

### **AP Statistics**

This course will introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There is a heavy emphasis on reading and writing in this course. Students who complete this course may take the Statistics AP exam. A B- or higher in Algebra 2 CP is recommended, along with teacher recommendation. A graphing calculator in the TI- Family (i.e. TI-83+, TI-84 color) is required.

### **Statistics & Probability 1 - Semester**

In this introductory course, students will learn the basics of data analysis for one- and two-variable data. They will also learn the foundations of probability. Students also have the opportunity to analyze data sets using technology. This course is an Algebra II equivalent course when taken with Statistics II the following semester.

### **Statistics & Probability 2 - Semester**

In the follow-up course to Statistics & Probability 1, this course will extend data analysis to include the study of confidence intervals and hypothesis tests, as well as more complex probability problems. Successful completion of Statistics & Probability 1 is required. This course is an Algebra II equivalent course when taken with Statistics I the previous semester.



## ***Music Department***

1 credit of Fine Art required for graduation

<b><u>Courses</u></b>	<b><u>Credit</u></b>	<b><u>Level</u></b>	<b><u>Prerequisite</u></b>	<b><u>Fee*</u></b>
Percussion Ensemble SB	1	9-10	None	\$75*
Percussion Ensemble WE	1	11-12	None	\$75*
Symphony Band	1	9-10	None	\$50*
Wind Ensemble	1	11-12	None	\$50*
Marching Eagles	2 years in marching band equals PE waiver	9-12	Audition for placement only. All are accepted if willing to make the commitment.	\$745 + \$50 instrument rental (not all apply*)
Concert Choir	½ per semester	9-12	None	\$30
AP Music Theory	1	9-12	Pre-Test & Teach. Rec.	\$35

***\* A \$50 per semester (\$100 per year) instrument rental fee applies to any student using a school-loaned instrument. This is in addition to the \$50 fee for the course.***

### **Symphony Band (Full Year)**

The BHS Symphony Band is the largest of the concert performance ensembles at Bellbrook High School, and is a **full year** course. Freshmen and sophomores should register for this ensemble, unless otherwise specified by the band directors. Students will learn intermediate and advanced performance techniques along with development of individual tone and musicianship. The Symphony Band performs at all on-campus concerts, as well as the Ohio Music Educators Association Solo & Ensemble Festival, the Music for All Regional Concert Band Festival, and other concert events. There is a \$50 fee associated with participation in the Symphony Band that is separate from the marching band fee, and a \$50 per semester fee for use of a school owned instrument (\$100/year). That fee will cover cleaning, repair, and maintenance that occurs every year.

### **Wind Ensemble (Full Year)**

The BHS Wind Ensemble is a concert wind ensemble of balanced instrumentation, made up of 11th and 12th graders. The directors will add 9th/10th graders if there is a need, so that instrumentation is balanced. This ensemble is a **full year** obligation for all members. Musicians in this ensemble continue the development of advanced performance techniques while cultivating superior musicianship. The Wind Ensemble performs at all on-campus concerts, district and state concert festivals, as well as other musical festivals regionally. Musicians also participate in the OMEA Solo and Ensemble Festival second semester, as soloists or as members of smaller chamber groups. There is a \$50 fee associated with participation in the Wind Ensemble that is separate from the marching band fee, and a \$50 per semester fee for use of a school owned instrument (\$100/year). Specifically, there is an instrument rental fee if the student is playing a school owned instrument (\$50 per semester). That fee will cover cleaning, repair, and maintenance that occurs every year.

### *Symphony Band - Percussion/Wind Ensemble - Percussion*

The BHS Percussion Orchestra is comprised of percussion students in grades 9-10/11-12 who are interested in the development of advanced performance techniques in all areas of percussion performance, including but not limited to marching percussion, keyboard percussion, timpani, and concert band/orchestra percussion techniques. Students in grades 9 and 10 should sign up for Symphony Band Percussion, and 11th and 12th grade students should register for Wind Ensemble. No audition is required to perform in the Percussion Orchestra. Percussion Orchestra is a **full year** class. *Students wishing to play percussion in the Marching Eagles and/or the Indoor Percussion Ensemble are required to register for Percussion Orchestra class OR one of the band classes, if their primary instrument is not percussion.* The Percussion Orchestra will explore percussion ensemble literature as well as standard concert band music, while expanding their own individual performance techniques. An Indoor Percussion Ensemble (IPE) may be offered during the 2nd semester as an extra- curricular activity. There are fees associated with the participation in the Percussion Orchestra class that are separate from those of the Marching Eagles and IPE. **Ninth and tenth grade percussion students should sign up for Percussion Orchestra SB, and eleventh and twelfth grade percussion students should sign up for Percussion Orchestra WE.**

### *Marching Eagles (MB)*

This prestigious ensemble is comprised of students grades 9-12 (with a few select 8th graders) interested in getting the most out of the high school band experience. The Marching Eagles, as an ensemble, demonstrate the highest level of school spirit, participating in football games, pep-rallies and parades. In addition to supporting Bellbrook High School athletics, the Marching Eagles compete on a local and national level. The Marching Eagles are nationally recognized as seven-time Bands of America Class National Class Champions, most recently as the 2013 BOA Class A National Champions. Rehearsals are held on a regular basis, and on selected Saturdays in September, October and November. The Marching Eagles travel across the nation, in the past to states like Florida, Tennessee, Missouri and New York. There are fees associated with participation in the Marching Eagles. The Marching Eagles conclude their competitive season each year at the Bands of America Grand National Championships in Indianapolis, Indiana in November. Members of the Marching Eagles must attend a mandatory band camp during the summer, as well as other scheduled summer rehearsals. Students interested in participating in the Marching Eagles as a marching brass, woodwind, or percussion member **must register concurrently** for a band class – Symphony Band (MB), Percussion Orchestra, or Wind Ensemble (MB). No audition is required for participation, just dedication and pride. Students must maintain academic eligibility to perform in season, and adhere to the Code of Conduct as set forth by Bellbrook High School.

### *Concert Choir*

The choir is open to vocal students who have a desire to develop vocal skills and techniques. The choir is a performance-based ensemble and will perform a minimum of three concerts per year. Students in the choir have the opportunity to sing a variety of styles of music and are given the opportunity to sing in small groups as well as in a large performance ensemble. Students must audition or be approved by the director. This is a year- long course that should be taken for 1 full credit; however, if necessary, students may take choir for either semester with the director's approval.

### *AP Music Theory*

Students in AP Theory will be challenged in all areas of music theory including advanced harmonic analysis, composition, orchestration, and arranging as well as ear training and other auditory skills. Students will take the collegiate advanced placement examination in May. This course is recommended for students who wish to continue in musical study past graduation from high school, or for students who wish to learn the construction and composition of music. *A basic understanding of music reading is required!* Students will be given a pre-test, at which time it will be determined whether the student is recommended to continue in the class. \*May only be offered every other year, dependent upon enrollment.\*

## ***Pre-Engineering Department (Project Lead the Way)***

Project Lead the Way's (PLTW) engineering program prepares students for future, successful engineering careers. Students may be eligible to receive college credit from many schools across Ohio through what are called Career Technical Assurance Guide (CTAG) Courses. The Ohio Transfer to Degree Guarantee allows students to earn college credit within their program, transferable to any Ohio public college or university with a similar program of study for successfully completing the Greene County Career Center program (Career Tech equivalent of CCP) – Students must earn a C or better in the course AND pass the state end-of-course exam (WebXam) to earn this credit. You can find out more information about this process at <https://www.ohiohighered.org/transfer/ct2/earning-college-credit>

Bellbrook High School offers two foundational courses in partnership with the Greene County Career Center: Introduction to Engineering Design (IED), Principles of Engineering (POE). We also offer four advanced courses: Engineering Design and Development (EDD), Civil Engineering and Architecture (CEA), Aerospace Engineering (AE), and Digital Electronics (DE). Any high school student wishing to explore a career in engineering is encouraged to sample these pre-engineering classes.

### **Foundational Course**

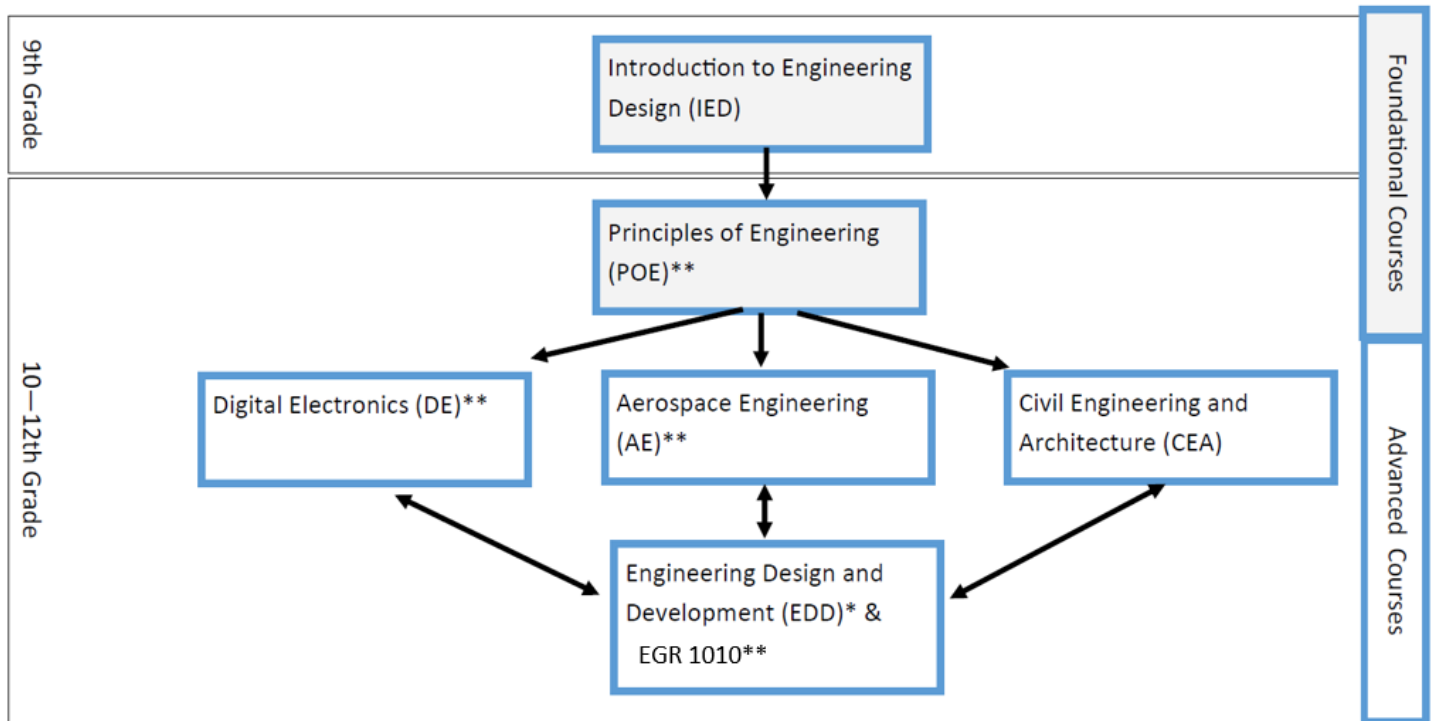
<b><u>Courses</u></b>	<b><u>Credit</u></b>	<b><u>Level</u></b>	<b><u>Prerequisite</u></b>	<b><u>College Credit</u></b>
Intro to Engineering (IED)	1	9 <sup>th</sup> Only	None	
Principles of Engineering (POE)**	1	10-12	Algebra 1	1 Credit CTAG

### **Advanced Courses**

<b><u>Courses</u></b>	<b><u>Credit</u></b>	<b><u>Level</u></b>	<b><u>Prerequisite</u></b>	<b><u>College Credit</u></b>
Digital Electronics (DE)**	1	11 - 12	POE or Physics & Teacher Recommendation	4 credit CTAG
Civil Engineering / Architecture	1	11 - 12	POE or Physics & Teacher Recommendation	
Aerospace Eng. (AE)**	1	11 - 12	POE or Physics & Teacher Recommendation	3 Credit CTAG
Engineering Design & Dev (EDD)* & EGR 1010 – Engineering Mathematics **	1	11 - 12	POE or Physics & Teacher Recommendation	4 Credit CCP Option

***\*Simultaneous Credit: Advanced Science & Engineering***

***\*\*College Level course***



### Introduction to Engineering Design (IED)

Using 3-D computer modeling software students learn the design process, solve design problems and develop, analyze and create product models. This curriculum makes math and science relevant for students. By engaging in hands-on, real world projects, students understand how the skills they are learning in the classroom can be applied in everyday life. This introductory course is for 9<sup>th</sup> graders only.

### Principles of Engineering (POE)\*\*

This course explores the wide variety of careers in engineering and technology and covers various technology systems and manufacturing processes. Using activities, projects and problems, students learn first-hand how engineers and technicians use math, science and technology in an engineering problem-solving process to benefit people. This is the entry course to the engineering pathway for any student in grades 10-12.

*Students will have the opportunity to choose either a robotics focused or general engineering section.*

*Prerequisite: Algebra 1*

### Digital Electronics (DE)\*\*

Digital Electronics is the study of electronic circuits that are used to process and control digital signals. Digital electronics is the foundation of all modern electronic devices. The major focus of the DE course is to expose students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation.

*Prerequisite: Principles of Engineering*

### *Civil Engineering and Architecture (CEA)*

The CEA course is intended to serve as a specialization course within the Pre-Engineering/STEM program. It may be taken in sequence or taken as a stand-alone course (see prerequisites). The course is structured to enable all students to have a variety of experiences that will provide an overview of both fields. Students work individually as well as in teams, exploring hands-on projects and activities to learn the characteristics of civil engineering and architecture. The major focus of the Civil Engineering and Architecture course is a long-term project that involves the development of a local property site. Students learn about documenting their project, solving problems, and communicating their solutions to their peers and members of the professional community of civil engineering and architecture.

*Prerequisite: Principles of Engineering*

### *Aerospace Engineering (AE)\*\**

This course propels students' learning in the fundamentals of atmospheric and space flight. As they explore the physics of flight, students bring the concepts to life by designing an airfoil, propulsion system, and rockets. Students will utilize industry-standard software and wind tunnels.

*Prerequisite: Principles of Engineering*

### *Engineering Design and Development (EDD) Capstone – Project Lead the Way\**

The knowledge and skills students acquire throughout the Engineering Pathway come together in EDD in an engineering design challenge as they apply engineering technical skills with advanced academic content. This course will work through physics and material science academic curriculum and the engineering design process to research, design, and construct a solution to an open-ended engineering problem. (Material science is the exploration of the properties of different materials such as metals, polymers, glass, ceramics, wood and composites and how they are used to optimize design elements for an application) The product development lifecycle and a design process will be used to guide and help your team reach a solution to the problem. You and your team will present and defend your solution to a panel of outside reviewers at the end of the school year. identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, ready to take on any post-secondary program or career. A graphing calculator in the TI-Family (i.e. Ti-83+, Ti-84 color) is required.

*Prerequisite: Applied Engineering Principles or Introduction to Engineering Design and either have completed or concurrently enrolled in Aerospace Engineering, Digital Electronics, or Civil Engineering*

**\*Simultaneous Credit: Engineering & Advanced Science**

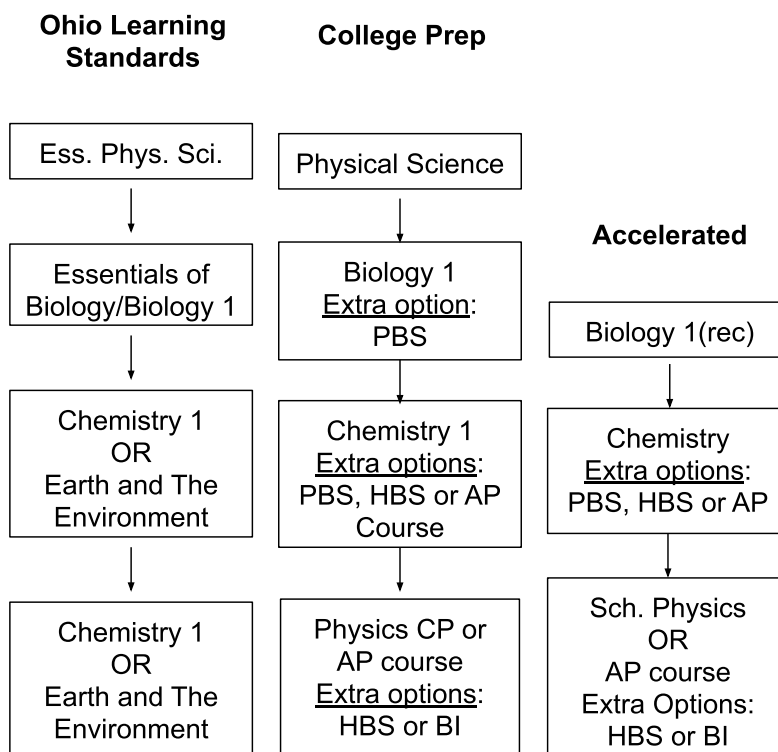
**\*\* Course is a College Level course.**

## ***Science Department***

3 credits required for graduation

<b><u>Course</u></b>	<b><u>Credit</u></b>	<b><u>Level</u></b>	<b><u>Prerequisite</u></b>	<b><u>Fee*</u></b>
Essentials of Physical Science	1	9	Placement made by teacher/counselor	\$20
Physical Science	1	9	None	\$20
Essentials of Biology	1	10	Placement made by teacher/counselor	\$40
Biology I	1	9-10	Teacher/counselor recommendations for 9 <sup>th</sup> graders	\$40
Chemistry I	1	10-12	"B" in Biology 1, "C" in Algebra 1	\$30
AP Biology	1	10-12	"A-" in Biology 1	\$50
AP Environmental Science	1	11-12	"A" in Biology 1	\$45
AP Chemistry	1	11-12	"A" in Chemistry 1 & Algebra 2; or Teacher recommendation	\$50
Earth and The Environment	1	11-12	Physical Science	\$25
Physics CP	1	11-12	"B" in Chemistry and Algebra 2	\$20
Scholarship Physics	1	11-12	"B" in Chem and conc/complet. Precalc	\$20
AP Physics C	1	12	"B" in Sch. Physics and conc/completion of Calc	\$20
<b>Biomedical Sciences PLTW (Project Lead the Way Program)</b>				
Principles of Biomedical Sciences (PBS)	1	9-10	Must be taking Biology or already have taken Biology with a "B" or better grade	\$100
Human Body System (HBS)	1	10-12	Must have taken Principles of Biomedical Science (PBS) or teacher approval	\$100
Medical Interventions (MI)	1	11-12	Recommend completion of HBS or AP Biology	\$100
Biomedical Innovation (BI)	1	12	**Must have teacher approval to sign up for this class	\$100

***\*Approximate cost***



### Physical Science

This is an introductory college prep course with an emphasis on introductory chemistry and introductory physics. This course serves the purpose of building a good science foundation academic skills, as well as providing a desirable background to successfully begin a course in Biology I, Chemistry I, Physics I, and Earth and the Environment. This is an inquiry based lab approach which allows students to be exposed to various laboratory techniques, laboratory safety, and experience concepts in physics, chemistry, and astronomy.

### Essentials of Physical Science

This course is a teacher/counselor recommended course designed to cover the state's Physical Science learning standards. It is designed to provide students with a more hands-on approach and individualized instruction. Students will be exposed to various laboratory techniques, laboratory safety, and experience concepts in physics, chemistry, astronomy.

### Essentials of Biology

This course is a teacher/counselor recommended course designed to cover the state's Biology Learning Standards. It is designed to provide students with real life foundation science skills incorporating more individualized direction. Biology Essentials explores areas of ecology, population biology, biochemistry, cells, energy transfers, genetics, DNA, evolution, and more. This class prepares students for the EOC state test by reviewing standards covered in Biology.

### Biology I

This is an introductory college prep course with emphasis on ecology, population biology, biochemistry, cells, energy transfers, genetics, DNA, evolution, and more. It is primarily designed as a sophomore level course. This course can be taken as a stand-alone biology course for those not planning post-secondary science studies, or as a strong foundation course upon which to build future study. This class prepares students for the EOC state test by reviewing standards covered in Biology.

### *Chemistry I*

This laboratory based course provides an introduction to the science of chemistry with an emphasis on mathematical application of chemistry, scientific method, problem solving, and precise laboratory procedures. Topics covered include; atomic structure, stoichiometry, thermochemistry, kinetics, equilibrium, and nuclear chemistry.

### *AP Biology*

This course follows the curriculum for the Advanced Placement Biology exam as stated by the College Board. Emphasis will be placed on eight themes of biology: Science as a Process, Evolution, Energy Transfer, Continuity and Change, Relationship of Structure to Function, Regulation, Interdependence in Nature, and Science, Technology, and Society.

### *AP Environmental Science*

This course follows the curriculum for the Advanced Placement Environmental Science Exam as stated by the College Board. The course treats environmental science as an interdisciplinary study, combining ideas and information from the natural sciences such as biology, chemistry, and geology, and from the social sciences such as economics, politics, and ethics to present a general idea of how nature works and how things are interconnected. This course requires participation in field activities that are done outside of the school day.

### *AP Chemistry*

This course follows the curriculum for the Advanced Placement Chemistry exam as stated by the College Board. Topics covered include: atomic structure, stoichiometry, thermochemistry, electrochemistry, kinetics, and equilibrium. Laboratory experience is a significant part of the course, stressing analytical methods, titration techniques, and collection of data. Additional time during the school day will be scheduled to satisfy AP curriculum lab requirement.

### *Earth and The Environment*

This course is a laboratory-based science class emphasizing the function of the Earth system and the effect of human activities on it. Topics studied include the composition of Earth, surface processes, the atmosphere, the dynamic nature of Earth, geologic time, and Earth's resources. Also included is a small chemistry unit that fosters the understanding of the chemical reactions involved in Earth science.

### *Physics CP*

This is an advanced high school level course that includes laboratory experiences. Students cultivate their understanding of physics as they explore topics including: motion, forces, momentum, energy, waves, electricity and magnetism. This course includes content found in Ohio's New Learning Standards and Model Curriculum for Science, High School Physics.

### *Scholarship Physics*

Scholarship Physics is an advanced high school level course that includes laboratory experiences. Scholarship Physics is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics as they explore topics including: kinematics, dynamics, circular motion and gravitation, energy, momentum, simple harmonic motion, torque and rotational motion. This course closely follows the AP Physics 1: Algebra Based Course Description.

### *AP Physics C*

AP Physics C. During the first semester, students will review mechanics, which students learned in a previous course. Additionally, students will be integrating calculus into mechanics. After the study of mechanics, students will transition to learning calculus based electromagnetism. This year-long course is equivalent to two one-semester, calculus-based, college-level physics courses, especially appropriate for students planning to specialize or major in one of the physical



sciences or engineering. Students cultivate their understanding of physics through classroom study and activities as well as hands-on laboratory work as they explore concepts like change, force interactions, fields, and conservation.

## **PLTW Biomedical Science Courses**

In partnership with the Greene County Career Center, the science department offers a PLTW program in Biomedical Sciences. Working with the same equipment and tools used by lab professionals, PLTW Biomedical Science students are empowered to explore and find solutions to some of today's most pressing medical challenges. Through scaffolded activities that connect learning to life, students step into the roles of biomedical science professionals and investigate topics including human medicine, physiology, genetics, microbiology, and public health. Students work together in teams to find unique solutions, and in the process, learn in-demand, transferable skills like critical thinking and communication. Any high school student wishing to explore a career in the medical field and/or biomedical engineering is encouraged to sample these classes.

### **Principles of Biomedical Science (PBS)**

Principles of Biomedical Science serves to provide foundational knowledge and skills in fields such as biology, anatomy and physiology, genetics, microbiology, and epidemiology, as well as engage students in how they can apply this content to real-world situations, cases, and problems such as solving a medical mystery case, diagnosing and treating a patient, or responding to a medical outbreak. This updated program modernizes content to be interactive using 3D animations, virtual and augmented reality, simulated electronic patient records, and more. The emphasis will be on how concepts in science, technology, math, and engineering apply in tandem to help understand and solve health care problems.

### **Human Body Systems (HBS)**

This class is the second course in the PLTW Biomedical STEM Program. In the Human Body Systems (HBS) course, students examine the interactions of body systems as they explore identity, communication, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through interesting real world cases, and often play the role of biomedical professionals to solve medical mysteries.

### **Medical Interventions (MI)**

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. Lifestyle choices and preventative measures are emphasized throughout the course as well as the important role that scientific thinking and engineering design play in the development of interventions of the future.

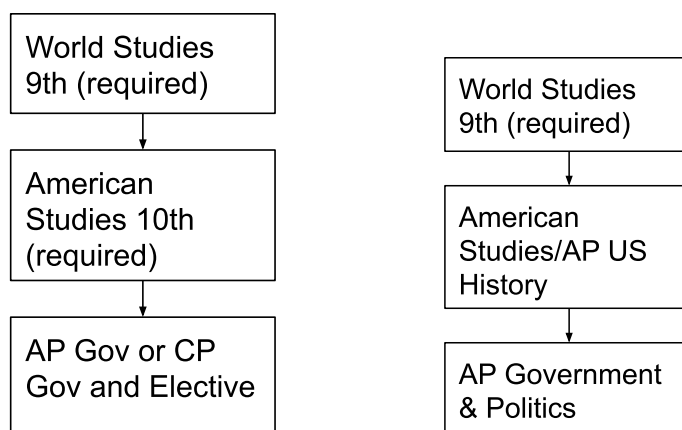
### **Biomedical Innovation (BI)**

In this capstone course, students apply their knowledge and skills to answer questions or solve problems related to the biomedical sciences. Students design innovative solutions for the health challenges of the 21st century as they work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. They have the opportunity to work on an independent project and may work with a mentor or advisor. Throughout the course, students are expected to present their work to an adult audience that may include representatives from the local business and healthcare community.

## ***Social Studies Department***

3 credits required for graduation

<b><u>Courses</u></b>	<b><u>Credit</u></b>	<b><u>Level</u></b>	<b><u>Prerequisite</u></b>	<b><u>Fee</u></b>
World Studies	1	9	None	None
American Studies	1	10	None	None
AP U.S. History	1	10-12	"A" in Social Studies and/or Teacher recommendation	Cost of textbook
American Govt. & Econ.	.5	11-12	None	None
AP U.S. Gov't & Politics	1	11-12	successful completion of or concurrent enrollment in one other AP course	Cost of textbook



### **World Studies**

Students will study a survey of world history from the Enlightenment to the present with a special focus on 20th century history. Additional emphasis will be placed on world geography, cultures, migrations, economics, global interdependence, and regional studies and how they relate to the time periods studied. This is a required course intended to be taken during the freshman year.

### **American Studies**

This course surveys the history of the United States from the 1800's to the present. The major units of study are the settlement of the West, the United States as a World Power, reform in America, and Post World War II to the present day. This is a required course intended to be taken during the sophomore year.

### **AP U.S. History**

This course follows the curriculum for APUSH as established by the College Board. APUSH is an elective course recommended to be taken during the 11th grade year, following the successful completion of American Studies in grade 10. Students wishing to take APUSH in place of American Studies during their 10th grade year must meet the following requirements:

1. Successful completion of World Studies with an "A" or "A+" average for both first and second semester.
2. A GPA of 3.8 or higher.
3. Enrollment in Honors English 10 for their sophomore year.

Enrollment in the class is limited and there is a fee to cover textbook expenses.

### **American Government and Economics**

This required course is a study of government in the United States at the national, state, and local levels. The course emphasizes reflection upon historical and modern significance of topics such as; the roles of the three branches of government, foreign policy decisions, landmark court decisions, the role of political parties, rights and responsibilities of citizens, economic theory and personal financing.

### **AP Government & Politics**

This course is intended for qualified students who wish to complete studies, in high school, equivalent to a college introductory course in Government and Politics. Topics similar to those addressed in American Government and Economics will be addressed but the course is intended to prepare students for the AP exam to be taken in May. Enrollment is limited and there is a book fee for the course.

## ***Social Studies Department Electives***

<b><u>Courses</u></b>	<b><u>Credit</u></b>	<b><u>Level</u></b>	<b><u>Prerequisite</u></b>	<b><u>Fee*</u></b>
American & Global Issues	½	10-12	None	\$10
Sociology	½	11-12	None	None
Psychology	½	11-12	None	None
Rock 'n Roll in Amer. History	½	10-12	None	None

***\*Approximate cost***

### **American and Global Issues**

This elective course is a study of current issues in America and the world. Students will focus on issues of both current and historical importance by utilizing digital resources, magazines and additional resources.

### **Sociology**

This course is based on the scientific study of social aspects of human life. The class includes personality, cultural development, minority groups, family life, major religions, significant political structures and their economic systems and other areas.

### **Psychology**

Psychology is designed for those who wish to better understand the mental processes and behaviors of themselves and others. The class covers topics such as: the history of psychology, current psychological perspectives, psychological methods, biology and the brain, psychological disorders, and theories on learning, intelligence, and personality.

### **Rock 'n' Roll in American History**

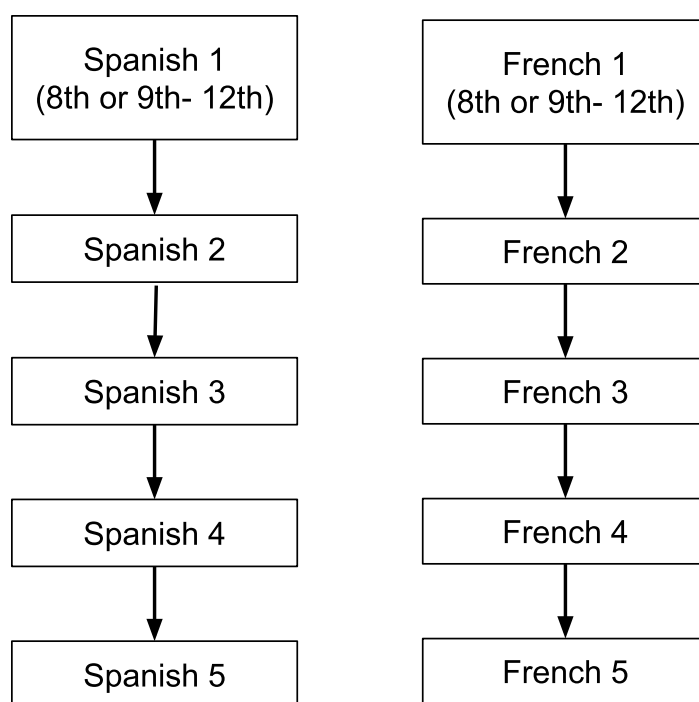
Since the 1950's Rock 'n' Roll music has been a pervasive and popular art form that reflects major themes and events within American society. This project based course allows students the opportunity to study the history of Rock 'n' Roll music and its connection to American political, social and economic history.

## ***World Languages Department***

<b><u>Course</u></b>	<b><u>Credit</u></b>	<b><u>Level</u></b>	<b><u>Prerequisites</u></b>	<b><u>Fee*</u></b>
French 1	1	9-12	none	\$21
French 2	1	9-12	French 1	\$21
French 3**	1	10-12	French 2	\$11
French 4**	1	11-12	French 3	\$15
French 5**	1	12	French 4	TBD
Spanish 1	1	9-12	none	\$16
Spanish 2	1	9-12	Spanish 1	\$16
Spanish 3**	1	10--12	Spanish 2	\$16
Spanish 4**	1	11-12	Spanish 3	\$15
Spanish 5**	1	12	Spanish 4	\$18

**\*\*CC Plus course**

**\*Approximate cost**



### **French 1**

This course follows the state model and allows students to develop proficiencies in reading, writing, speaking, and listening in French. Students will become acquainted with the culture, geography, art, literature, and history of the French speaking world. Students will use a variety of media to obtain these goals. The course is conducted with every increasing emphasis on the target language.

### **French 2**

This course is a continuation of French 1. Emphasis will be placed on the further development of the proficiencies in reading, writing, speaking, and listening. Students will be exposed to the culture, geography, art, literature, and history of the French speaking world. The course is conducted with every increasing emphasis on the target language.

### *French 3 Honors\*\**

Proficiencies obtained in French 1 & 2 will be further developed. Students advance their knowledge of the language through the study of literature, history, art, French culture, and a review of grammar. The course is conducted primarily in the target language.

### *French 4 Honors\*\**

This course utilizes and expands the proficiencies obtained in French 1, 2, and 3. Students will advance their knowledge of the language through a more in-depth study of the literature, history, art, French culture, and a review of grammar. The course is conducted exclusively in the target language.

### *French 5 Honors\*\**

This course allows students in-depth research and activities pertaining to topics relevant to the French speaking world. Students will follow a designated college-level French curriculum, involving advanced skills in reading, writing, speaking, and listening. The course is conducted exclusively in the target language.

### *Spanish 1*

This course follows the state model and allows students to develop proficiencies in reading, writing, speaking, & listening in Spanish. Students will become acquainted with the culture, geography, art, lit, & history of the Spanish speaking world. Students will use a variety of media to reach these goals. The course is conducted with every increasing emphasis on the target language.

### *Spanish 2*

This course is a continuation of Spanish 1. Emphasis will be placed on the further development of the proficiencies in reading, writing, speaking, and listening. Students will be exposed to the culture, geography, art, literature, and history of the Spanish speaking world. The course is conducted with every increasing emphasis on the target language.

### *Spanish 3 Honors\*\**

This course utilizes and expands the proficiencies obtained in Spanish 1 and 2. Students will advance their knowledge of the language through the study of literature, history, art, Hispanic culture, and a review of grammar. The course is conducted primarily in the target language.

### *Spanish 4 Honors \*\**

This course utilizes and expands the proficiencies obtained in Spanish 1, 2, and 3. Students will advance their knowledge of the language through a more in-depth study of literature, history, art, Hispanic culture, and a review of grammar. The course is conducted exclusively in the target language.

### *Spanish 5 Honors \*\**

This course allows students in-depth research and activities pertaining to topics relevant to the Spanish speaking world. Students will follow a designated college-level Spanish curriculum involving advanced skills in reading, writing, speaking, and listening. The course is conducted exclusively in the target language.

## ***Aerospace Science – Air Force Junior Reserve Officer Training Corps (AFJROTC)***

*Air Force Junior ROTC is a program for all students. Interest in a military career is not a requirement for the class.*

Air Force Junior ROTC is a citizenship program for high school students in the ninth through twelfth grades. The mission is:

**“Develop citizens of character dedicated to serving their nation and community”**

The objective of Air Force Junior ROTC is to “Instill Values of Citizenship, Service to the United States, Personal Responsibility and Sense of Accomplishment.” This is achieved by educating and training high school students in citizenship, promoting community service, instilling attributes of responsibility, character, self-discipline, and providing instruction in air and space fundamentals and leadership.

The Air Force Junior ROTC program is grounded in the Air Force core values of Integrity First, Service Before Self, and Excellence in all We Do. The curriculum emphasizes the Air Force heritage and traditions, the development of flight, applied flight sciences, military aerospace policies, and space exploration.

Students at any grade level can take the Air Force Junior ROTC class (9-12.) All new AFJROTC cadets will take Aerospace Science I regardless of their grade level, unless the AFJROTC Instructors approve the student to start at a higher level.

<u><b>Courses</b></u>	<u><b>Credit</b></u>	<u><b>Level</b></u>	<u><b>Prerequisite</b></u>	<u><b>Fee</b></u>
Aerospace Science I	1	9-12	None	None
Aerospace Science II	1	10-12	Aerospace Science I or instructor permission	None
Aerospace Science III	1	11-12	Aerospace Science II or instructor permission	None
Aerospace Science IV	1	12	Aerospace Science III or instructor permission	None

Students who successfully complete two years of Air Force JROTC will receive their PE waiver, allowing the student to exempt PE courses during high school.

**Leadership Opportunities:** Students will have multiple opportunities to hold a leadership position or perform in a leadership role. These experiences will assist the student on applications for jobs, college scholarships, awards, and a whole lot more.

Curriculum opportunities include: Academic Studies, Character Education, Life Skills, Leadership Opportunities, Mental and Physical Fitness Activities to include Intramural Competition, Field Trips and Training opportunities.

Aerospace Science course work relates to different themes. Examples include milestones in aviation, the science of flight, cultural studies and the exploration of space. Leadership Development stresses responsibility, self-discipline, self-confidence, and communicative skills development through practical lab experience in planning, instructing, and motivating fellow classmates. To enhance classroom learning, students participate in extracurricular and social activities such as field trips, color guard, community service, and military events.

- Air Force Junior ROTC is a combined social studies, applied science, and leadership development course sponsored by the United States Government. The Air Force establishes the curriculum and furnishes all text material. Forty percent of the curriculum focuses on aerospace science, forty percent is on leadership development and the remaining twenty percent is wellness. One day a week is normally devoted to drill and marching and Fridays are normally dedicated to wellness where students will participate in physical & mental fitness activities.

**Field Trips:** JROTC students may have the opportunity to take field trips throughout the year both as a class and for smaller groups of cadets. Examples of some recent field trips are class trips to the Air Force Museum and iFly Cincinnati as well as small group trips for color guards for events in the local communities, luncheons for local military-affiliated organizations and leadership seminars. The field trips are dependent upon the curriculum for that year and needs in the community.

**Community Service:** Air Force Junior ROTC encourages its students to get involved in their local communities. Students will have the opportunity to perform various community service acts such as food drives, assisting the elderly in yard work, recycling cardboard and paper at the high school, helping at the Veteran Affairs Hospital in Dayton, and many other fun and unique opportunities.

**Uniform:** Air Force uniforms are furnished for free. Uniforms include physical training clothing, Air Force jackets, shirts, pants, shoes, socks, etc. Some of the uniform items are required to be returned at the end of the school year or the student may be charged a fee. The Air Force uniform will be worn once a week after it has been issued. Students are expected to maintain Air Force grooming standards when wearing the uniform, which includes maintaining hair standards.

**After High School Employment:** Career-minded high school students will learn about jobs in the aerospace industry and the Air Force that could open important opportunities for their future. High school students who complete the aerospace science program in Air Force Junior ROTC can enlist in any branch of the armed forces at higher pay grades than students that did not take Air Force Junior ROTC.

**College and Scholarship Opportunities:** The leadership opportunities and positions held in Air Force Junior ROTC provide students a wealth of experiences which will make them extremely competitive when they fill out college applications, scholarship applications, appointments to any of the US Military Service Academies (West Point, Annapolis, and Air Force Academy), and scholarships for the Army/Navy/Air Force/Marine ROTC college programs. JROTC cadets may be eligible for specific scholarships offered only to cadets enrolled in the program. Current scholarships offered are the J-100 AFROTC scholarship which supplies tuition, room and board to selected JROTC cadets and the Flight Academy Scholarship which allows selected cadets to attend a flight training program in the summer and earn their private pilot's license.

**Wellness:** All cadets are required to participate in the Air Force Junior ROTC Wellness Program. Each Friday, students will engage in various physical fitness activities. The activities include team competitions, group exercise classes, individual exercises, and twice a year all cadets will complete a Physical Fitness Test which includes push-ups, sit-ups and a 1-mile run/walk.

## **FIRST YEAR STUDENTS**

The introductory **Aerospace** course is designed to give a basic knowledge of the origin and development of today's aerospace world. The course is organized as a chronicle of American military history in relation to the development of air power and covers a period about 4,000 years, from 2,000 BC to the present. The **Leadership** portion concentrates on customs and courtesies; the flag, uniform, and personal appearance; attitude, discipline, study habits, and drill.

## **SECOND and THIRD YEAR STUDENTS**

The second and third year **Aerospace and Leadership** courses are taught in blended classes and cover the following information on a schedule to ensure a student does not repeat a course within a four-year Air Force Junior ROTC career.

The **Aerospace** courses include a customized course about the world's cultures. It introduces students to the world's cultures through the study of world affairs, regional studies, and cultural awareness. The course delves into history, geography, religions, languages, culture, political systems, economics, social issues, environmental concerns, and human rights. It looks at major events and significant figures that have shaped each region. Throughout the course, there are readings, video segments, hands-on activities, other optional activities, technology enrichment, and assessments to guide in the reinforcement of the materials. The **Aerospace** curriculum also contains courses with emphasis on propulsion, space travel, rocketry, and spacecraft.

**Leadership** concentrates on effective listening, communication, motivation, prejudice, sexism, and leadership principles. **Leadership** also looks at management process, stress and financial management, systems of government, personal standards, and guide to decision-making and oral communication. Drill performance is brought to the highest level by studying and demonstrating all the basic drill commands.

### **FOURTH YEAR STUDENTS**

This course is structured to the individual needs of selected students. Emphasis is placed on developing leadership abilities. Students are rotated into high-level group staff positions and required to demonstrate leadership and management techniques by running the cadet corps as a whole and leading individual projects and activities.





The Greene County Career Center (GCCC) proudly serves students from the seven public school districts in Greene County as well as those who attend private, home, and parochial schools. GCCC offers career-technical programs for high school juniors and seniors in programs of multiple high skill, high demand, and high wage pathways. These programs are offered at the NEW main campus located south of Xenia, at the Agricultural Research Center – a 49-acre facility with an indoor riding arena and a 28-stall barn, or at the new 7,500 square foot instructional hanger at the Greene County Airport. As a provider of both traditional education and workforce development GCCC offers cutting edge technology, career coaching, college credit courses, career-technical student organizations, and a seamless transition to college or careers. GCCC students have the opportunity to earn industry recognized credentials, participate in work-based learning, and participate in hands-on learning both in the “labs” but also in our academic courses. GCCC is a partner of the Miami Valley Tech Prep Consortium and students are eligible for a \$3000 scholarship to Sinclair Community College and Clark State Community College. With 2- workforce development, 3 transition, and 2 future programs, there is something for everyone at the Greene County Career Center - become a GCCC student today!

### **Auto Collision**

In this program students learn the skills in automotive refinishing for repair, replacement, and enhancement of all types of vehicles. This program teaches paint technologies (including design and airbrushing), sheet metal and welding, auto body structures, and mechanical systems. They have opportunities to earn some of the best industry credentials possible including the Platinum I-Car certifications. This is a great career path with many job opportunities nationwide in shops and auto production.

### **Automotive Technology**

As new vehicles become more technologically advanced the need for highly-trained automotive technicians continues to grow. Maintenance and repair necessitates the use of state-of-the-art equipment and an increasingly highly trained workforce. Students learn to diagnose, troubleshoot, and service automotive transmissions, engines, brakes, electrical systems, wheel alignment and balancing, fuel carburetion, ignition systems and tune-up, exhaust systems, cooling systems, front and rear suspensions, and computer control systems using electronic engine analyzers. Students will have the opportunity to earn ASE industry credentials.

### **Aviation Maintenance Technician**

This program will prepare students for a career as a fully certified FAA Airframe Technician for our local industry. Students can work immediately in industry or continue on to earn their Powerplant (the engine) certification. Students will learn avionics repair, electrical troubleshooting, sheet metal and composites repair, aircraft servicing, ground operations, communication and navigation control systems, and landing gear systems. This unique program will operate with a new facility at the Greene County Airport with access to everyday operations at a real airport.

## *Construction Technology*

As the building industry continues its growth in the Miami Valley, career opportunities in a variety of construction-related trades are expanding daily. The first year will expose you to the basics of tool use and safety, carpentry, masonry, drywall installation, basic plumbing, basic electric and roofing. The senior year will expand on those skills as you hone in on areas of concentration. Certifications play an important role in career advancement in the construction industry and this program offers opportunities for growth within the certification program and the Carpenters International Training Fund.

## *Cosmetology*

Become a licensed cosmetologist! You can develop relationships with clients while fine-tuning your skills and operating a full-service salon. Experience comes from hands-on learning in the areas of hair care, nail care and skin care in a salon equipped with professional products and equipment like those found in the most successful businesses. You have the opportunity to rehearse your skills on your first clients: mannequins, friends, family members and other students! Job placement begins with a 150-hour internship at a local salon and ends with a job fair of local salon owners who recognize Greene County Career Center for its reputation of student achievement. The professional environment of respect and trust allows you to express your individuality and creativity while preparing for the State Board of Cosmetology exams.

## *Criminal Justice*

Criminal Justice students obtain the knowledge and skills applicable to a variety of public safety careers with a direct pathway to criminal justice, private security and corrections professions. Specialized classroom and practical learning are directed by law enforcement professionals representing local and federal agencies. A blend of safety, law enforcement, investigation, ethics, human relations and equipment training offers an in-depth view into the world of criminal justice and public safety. Discipline and respect play a large part in the day-to-day operation of the program. Because a large number of Career Center Criminal Justice students graduate then enroll in a two- or four-year college or university, academic excellence is stressed. Additionally, a Forensic Science elective class is available where you can learn beginning and advanced investigative techniques. Students can earn the National Incident Management Systems certifications as well as basic first responder certifications such as CPR and First Aid.

## *Culinary Arts*

Enter the world of culinary expertise and restaurant management through this exciting, fast-paced career preparation program. Students learn basic food preparation, quantity cooking, menu planning, operation and care of equipment, nutrition, quality control and cost of quantity food purchasing, along with various techniques of food services including catering. You gain experience and core competencies by learning all facets of restaurant and food service operations by actually managing the award-winning restaurant "The Greene Room." Students have the opportunity to earn the ServSafe Pro-Start certifications.

## *Cybersecurity*

This program will prepare students for a career in the high-demand cybersecurity workforce. Students will learn Python programming, computer software, hardware, networking, mobile device technology, network and operational security, access control, identity management, cryptography, threats and vulnerabilities, application, data, and host security. Students will have the opportunity to earn nationally recognized industry credentials such as CompTIA Security+ as well as college credit to either enter the workforce directly and continue your education.

### *Digital Design and Development*

From apps, to internet, to design, to user experience, we are constantly interacting with the technology around us. This program will teach students about digital media management, app development, and 3-D design for augmented and virtual reality. Students will learn basic design techniques using Adobe Photoshop, InDesign, Illustrator and After Effects as well as AutoCAD and Inventor for 3D Design. This process will aid the students in developing their critical eye and technical skills in creating UX design. Senior year, students will study web and design techniques to understand highly responsive web designs and how the UX/UI development process applies to the workforce today. Following this, the students will learn web and app development through the CIW certification program.

### *Electrical Wiring and Motor Controls*

Students will learn and apply the basic theory of electricity to commercial, residential, and industrial construction projects. In addition to hands-on practice in a new state-of-the-art laboratory area, you will learn the theory of electrical flow, Ohm's Law and the mathematics of dealing with voltage, amperage and wattage. Gain a broad understanding of the National Electrical Code, estimating materials, electrical systems and troubleshooting, programmable controllers, and fire alarm systems. This program gives you a head start on earning Journeyman status as a certified electrician. Students who excel academically and in their career-technical program as well as meeting a stringent attendance requirement may apply for the Pre-Apprenticeship program and earn their Pre-Apprenticeship Certificate credential.

### *Engineering Technology*

This program will prepare students for a flexible career in many high need industry occupations in mechanical engineering design and material science. This program utilized a curriculum designed by the Department of Defense to support the mechanical and advanced manufacturing needs that support the aerospace industry in our region. Students will learn the mindset of an engineer, the foundations of material science, and the mechanical principles of advanced manufacturing. Students will have the opportunity to earn industry credentials in design such as SolidWorks but also the hands-on knowledge to be a CNC programmer. Most courses also earn dual enrollment for college credit if you wish to advance your education. Take engineering to the next level with this exciting new program.

### *Equine Science*

Students learn about the care and feeding, breeding and anatomy of horses; horseback riding and horse training; and running horse-related businesses, such as riding schools, stables and stud farms. Areas of instruction include: nutrition, reproduction, rehabilitation, exercise physiology, welfare, and behavior of horses. Students take their academic courses at the Greene County Career Center main campus and are taken to the Greene County Agricultural Research Center for the lab portion of their day. Students will work their way through the Certified Horsemanship Association (CHA) levels for future employment.

### *Health Science Academy*

The Health Science Academy is a multi-discipline academy that allows individuals to discover their strengths and interests then follow through in any of a wide array of health-related career pathways. All students will have the opportunity to receive STNA (State Tested Nurse Assistant) certification which provides a good foundation for all health related careers. The Health Science Academy is tied closely with Sinclair Community College and Clark State Community College allowing students to have the opportunity to receive college credits for the work they do in class and for the passage of the STNA program. An accelerated option is available for students who meet the requirements and who have demonstrated the ability and work ethic to move quickly through the curriculum.

### **Information Technology & Networking**

Students in this program will gain the necessary skills to build, repair and troubleshoot computers, systems and software, create software, manage information systems and provide technical assistance. The IT program is divided into specialties where students can explore and become proficient in the following: information services and support, programming and software development/applications, network systems, A+ personal computer repair and troubleshooting and network security administration. Each of these specialties is accompanied by CompTia certifications for industry entry level positions.

### **Natural Resource Technology**

Students in this program will learn the basics of the “green” industries in residential, commercial, and recreational environments before declaring an area of concentration. Career pathways are offered that can lead graduates to excellent post-secondary opportunities at area community colleges and technical schools or open doors that lead directly to the job market. Areas of concentration include: Golf Course & Turf Grass Management; Environmental Forestry Management; Landscape Architectural Design; Retail Garden Center & Horticulture Management; Water & Soil Conservation Science; and Entomology & Pest Science. Each area of concentration has credentialing including Ohio Nursery Technician and Ohio Turf Grass Certification.

### **Power Equipment Mechanics**

Greene County is recognized around Ohio for its strong agricultural base. Qualified technicians who can maintain and repair agricultural and industrial equipment are in high demand. Students learn the operation, maintenance and repair of power equipment with special emphasis on gasoline and diesel engines, electrical systems, hydraulic systems and fuel systems, as they apply to agricultural and lawn and garden equipment. Parts distribution, stocking, and basic welding skills are also a part of this program. This program provides various industry certified credentials from Briggs and Stratton, STIHL, Kohler, and Diesel Engines.

### **Sports and Exercise Science**

If you are interested in sports, exercise, conditioning, nutrition and fitness, this new program is for you! Our pathways can lead you to careers in personal fitness, athletic training, or therapeutic careers. This challenging program provides instruction into techniques approved by the American College of Sports Medicine (ACSM) and the National Strength and Conditioning Association. Greene County Career Center’s commitment to the program includes the development of a state-of-the-art fitness wellness facility complete with diagnostic and therapeutic equipment. You will learn how to create, evaluate and develop fitness plans for clients as well as meet the needs of athletic injuries and prevention. Students have the opportunity to earn ACE Personal Training and AMCA Physical Therapy Aide certifications.

### **Veterinary Science**

Students learn about all animals, small and large, and will get a well-rounded education. You will handle and provide care for a variety of animals on a daily basis including dogs, cats, rabbits, rats, horses and cattle. Basic, hands-on experiences give students comfort and confidence around all animals. After establishing a set of basic skills, you will be exposed to all aspects of veterinary care. This includes anatomy, nutrition, behavior, medical terminology, parasitology, principles of disease and introduction to surgery. The facility’s small animal care hospital features the same equipment found in professional veterinary operations. During laboratory time, you will develop and practice patient care. Restraining an animal, performing a physical exam, drawing a blood sample, reading fecals, administering injections and cleaning surgical instruments are just a few of the skills that are addressed in this program. You will become part of a hospital team that works together every day. Students work toward IDEXX and NVAT Vet Assistant credentials.

### *Video and Animation*

Students will be trained in the area of interactive multimedia and will become competent in creating, designing and producing interactive multimedia products and services. Students will use multimedia technology to develop products/programs for business, training, entertainment, communications, and marketing. The main software used in lab is Adobe Creative Cloud, which includes two industry credential certification tests. This program should appeal to those who enjoy computers and are creative.

### *Welding & Metal Fabrication*

The welding industry is looking for talented, committed and qualified welders. It is projected that there will be a shortage of 400,000 welders nationwide by 2025. In Welding and Metal Fabrication you will develop entry-level and advanced skills in shop safety, metal characteristics, welding applications and project management. Receive hands-on welding experience in one of the most modern and complete labs in Ohio. Oxyfuel welding (OFW), shielded metal arc welding (SMAW), gas metal arc welding (GMAW), gas tungsten arc welding (GTAW), flux core arc welding (FCAW) are all taught over the course of the program. Students will have opportunities to earn the American Welders Society certifications.

### *Career X*

Career X is a program at Greene County Career Center where students with special career requirements explore various pathways and learn “soft skills” that will enhance their employability. As a student, you will visit a variety of career areas to help assess your skills, career goals, and capabilities. Learning how to interact with others, accept responsibility, complete assignments and display proper workplace behavior will be part of each day’s lesson in Career X. Skill areas are divided into self-paced learning modules. The goal of Career X is to give you the skills and confidence to enter a career-technical program at Greene County Career Center, enroll as a deferred-diploma student in Project SEARCH at one of the area hospitals, gain employment through an adult agency, or earn a referral to an adult agency. (Counselor Recommendation Required)

### *Career Based Intervention*

The Senior Only Career-Based Intervention (CBI) program is a transition program designed for students who have barriers to achieving academic and career success. The program is to help students improve academic competence, graduate from high school, develop employability skills, implement a career plan and participate in a career pathway in preparation for postsecondary education and/or careers. (Counselor Recommendation Required)

### *Project SEARCH*

The Project SEARCH Transition Program is a one-year internship program for students with disabilities, in their last year of high school. It is targeted for students whose goal is competitive employment. This unique program is in Soin Medical Center in Beavercreek where total immersion in the workplace facilitates the teaching and learning process as well as the acquisition of employability and marketable work skills. Students participate in three internships to explore a variety of career paths. The students work with a team that includes their family, a special education teacher and job coach, and the Ohio Rehabilitation Services Commission (BVR) to create an employment goal and support the student during this important transition from school to work. . (Counselor Recommendation Required)

### *Drone and UAS Technology*

This program will prepare students for a career maintaining and operating Unmanned Aerial Systems (UAS), also known as drones, in this cutting edge field with applications in Criminal Justice, Precision Agriculture, and Engineering. Students will learn flight planning, ground controls, physics of flight and space, aircraft operations, ground informational systems (GIS), basic robotics, and aerospace engineering. Students can focus on one application of UAS their senior year to help enter the workforce with experience in criminal justice, precision agriculture, or engineer GIS technology.

### *Automations and Robotics*

This program will prepare students for a career in the future of robotic applications in the workforce. Students will learn robotics, robotic operating systems, electrical systems, sensor technology, engineering logic, robotic mechanisms and drives, computer modeling, and flexible automation systems. Students will have the opportunity to earn industry credentials as well as college credit to either enter the workforce directly or continue their education.