## William Henry Harrison High School

"Academic and Social growth for ALL students, EVERY DAY!"


2024/2025
Registration Bulletin

Have a specific question regarding your student? Check below for a quick guide on who you need to contact to help answer your question.

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## Duty

Registration Coordinator
Naviance Curriculum Coordinator

Scholarships<br>NCAA Eligibility

Testing Coordinator (PSAT, AP, ACT) EOC Co-coordinator

Mental Health Wellness Coordinator

## Special Education High School and Transition Coordinator

Guidance Secretary

School Psychologist

## Shared Duties (Divided by assigned alphabet)

Scheduling
Individual Counseling
Mediations/ Conflict Resolutions
Academic Advising
Educational Options
Transcripts
Career/College Advising

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## TO PARENTS AND STUDENTS:

Please read this Registration Bulletin carefully. We urge students and parents to weigh course choices in terms of what students plan to do upon graduation from high school. A student's interests, ability, and motivation are also important factors in making decisions concerning course selections. Additionally, teacher and counselor recommendations are very important to consider.

REGISTRATION DEADLINE

Your selection of courses for the 2024/25 school year must be made final by February 10, 2024. After this date, students must wait until they receive their schedules in May and will have until the last day of the current school year to make any final changes to their schedules for both $1^{\text {st }}$ and $2^{\text {nd }}$ semester.

GENERAL INFORMATION

1. Be aware of your credit total and the credits you have earned by the end of each school year (current $9^{\text {th }}, 10^{\text {th }}$, and $11^{\text {th }}$ graders).
2. Students are responsible for registering for required courses to meet graduation requirements. You are urged to consult your counselor if you have questions. The best time to call a counselor is between 7:30 am and 2:45 pm (see page 2 for phone numbers).
3. Refer to page 5-9 of this bulletin for graduation requirements and note which subjects are required and which are electives, then choose your courses wisely.
4. Required subjects that students failed must be repeated in summer school. The next higher course in a sequence may not be taken until the failed subject is successfully completed. For example, you may not take Spanish 2 until you have earned your credit in Spanish 1.
5. Be aware of any prerequisite courses needed for a class you wish to take. For example, you may not take Algebra 2 until you have passed Algebra 1.
6. We are on a flexible school day with 0 period, 7 traditional periods, after school, and evening classes at William Henry Harrison High School. Students should sign up for enough courses to fill seven periods.
7. Athletes are required to pass a minimum of $\underline{5}$ credits from the previous grading quarter to maintain their eligibility (excluding summer school). A single Physical Education course does not count as one of the five credits because it has a credit value of only .25 for the semester. Eligibility is determined preceding each quarter subject to Ohio High School Athletic Association (OHSAA) rules, which are published at the beginning of each school year. Consult the Athletic Director for changes or questions regarding eligibility.
8. Students who have excessive absences, tardies, five or more suspension days and/or two or more failing grades may be placed on Social Probation. Students on Social Probation are only permitted to attend classes. They lose all after school social privileges including sports, clubs, and attendance at dances, games, etc.

## EARLY GRADUATION POLICY

Students who earn all credits required for graduation by the completion of a minimum of SIX semesters can request permission to graduate early. The principal and counselors will, upon request from the parent, review individual cases to determine eligibility for early graduation. Graduation is observed three times during the year: May/June, August, and January. Students wishing to graduate early for May/June and January, must request this by September 1 st of the academic year they plan to graduate. Students wishing to graduate early for August graduation must request this by January $15^{\text {th }}$ of the academic year they plan to graduate.

## Graduation Requirements

 Class of 2025Students in the class of 2025 must complete the requirements in the THREE steps determined by the State of Ohio. The first step for graduation is that students at William Henry Harrison High School must earn a minimum of 21 Credits to be eligible for graduation. Among the credits necessary for graduation, the following are required:

| STEP 1: CREDIT |  |  |  |
| :---: | :---: | :---: | :---: |
| REQUIREMIENTS |  |  |  |
| Subject | Description (course levels vary based on level of study) |  | Total Credits |
| English | English 9 <br> English 10 <br> English 11 <br> English 12 | 1 <br> 1 <br> 1 <br> 1 <br> 1 | 4 |
| Mathematics | Algebra 1 Geometry Algebra 2 Math Elective | 1 1 1 1 | 4 |
| Social Studies*** | American History American Government World History Financial Literacy/Econ | 1 .5 1 .5 | 3 |
| Science | Biology <br> Physical Science <br> Science Elective(s) | 1 <br> 1 <br> 1 | 3 |
| Fine Art* | Fundamentals of Art Art Elective | $.5$ | 1 |
| Physical Education | $\begin{aligned} & \text { PE1 } \\ & \text { PE2 } \end{aligned}$ | $\begin{aligned} & .25 \\ & .25 \end{aligned}$ | . 5 |
| Health | Health | . 5 | . 5 |
| Electives | Any combination of extra core courses or elective options allowed | 5 | 5 |

*Students planning to attend a public college or university in Ohio must have one credit in Fine Arts, which can only be fulfilled by taking music or art courses. Students completing a Career Based Vocational program do not have to obtain a full credit in the Fine Arts but may have to fulfill the requirement still if they are planning to attend a public college or university in Ohio.
***Students must meet the financial literacy requirement as set by the state. This requirement is met by completing a full semester of Financial Literacy that is attached to American Government or by completing the online Financial Literacy offering.

Students in the class of 2025 are subject to 2 new Ohio Graduation Requirement steps in addition to the first step of required course credits.

| STEP 2: Earn a passing score on Ohio's high school Algebra 1 and English 2 tests. If students do NOT receive passing scores on either of the test, they may choose an option below to show equivalency |  |  |
| :---: | :---: | :---: |
| Option 1 | Option 2 | Option 3 |
| Demonstrate TWO Career-Focused Activities (at least one must be earned from Group A) <br> Group A <br> -Proficient scores on WebXams <br> -12-point industry credentials <br> -A pre-apprenticeship into an approved apprenticeship program <br> Group B <br> -Work-based learning <br> -WorkKeys exam score of <br> -Earn the OhioMeansJobs Readiness Seal | Enlist in the Military Show evidence that you have signed a contract to enter a branch of the US armed services upon graduation | Complete College Coursework <br> Earn credit for one college-level math and/or college-level English course through Ohio's free CCP program |

STEP 3: Earn 2 of the following diploma seals, choosing those that line up with your goals and interests....with at least one being designed by the State of Ohio
-OhioMeansJobs Readiness Seal (Ohio)
-Industry-Recognized Credential Seal (Ohio)
-College-Ready Seal (Ohio)
-Military Enlistment Seal (Ohio)
-Citizen Seal (Ohio)
-Science Seal (Ohio)
-Honors Diploma Seal (Ohio)
-Seal of Biliteracy (Ohio)
-Technology Seal (Ohio)
-Community Service Seal (Local)
-Fine and Performing Arts Seal (Local)
-Student Engagement Seal (Local)

Students in the classes of 2026 \& beyond must complete the requirements in the THREE steps determined by the State of Ohio. The first step for graduation is that students at William Henry Harrison High School must earn a minimum of 21 Credits to be eligible for graduation. Among the credits necessary for graduation, the following are required:

| STEP 1: CREDIT |  |  |  |
| :---: | :---: | :---: | :---: |
| REQUIREMENTS |  |  |  |
| Subject | Description (course vary based on level of stu |  | Total Credits |
| English | English 9 <br> English 10 <br> English 11 <br> English 12 | 1 <br> 1 <br> 1 <br> 1 <br> 1 | 4 |
| Mathematics | Algebra 1 Geometry Algebra 2 Math Elective | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | 4 |
| Social Studies*** | American History American Government World History Social Studies Elective | 1 .5 1 .5 | 3 |
| Science | Biology <br> Physical Science Science Elective(s) | 1 <br> 1 <br> 1 | 3 |
| Fine Art* | Fundamentals of Art Art Elective | $\begin{aligned} & .5 \\ & .5 \\ & \hline \end{aligned}$ | 1 |
| Physical Education | $\begin{aligned} & \hline \text { PE1 } \\ & \text { PE2 } \\ & \hline \end{aligned}$ | $\begin{aligned} & .25 \\ & .25 \\ & \hline \end{aligned}$ | . 5 |
| Health | Health | . 5 | . 5 |
| Financial Literacy | Financial Literacy | . 5 | . 5 |
| Electives | Any combination of extra core courses or elective options allowed | 4.5 | 4.5 |

*Students planning to attend a public college or university in Ohio must have one credit in Fine Arts, which can only be fulfilled by taking music or art courses. Students completing a Career Based Vocational program do not have to obtain a full credit in the Fine Arts but may have to fulfill the requirement still if they are planning to attend a public college or university in Ohio.

Students in the classes of 2026 and beyond are subject to 2 new Ohio Graduation Requirement steps in addition to the first step of required course credits.

STEP 2: Earn a passing score on Ohio's high school Algebra 1 and English 2 tests. If students do NOT receive passing scores on either of the test, they may choose an option below to show equivalency

| Option 1 | Option 2 | Option 3 |
| :--- | :---: | :---: |
| Demonstrate TWO Career-Focused | Enlist in the Military | Complete College |
| Activities (at least one must be earned | Show evidence that you |  |
| from Group A) | Coursework <br> have signed a contract to <br> Earn credit for one <br> Group A | enter a branch of the US <br> college-level math <br> -Proficient scores on WebXams |
| -12-point industry credentials | graduation | English course <br> -A pre-apprenticeship into an approved <br> apprenticeship program <br> Group B |
| -Work-based learning |  | CCP program |
| -WorkKeys exam score of |  |  |
| -Earn the OhioMeansJobs Readiness Seal |  |  |

STEP 3: Earn 2 of the following diploma seals, choosing those that line up with your goals and interests....with at least one being designed by the State of Ohio

-OhioMeansJobs Readiness Seal (Ohio)<br>-Industry-Recognized Credential Seal (Ohio)<br>-College-Ready Seal (Ohio)<br>-Military Enlistment Seal (Ohio)<br>-Citizen Seal (Ohio)<br>-Science Seal (Ohio)<br>-Honors Diploma Seal (Ohio)<br>-Seal of Biliteracy (Ohio)<br>-Technology Seal (Ohio)<br>-Community Service Seal (Local)<br>-Fine and Performing Arts Seal (Local)<br>-Student Engagement Seal (Local)

The Academic Diploma with Honors recognizes graduating seniors who have successfully completed academic requirements beyond the requirements for a Diploma of Graduation in either a college preparatory or career-technical curriculum.

The Ohio Department of Education and Workforce, under the direction of the State Board of Education has established the requirements to earn the Ohio High School Honors Diploma. It is based upon exceeding the Core criteria in all but one of the following requirements:

| CREDIT |  |  |  |
| :---: | :---: | :---: | :---: |
| REQUIREMENTS |  |  |  |
| Subject | Description (cour vary based on lev |  | Total Credits |
| English | English 9 English 10 English 11 English 12 | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | 4 |
| Mathematics | Algebra 1 Geometry <br> Algebra 2 <br> Math Elective | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | 4 |
| Social Studies*** | American History American Government World History Social Studies Electives | $\begin{gathered} \hline 1 \\ .5 \\ 1 \\ 1.5 \\ \hline \end{gathered}$ | 4 |
| Science | Biology <br> Physical Science <br> Science Elective(s) <br> Science Elective(s) | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | 4 |
| Fine Art | Fundamentals of Art Art Elective | $\begin{aligned} & \hline .5 \\ & .5 \\ & \hline \end{aligned}$ | 1 |
| Physical Education | $\begin{array}{\|l\|} \hline \text { PE1 } \\ \text { PE2 } \end{array}$ | $\begin{aligned} & .25 \\ & .25 \end{aligned}$ | . 5 |
| Health | Health | . 5 | . 5 |
| Foreign Language* | French/Spanish/ASL 1 French/Spanish/ASL 2 French/Spanish/ASL 3 | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | 3 |
| GPA | 3.5 or above |  | UNWEIGHTED GPA ONLY |
| ACT/SAT | 27 (ACT) or 1280 (SAT) |  |  |

*Students may obtain TWO units of each Foreign Language in lieu of completing 3 units of one Foreign Language.
***Students must meet the financial literacy requirement as set by the state for their graduating class.
In addition to the traditional Academic Honors Diploma, the State of Ohio has created the following other honors diploma options:

- Career Tech Honors Diploma
- STEM Honors Diploma
- Arts Honors Diploma
- Social Science and Civic Engagement Honors Diploma

Each new Honors Diploma option has specific requirements. For more information on the new Honors Diplomas, visit ODE's website:
http://education.ohio.gov/Topics/Ohio-s-Graduation-Requirements/Honors-Diplomas

## COURSE INFORMATION

## COURSE DROP/ADD POLICY

Southwest Local School District is committed to giving our students the best education possible while still maintaining the lowest cost possible for our tax payers. To help staff efficiently, students will receive their class schedules for next year BEFORE school is dismissed for summer break. Students MUST make any schedule changes by the end of the previous school year, this includes adding study halls. Counselors will pass out schedules to students. Students will be able to make any changes to their 2024-25 schedules up to the last day of school for the 2023-24 school year. (May 22, 2024)

Changes in course selection (registration) prior to the start of school year will be made only for the following reasons:

1. If a scheduled course is taken during summer school.
2. If a documented medical situation/reason exists administrative approval will be needed.

This policy is to help the administration of Southwest Local Schools better plan for staffing needs and to efficiently schedule students into classes/plan class offerings with the least amount of waste in staffing.

THE GPA AND CLASS RANKING SYSTEM:
The GPA and Class Ranking System:

1. Student's grade point average will be calculated using a 4.3 scale.
2. Students will have a factor added for final grades in weighted courses as follows:

Student GPA + [(\# of A's) x .02] + [(\# of B's) x .02] + [(\# of C's $) \times .01]$
All courses will be counted for class rank and grade point average except the Yearbook and Journalism classes beyond the first year, and any courses graded on the pass/fail system.

## WEIGHTED COURSES, GRADE POINT AVERAGE, AND CLASS RANK

The following courses are "value-added" weighted courses (worth an additional point value based on each semester grade earned: $\mathrm{A}=+.02, \mathrm{~B}=+.02, \mathrm{C}=+.01, \mathrm{D}=0, \mathrm{~F}=0$ ). This value is added to each student's G.P.A. calculation based on the grade earned in the weighted courses listed below.
\(\left.\begin{array}{ll}English \& AP English Language \& Composition, AP English Literature \& Composition, <br>

\& AP Seminar, AP Research\end{array}\right]\)| AP Calculus AB, AP Calculus BC, Advance Pre-Calculus, Calculus |
| :--- |
| Math |
| Science |
| Chemistry, Physics, AP Biology, AP Chemistry, AP Physics C:Mechanics, AP Physics 1, |
| Social Studies |
|  |
| AP Physics 2, AP Environmental Science |

## EDUCATIONAL OPTIONS/OPPORTUNITIES

## ADVANCED PLACEMENT (AP) COURSES

Advanced Placement classes are offer based upon student interest or on the number of students who register for the classes in the spring, prior to beginning summer Advanced Placement class work. Classes offered at William Henry Harrison High School include:

- Advanced Placement Chemistry
- Advanced Placement Psychology
- Advanced Placement Calculus AB
- Advanced Placement Calculus BC
- Advanced Placement Literature and Composition
- Advanced Placement Language and Composition
- Advanced Placement Biology
- Advanced Placement Physics C: Mechanics
- Advanced Placement Physics 1
- Advanced Placement Physics 2
- Advanced Placement Environmental Science
- Advanced Placement United States History
- Advanced Placement American Government
- Advanced Placement Art History
- Advanced Placement Music Theory
- Advanced Placement Human Geography
- Advanced Placement World History
- Advanced Placement Computer Science Principles
- Advanced Placement Computer Science A
- Advanced Placement Capstone Seminar
- Advanced Placement Research

Mr. Zureick Juniors and Seniors
Mr. Meyer Juniors and Seniors
Mrs. Donath Juniors and Seniors
Mrs. Donath Seniors
Mr. Nienaber Juniors and Seniors
Mr. Motsinger Juniors and Seniors
Mr. Menze Juniors and Seniors
Ms. Peace Juniors and Seniors
Ms. Peace Juniors and Seniors
TBA
Mrs. Krise
Mr. Deak
Mr. Deak
Ms. Keller
Mr. Egan
Mr. Thomas
Mr. Thomas
Mr. Clark
Mr. Clark
Mr. Nienaber
Mr. Nienaber

Juniors and Seniors
Juniors and Seniors
Sophomores, Juniors and Seniors
Sophomores, Juniors and Seniors
Sophomores, Juniors and Seniors
Juniors and Seniors
All Grades
Juniors and Seniors
Juniors and Seniors
Juniors and Seniors
Sophomores, Juniors and Seniors
Juniors and Seniors

## Advanced Placement

Information can be found at: http://apcentral.collegeboard.com/home
(Info copied with permission from the College Board)
AP courses are taught by highly qualified high school teachers who use the AP Course Descriptions to guide them. The Course Description for each discipline outlines the course content, describes the curricular goals of the subject, and provides sample examination questions. While the Course Descriptions are a significant source of information about the course content on which the AP Exams will be based, AP teachers have the flexibility to determine how this content is presented. Published in the spring of the school year before the course will be taught, the Course Descriptions are available on AP Central, accompanied by a course perspective written by an experienced AP teacher. These perspectives represent the personal viewpoints and teaching styles of their authors; however, we hope they will provide insight and inspiration for other educators.

Because AP classes are college level courses, they require a significantly greater amount of effort than do regular high school classes. AP classes also carry weighted grades, so taking AP classes and doing well in them will raise a student's grade point average. These classes are likely to enhance a student's class rank and ability to win scholarships. Students may enroll in one or more AP classes.

The decision to enroll in AP classes should be made after careful consideration of the student's ability, prior academic preparation in a subject area, interest in the subject, and future career goals. All AP classes require specific course prerequisites, so students must think ahead when planning their freshman and sophomore schedules to ensure that they are eligible for a desired AP class in the junior or senior year.

## The Exams

The AP Examinations are administered each year in May and represent the culmination of college-level work in a given discipline in a secondary school setting. Rigorously developed by committees of college and AP high school faculty, the AP Exams test students' ability to perform at a college level.

Development Committees meet throughout the year to create new exams, which each contain a free-response section (either essay or problem solving) and a section of multiple-choice questions. (The only subject that does not follow this format is AP Studio Art, which is a portfolio assessment.) The world language exams also have a speaking component, and the AP Music Theory Exam includes a sight-singing task. The multiple-choice questions are scored by computer, while the free-response portions are evaluated by a team of skilled college professors and high school teachers who meet annually to score exams in their subject area. The involvement of college faculty at all levels of exam development and scoring ensures that the AP Exams truly reflect college-level achievement. Students who perform well can receive course credit and/or advanced standing at thousands of universities worldwide.

Please note that when students enroll in an AP course, they are required to take the AP exam and sign an AP contract. Southwest Local School District will pay the cost of ONE AP exam per student per year. Any additional AP exam costs will be the responsibility of the student. The approximate cost of an AP Exam is $\$ 97.00$, this fee is part of the class fee and is to be paid when students obtain schedules in the fall. Students dropping the course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of school.

The Ohio Department of Education and Workforce has contracted with The College Board to handle Advanced Placement (AP) exam fee reimbursement for free and reduced lunch students who take the AP exam. For information about this reimbursement and process visit The College Board website at http://apcentral.collegeboard.com/repository/ap06

Advanced Placement Test Scores can earn semester credits towards a Bachelor of Arts or Bachelor of Science. The benefits of AP scores vary from college to college and it is best to inquire at any school you might be considering in advance.

COLLEGE CREDIT PLUS
Eligible students can take a course and earn high school and college credit that appears on both their high school and college transcripts. Teachers who teach a College Credit Plus course in a high school must receive professional development and be an adjunct professor at a college or university. All courses offered through College Credit Plus-even courses offered in the high school-must be the same course that the college offers. The course must apply to a degree or professional certificate. Students interested in enrolling in College Credit Plus must attend, with their parents, the informational meeting held during the month of January. These meetings are held in the auditorium and offer insight into the advantages and disadvantages of participating in the program, as well as the process that parents/students must follow to receive the credit. College representatives will be at the meeting to answer individual questions about their offerings and will have applications for participation on hand for parents/students.

## Program Eligibility:

1. Parents and students must sign a form indicating they received the appropriate counseling regarding College Credit Plus and that they understand the responsibilities of the program by April $1^{\text {st }}$, previous year.
2. To be eligible, the student must meet the College Credit Plus requirements as measured by the Accuplacer test.
3. Students must apply to the college by their posted deadline and be officially accepted by the college.
4. Students must meet class registration deadlines as posted by the university. Note: Students may be charged a fee if taking classes off the high school campus at a private college Note: All CCP Textbooks will be purchased by WHHHS, are property of WHHHS, and must therefore be returned to WHHHS at the end of the semester.

## Why Should I Take an Advanced Placement Course?

Advanced Placement (AP) courses offer a nationally-recognized, rigorous curriculum respected by institutions of higher learning across the country. Students participate in a challenging high school curriculum, and then take an exam in May to demonstrate their level of mastery of the course content. Scores range from 1-5. Colleges and universities will award students college credit for certain scores, typically a 3 or higher (these vary by college/university). AP credit is awarded nationwide at most colleges and universities. Even though some may not take either AP or CCP credit from high school, evidence of Advanced Placement coursework on a high school student's transcript tells admissions committees at colleges and universities that students have experienced the most rigorous courses that a high school can offer and are thus well-prepared for college.

If you are a high-achieving student and are considering universities outside of Ohio, or if you are considering elite colleges or universities, you should consider taking AP courses in high school.

## Why Should I Take a College Credit Plus Course?

College Credit Plus (CCP) is a program sponsored by the Ohio Department of Education and Workforce. The purpose of this program is to promote rigorous academic pursuits and to provide a wide variety of options to college-ready students. Taking a college course from a public college or university through College Credit Plus is free. That means no cost for tuition, books or fees if you attend public school in the state of Ohio. If you choose to attend a private college or are homeschooled, you may have limited costs.

Students and parents need to be aware that CCP credit is transferrable to public colleges and universities in the state of Ohio and to those colleges or universities in neighboring states that have reciprocity agreements in place with Ohio. The transfer of credits is subject to the colleges' and universities' discretion for application of credit for example, if you take Chemistry as a CCP course in high school and get accepted to Ohio University, your CCP course may transfer as a general science, not specifically as Chemistry. Just like with Advanced Placement, each college or university is different and may require additional coursework per their programs of study within each major or minor, in addition to, or in place of, any CCP coursework completed in high school.

If you are a high-achieving student and know that you will attend a college or university in Ohio, CCP may be a good option for you.

Regardless of your decision to take AP or CCP courses in high school, you will need to do your research with each college or university that you are considering attending to determine exactly how your AP scores or CCP credits will transfer.

CREDIT FLEXIBILITY

Credit Flexibility shifts the focus from seat time to performance. Students can earn units of high school credit based on an individually approved credit flexibility plan. The intent of credit flexibility is to meet increased expectations for high school graduation in response to globalization and technology and to meet the demand for $21^{\text {st }}$ century skills.

Students can earn credit by:
Completing standard coursework;
Showing mastery of course content;
Pursuing an educational option and/or individually approved option and/or;
Any combination of the above items.
Credit flexibility applications will be available in April through the guidance department. We strongly suggest that students interested in Credit Flexibility should meet with their counselor. Each guidance counselor will be able to help with the Credit Flexibility option.

Harrison High School offers educational opportunities during the summer months. Students may take both initial and recovery credit for most classes during the summer months through online EDGENUITY offerings. Specific summer school information is available in the Guidance Office each spring.

Any student that fails part OR all of a core class must enroll in summer school. If the student fails to complete the deficient credit(s) in summer school, they will be placed on Social Probation until the deficient credit(s) are completed.

## WORK-BASED LEARNING

Students have the opportunity to earn up to 2 elective credits each year by participating in work-based learning. Students have to complete at least 250 hours of paid or volunteer work and complete monthly supervisor evaluations to earn credit. Students can sign up for work-based learning during the first two weeks of each semester. Students can stop by the Guidance Office for more information.

NAVIANCE
All students have access to the college and career education program called Naviance. There are several ways that students and their parents can use Naviance to aide in their career planning and execution of their career plan. With Naviance, students and parents can do the following things:

1. Get involved in the planning and advising process- Complete online surveys and explore next steps for planning future goals.
2. Research careers- Research hundreds of careers and career clusters, and take career assessments.
3. Create plans for the future- Create goals and to-dos, and complete tasks assigned to you by the school to better prepare yourself for your future college and career goals.
4. Research colleges- In the future, compare GPA, standardized test scores, and other statistics to actual historical data from our school for students who have applied and have been admitted in the past. Juniors and Seniors also have the option to sign up for college representative visits at Harrison through this program.
5. College applications- College applications and tracking will also be done through Family Connection, where students can request letters of recommendation from teachers, track deadlines, track transcripts sent, and much more!
6. Scholarships- This program also offers a wide-range of college scholarship resources which are available to seniors. The resources range from the National Scholarship Match program (partnered with Sallie Mae) to our local scholarship postings.
7. ACT preparation software- Students will be able to access ACT preparation software that works with their individual strengths and weaknesses.

All students will participate in an exciting, year-long career education curriculum provided through the Naviance software with their homeroom teacher. Through this program we hope to better achieve our district's goal of all students successfully growing both academically and socially through mentor relationships.

Students who wish to enroll in the Great Oaks Career Development program should meet the criteria for junior status for next school year and be eligible to graduate with their class. Each applicant will be given individual consideration.

Requirements needed by the end of sophomore year:

| English. | 2 credits |
| :---: | :---: |
| Math. | 2 credits |
| Science | 1 credit |
| Social Studies. | 1 credit |
| PE. | 1/2 credit |
| Health. | 1/2 credit |
| Financial Liter | 1/2 credit |

If a full-time Great Oaks student decides to return to Harrison High School for his/her senior year, it is understood that the requirements for graduation under a regular academic program must be fulfilled.

One- and two-year career programs are available and result in career/technical certification and include job placement assistance. This student is free at the end of the day to return to Wm. Henry Harrison High School to participate in any extracurricular activity for which he/she is eligible. Credits will vary depending on the program selected.

Great Oaks academic courses in math, science, English, and social studies are comparable to those offered at Harrison High School, and are taught by state-certified instructors. Qualified students may take Post-Secondary Option courses on the campus during their senior year. Successful completion provides up to 26 transcripted credits from Hocking College. These credits may be transferred to any other public college in Ohio.

Applications are accepted beginning in January and notification of acceptance begins in March of each year.
Additional facts to know regarding Career Campus Programs:
Some programs require students to buy personal tools and uniforms. Costs may range from $\$ 30.00$ to $\$ 400.00$. Payment plans and financial assistance are available.
Applications are made through the home school counselor. Orientation sessions will be held and a visitation day is scheduled prior to the enrollment deadline. Parents are invited to attend the Diamond Oaks Open House in January. A student may select a first and second choice program on their application. The Great Oaks personnel evaluate all information on each application.
Students are encouraged to apply for acceptance into their program of choice in January. Students applying late may be disappointed because their first-choice program is already at full enrollment. If enrollment is full in the program a student selects, the student will be placed on a waiting list.

## GREAT OAKS CAREER PATHWAYS

The letters following the career major indicate the campus or campuses where it is offered:

$$
\begin{array}{ll}
\mathrm{Di}=\text { Diamond Oaks } & \mathrm{La}=\text { Laurel Oaks } \\
\mathrm{Li}=\text { Live Oaks } & \mathrm{Sc}=\text { Scarlet Oaks }
\end{array}
$$

Career majors preceded by (*) are senior only programs.
Career majors preceded by ( + ) are exclusively for students with disabilities and a current Individualized Education Plan (IEP).
Career majors preceded by ( $\mathbf{x}$ ) are programs sponsored by Great Oaks in affiliate schools.

TRANSPORTATION, DISTRIBUTION \& LOGISTICS
Automotive Refinishing \& Collinsion Repair - Di,
La, Li, Sc
Automotive Service Technician - Di, La, Li, Sc
Aviation Maintenance Technician - La, Di
Aviation Exploration- Li
Industrial Diesel Mechanics - La, Sc

## ARCHITECTURE \& CONSTRUCTION

Commercial and Residential Electricity - Di, Sc
Construction Technologies - Di, Sc, La
Heating, Ventilating \& Air Conditioning - Di, Li,
Sc, La
Heavy Equipment Operations - La, Li, Sc

HUMAN SERVICES
Cosmetology - Di, La, Li, Sc
LAW, PUBLIC SAFETY, CORRECTIONS \& SECURITY
Firefighting/Emergency Medical Service - Sc
Law Enforcement - Sc, La
AGRICULTURE, FOOD \& NATURAL RESOURCES
Animal Science and Management - Li
Equine Science and Management - Di, La
Veterinary Assistant - Di, Li, Sc
Environmental Science and Management- Li

## HEALTH

Dental Assisting - Sc, La
Health Technology - Di, La, Li
Health Academy - Sc
Exercise Science \& Sports Medicine- Di, Li, La,Sc
Surgical Technology - Di, Sc

## MANUFACTURING

Engineering Technologies \& Robotics - Sc
Manufacturing Engineering Technology - Di, Li
Welding - Di, Li, La, Sc

## INFORMATION TECHNOLOGY

IT Academy - Li
Coding \& Web Design-Di, Sc
Information Technology- La

ARTS, AUDIO/VIDEO TECHNOLOGY \& DIGITAL TV
Digital Arts \& Design - Di, Li, La, Sc
HOSPITALITY \& TOURISM
Culinary Arts \& Hospitality Services - Di, Sc, Li
EDUCATION \& TRAINING
Early Childhood Education - Li, La, Sc
If the career major a student wishes to enroll in is not offered at the nearest campus, he or she may attend the campus where it is offered. (transportation is only offered from Harrison to Diamond Oaks campus)

## ENROLLMENT STANDARDS

The Great Oaks Institute of Technology and Career Development has established Enrollment Standards for all career majors. The standards, which are based on employer expectations and the demands of the various curricula, are listed in the description for each career major.

## WHHHS COURSE OFFERINGS

## ENGLISH DEPARTMENT FLOW CHART




This course is designed to improve reading and writing skills of ninth grade students. The course explores reading of high interest short stories, poetry, novels, plays, and non-fiction. Students will write journals, personal narratives, and essays about the literature they read.

| English 9 CP |
| :--- | :--- | :--- |
| 1004 |

This course, geared toward students who plan to pursue post-high school education, deals with reading and interpreting short stories, drama, poetry, epics, novels, and non-fiction. Readings will provide the basis for composition dealing with analysis of the literature, as well as personal reactions and interpretations.

```
English 9 ADV 9 1 Credit/Year
1005
```

This course is designed to challenge students in the areas of reading, writing and vocabulary. This course is also a preparation for the AP exam students may take in their senior year. Students will learn critical thinking skills, make inferences about literature, write and speak effectively and increase their vocabulary. The rigorous study found in this course is designed to prepare students for college studies in addition to standardized tests, such as the ACT and SAT.

| English 10 <br> 1006 | 10 | 1 Credit/Year |
| :--- | :--- | :--- |

This course is designed to further improve reading ability by focusing on themes involved in world literature. Students will read and respond to literature from different genres and cultures.

| English 10 CP <br> 1040 | 10 | 1 Credit/Year |
| :--- | :--- | :--- |

This course, designed for students planning to attend post-secondary education, explores the literature of other countries and cultures. Students will practice
and enhance their composition skills by responding to the literature and to personal experience.

| English 10 ADV 10 | 1 Credit/Year |
| :--- | :--- | :--- |
| 1150 |  |

*Admission to this program is based on the recommendation of the freshman teacher, a " B " average or better in present class, and if necessary, a usage test and/or a writing assessment.

This course is designed to challenge students in the areas of reading, writing and vocabulary. This course is also a preparation for the AP exam students may take in their senior year. Students will learn critical thinking skills, make inferences about literature, write and speak effectively and increase their vocabulary. The rigorous study found in this course is designed to prepare students for college studies in addition to standardized tests, such as the ACT and SAT.

| English 11 <br> 1151 | 11 | 1 Credit/Year |
| :--- | :--- | :--- |

This course is designed to continue improving reading skills while introducing students to American authors, covering the Colonial, Revolutionary, Romantic, Realistic, and Modern Periods. Readings will provide the basis for compositions which emphasize literary analysis and personal reflection.

## English 11 CP $11 \quad 1$ Credit/Year 1152

This course examines American fiction, nonfiction, poetry, and drama. Improving writing and grammar skills, as well as improving vocabulary to prepare students for college, are also aims of this course.

| AP English | 11 | 1 Credit/Year |
| :--- | :--- | :--- |
| Language and |  |  |
| Composition |  |  |
| 1650 |  |  |

*Admission to this program requires the recommendation of an English teacher, an A- in CP or a B- average in Adv English. This course requires the completion of a summer reading list consisting of 3-4 books.

An AP course in English Language and Composition engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing.

## AP Capstone <br> 10,11,12 <br> 1 Credit/Year <br> Seminar <br> 1660

*Recommendation of an English teacher (writing sample for rising $10^{\text {th }}$ graders), an $\mathrm{A}-$ in CP or a B- average in Adv English.

The AP Capstone Seminar is the first year of a twoyear AP Capstone Program. (Note the second year is not mandatory). The general topic of the Seminar is global studies. The specific topics are those global issues of interest to students - for example, global warming, pollution, terrorism, nuclear arms control, immigration, etc. The goal of the course is to develop students' skills - in particular, their capacity to analyze and evaluate non-fiction texts; communicate orally, in writing, and via other media; work collaboratively; reflect on their learning and do research.
All 10th and 11th grade students who take the Seminar are eligible in the following year to take the AP Capstone Research Project, which allows students to design, plan and conduct a year-long research-based investigation on a topic of individual interest. The course culminates in a 4,500 to $5,000-$ word academic paper and prepares students for major research projects in college or thereafter.
Students who complete the Seminar and the Research Project with scores of 3 or higher receive the AP Capstone Certificate, signifying successful performance in those courses. Students who earn scores of 3 or higher on both Capstone courses and on four additional AP exams of their choosing receive the AP Capstone Diploma.

## AP Research 11,12 1 Credit/Year 1661 <br> *Prerequisite- AP Capstone Seminar

AP Research is the second year of the two-year AP Capstone Program. AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a year-long research-based investigation to address a research
question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question.

| English 12 | 12 | 1 |
| :--- | :---: | :---: |
| 1210 |  | Credit/Year |

This course is designed to prepare students to read, write, and communicate effectively after high school. It is a general level class for students who may need additional reinforcement in reading and writing. Students will improve reading strategies using both fiction (including novels and short stories) and nonfiction (including newspaper and magazine articles). Students will become more aware of audience and purpose in writing, and will incorporate the writing process while completing several written assignments, including business letters and various compositions. Additionally, students will work collaboratively to improve communication and teamwork skills.

| English 12 CP | 12 | 1 Credit/Year |
| :--- | :--- | :--- |
| 1184 |  |  |

This is a reading and writing intensive course designed to prepare students for any reading and writing experiences they may encounter in college. Students will read and discuss the ideas and attitudes reflected in selected modern novels. In addition, students will improve critical reading techniques. Students will also be challenged to improve their writing techniques through grammar review and by composing several compositions, including personal, persuasive, analytical, and research writing. This is a year-long course.

| AP English | 12 | 1 Credit/Year |
| :--- | :--- | :--- |
| Literature and |  |  |
| Composition |  |  |
| 1600 |  |  |

Admission to this program results from the recommendation of the Junior English teacher, an Ain CP or B- average in Advanced English, and if necessary, a usage test and/or a writing assessment.

This course prepares students for the AP exam in English given by the College Board each spring. The purpose of the course is to challenge superior students with college level work in order to demonstrate their competence in English. Students successful on the AP exam may receive college credit
in English. It is the student's responsibility to check with prospective colleges and universities regarding methods of awarding credit. This course requires the completion of summer assignments/reading.

The AP English Literature and Composition course is designed to engage students in the careful reading and critical analysis of imaginative literature. Through close reading of selected texts, students can deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students should consider a work's structure, style, and themes, as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone.

Students registered for this AP course will be required to take the appropriate AP Exam in May. AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. The AP exam fee will be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.

| AP English $\quad \mathbf{1 2} \quad \mathbf{1}$ Credit/Year |
| :--- |
| Language and |
| Composition |
| $\mathbf{1 6 5 0}$ |
| $\quad$ Admission to this program requires the |
| recommendation of an English teacher, and if |
| necessary, a usage test and writing assessment. This |
| course requires the completion of summer |
| assignments/reading. |

An AP course in English Language and Composition engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing.

Students registered for this AP course will be required to take the appropriate AP Exam in May. AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. The AP exam fee will be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.

College Writing 12 1 Credit/Year ENG 120

In this course, students acquire the writing competencies necessary for completing analytical and argumentative papers supported by secondary research. A variety of assignments, beginning with personal reflections, build upon one another, as students develop ideas that respond to, critique, and synthesize the positions of others. Students systematize and organize knowledge in ways that will help them in all their courses. The course also emphasizes the elements of critical reading, effective writing style, appropriate grammar and mechanics, clarity of language, and logical and cohesive development. It culminates in submission of an extended, documented research paper. College Credit Plus students will receive 4 credits from Franklin University upon completion of this course.

| Speech |
| :--- |
| 1190 |$\quad 10,11,12 \quad 1 / 2$ Credit/Semester

## ENGLISH ELECTIVE COURSE

 SELECTIONS*These courses do not count toward English credits for graduation

Students will acquire self-confidence and poise while developing speech communication skills. Each student will be provided the opportunity to improve speaking skills through a variety of speaking assignments, including formal speeches and media speaking. This is a one-semester course.

## SPCH 100 Speech 10,11,12 1 Credit/Semester Communication SPCH 100

*Prerequisite(s): Speech 1
A basic public speaking course intended to improve the student's ability to think critically and to communicate orally. Theory and practice are provided in various speaking situations. Each student is required to speak before an audience, but class work also involves reading, gathering and organizing information, writing and listening. College Credit Plus students will receive 4 credits from Franklin University upon completion of this course.

## Creative 10,11,12 $1 / 2$ Credit/Semester Writing 1 1160

This course is designed as an introduction to creative writing. This course is broken in half, devoting onehalf to
poetry and one-half to short stories. Students will be expected to submit various pieces of writing weekly, followed by revision and the completion of a writing portfolio.

| Creative | $10,11,12$ | $1 / 2$ Credit/Semester |
| :--- | :--- | :--- |
| Writing 2 |  |  |

1161

This course is designed for students who wish to publish their own pieces of writing or to further their skills for college. Students will create manuscripts for contests and publication in literary magazines. The class will also publish a school literary magazine that will celebrate the writing of all staff and students at Harrison High School.

| ACT/SAT | $10,11,12$ | $1 / 2$ Credit/Semester |
| :--- | :--- | :--- |
| Prep |  |  |
| 1707 |  |  |

## * Recommended Prerequisites: Algebra I, Geometry, and Algebra II

This course is designed for students who would like to sharpen their test preparation skills. It is a required course for juniors or seniors not attending the career center or not enrolled in an administrative approved career track program. This requirement is designed to meet Ohio's College or Career Standards and prepare students for the required Ohio ACT test requirement.

Students will be guided through a program designed to help them become familiar with the concepts and types of questions given on both the ACT and the SAT tests. Students will work individually and with the class to develop testing skills and strategies. The Language Arts part of the course consists of vocabulary, reading strategies, and essay writing. The mathematics part of the course includes topics from Algebra I, Geometry and Algebra II.

## Classical 9,10,11,12 1/2Credit/Semester Mythology 1705

In this course, students will study about the religion of the ancient Greek and Roman people and the stories associated with it. Since this will look at the myths as cultural phenomenon and part of religion, we will also examine some other preceding and succeeding cultures and religions (Babylonian, Sumerian, Egyptian, Zoroastrian, Judaic, Celtic, Norse, Knights of Charlemagne) to see similarities between them and Greco-Roman myth. This will also allow students to see changes over time in thoughts about myth, belief, and their effects on culture. While this will deal with religion, this course will not promote any one belief or deny the validity of any practiced belief; it is simply meant to show the underpinnings of the form and content of the myths with which many students are already familiar. Along with looking at myth as religion, we will also examine myth as literature and its literary and linguistic influence. Many of the stories of GrecoRoman mythology lend to us characters and words used throughout Western literature and still used today in English. Therefore, this course will be a good way for students to build vocabulary knowledge and become aware of literary allusions. The ideas put forth in these stories also influence many stories told today in books, film, and other media, and we will discuss some of these analogies as the course progresses.

## Think Again: 10,11,12 1/2 Credit/Semester Argumentative Writing 1706 <br> *teacher recommendation is needed for this <br> course.

Do you like to win arguments? Have you been debating since you were a toddler? If you learn better when you choose your own topics, then this is the class for you. This semester course will develop and foster independence, while students work collaboratively to create a cumulative project (service learning, project or product based). This course will include digital literacy and learning, debates (digital and classroom) and research and argumentative writing.

## Journalism 9.10.11.12 1/2 Credit/Semester 1230

Students that enroll in this course will learn modern journalism by producing a digital school newspaper. In addition to news writing, the course will cover editing, interviewing, photography, layout and design, and other skills necessary for publication.

Students will also have leadership opportunities as student editors. Additional topics such as rhetoric, news analysis, ethics, journalism history, and website design will also be covered.

## MATH DEPARTMENT FLOW CHART

| Advance College Preparatory Sequence |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Geometry ADV (one credit full year) | $\square$ | Algebra 2 <br> ADV <br> AP Statistics (one credit full year) | $\square$ | Pre-Calculus ADV (one credit full year) | $\square$ | AP Calculus and/or CCP Statistics (one credit full year) |
| College Preparatory Sequence |  |  |  |  |  |  |
| Algebra 1 CP (one credit full year) | $\square$ | Geometry CP (one credit full year) | $\square$ | Algebra 2 CP (one credit full year) | $\square$ | Statistics, Pre- <br> Calculus, or CCP Statistics (one credit full year) |
| Ohio Core Minimum Sequence |  |  |  |  |  |  |
| Algebra 1A (one credit full year) | $\square$ | Algebra 1B (one credit full year) | $\square$ | Geometry (one credit full year) | $\square$ | Math <br> Modeling \& Reasoning (one credit full year) |
| NOTE: Students must complete the math course sequence through Algebra 2 (or Math Modeling \& Reasoning equivalent to Algebra 2) to meet graduation requirements. |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

MATHEMATICS COURSE SELECTIONS
NOTE: Courses requiring a TI83/83+/84/84+ graphing calculator are noted in the course descriptions. All other courses require at least a scientific calculator.

```
Algebra 1A 9,10,11,12 1 Credit/Year
3010
Prerequisite - Teacher Recommendation
```

This course provides the groundwork for further study in math as well as helping the student better understand some of the arithmetic already experienced. Topics include statistics, solving equations, linear equations, functions, and exponential functions. This is part of a two-year course sequence and must be followed by Algebra 1B.

## Algebra $1 \quad 9,10,11,12 \quad 1$ Credit/Year CP <br> 3011

Prerequisite - Teacher Recommendation or an A or B in Pre-Algebra

This course provides the groundwork for further study in math as well as helping the student better understand some of the arithmetic already experienced. Topics include negative numbers, equations, polynomials, and exponents.

| Geometry | $\mathbf{1 0 , 1 1 , 1 2}$ | 1 Credit/Year |
| :--- | :--- | :--- |
| 3300 |  |  |

This course emphasizes the concepts and practical problems of geometry.

| Geometry <br> CP $3030$ | 9,10,11,12 | 1 |
| :---: | :---: | :---: |
|  |  | Credit/Year |
|  |  |  |
| *Prerequisite - Algebra 1 |  |  |
| Includes the study of points, lines, planes, angles, triangles, polygons, circles, solids, and also proofs of theorems. The principles of algebra and graphing are used in this course. |  |  |

Geometry ADV 9,10 1 Credit/Year 3031
*Prerequisite - Teacher recommendation
This course will cover all of the material normally presented in Geometry at a pace geared toward preparing the student to take the AP Calculus AB as a senior. TI 83/84 graphing calculator required.

```
Algebra 2 11,12 1 Credit/Year
3040
*Prerequisite - Algebra 1 and Geometry
```

Essentially the same content as Algebra CP but at a more deliberate pace. Purchase of a graphing calculator is strongly recommended.

```
Algebra 2 CP 10,11,12 1 Credit/Year
3050
    *Prerequisite - Algebra 1/CP and Geometry
(Algebra 2 CP may be taken concurrently with
Geometry)
```

This course includes an expansion of topics introduced in Algebra 1 plus new topics such as rational exponents and right triangle trigonometry, systems of equations, and complex numbers. Purchase of a graphing calculator is strongly recommended.

| Algebra 2 ADV | 9,10 | $1 \mathrm{Credit} / \mathrm{Year}$ |
| :---: | :---: | :---: |
| *Prerequ recommendation. |  | DV and Teacher |
| This course will co presented in Algeb preparing the stud senior. TI 83/84/+ | C ot anh | rial normally eared toward ulus AB as a r required. |

Pre-Calculus 11,12 $\quad \mathbf{1}$ Credit/Year
$\quad$ *Prerequisite - C average or better in
Algebra 2 and Geometry
This is the fourth-year course for students who
possess high ability in math and/or plan to pursue
math or science in college. Includes work with
various types of functions, trigonometry, analytic
geometry (conic sections) probability, and an
introduction to calculus. TI 83/84 graphing
calculator required.

Pre-Calculus $11 \quad 1$ Credit/Year ADV 3065
*Prerequisite -Algebra 2 ADV and Teacher recommendation.

| Calculus | 12 | 1 Credit/Year |
| :--- | :--- | :--- |
| $\mathbf{3 0 7 0}$ | *Prerequisite |  |
|  |  |  |

Calculus includes further work on various functions, differential, and integral calculus, and analytic geometry. Students may take the Calculus AP exam at their own expense and obtain college credit for this course if they score high enough. TI 83/84 graphing calculator required.

| AP Calculus $\quad \mathbf{1 1 , 1 2} \quad \mathbf{1}$ Credit/Year |  |  |
| :--- | :--- | :--- |
| AB |  |  |
| $\mathbf{3 0 7 1}$ | *Prerequisite: B average in Pre-Calculus |  |
|  | ADV, A average in Pre-Calculus and AP |  |
|  | Calculus Teacher recommendation |  |

This is an AP course. Students may take the Calculus AB AP exam. TI 83/84 graphing calculator required.

Students registered for this AP course will be required to take the appropriate AP Exam in May. AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. Students will sign an AP contract prior to enrollment in the class. The AP exam fee will be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.

## AP Calculus BC <br> 12 <br> 1Credit/Year

 3072*Prerequisite- passing grade in Calculus AB
or B average in Calculus with teacher rec
This course is designed for motivated, college-bound students. The year will start with a fast-paced review of topics covered in Calculus AB/Calculus. Topics specific to AP Calculus BC that will be covered include: Deriving and integrating parametric equations, polar coordinates, and vector-valued functions; infinite sequences and series. Extensions of Calculus $\mathrm{AB} /$ Calculus topics include: methods of integration, Euler's Method, differential equations, and arc length.

This course will cover all of the material normally presented in Pre-Calculus at a pace geared toward preparing the student to take AP Calculus AB as a senior. TI 83/84/+ graphing calculator required.

Students registered for this AP course will be required to take the AP Calculus BC Exam in May. AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. The AP exam fee will be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.
Math Applications $\mathbf{1 2} \quad \mathbf{1}$ Credit/Year
$\mathbf{3 0 8 0}$ *Prerequisite - Algebra 1, Geometry,
Algebra 2
This course is designed for those seniors who are
college bound but need to improve their mathematics
skills and understanding. The course covers many
algebra topics with a more concrete and numerical
approach. This course is NOT designed for the
student who took Pre-Calculus. Scientific calculators
are required for this course.

| Statistics | $\mathbf{1 1 , 1 2}$ | $\mathbf{1}$ Credit/Year |
| :--- | :--- | :--- |
| $\mathbf{3 6 0 0}$ |  |  |
| *Prerequisite - Algebra | 1, Geometry, |  |
| Algebra 2 |  |  |

This course is designed for juniors and seniors interested in math and/or business. Students will be introduced to the basic concepts of probability and statistics. It will also explore the real-world applications of statistics. TI-83/86 Graphing Calculator furnished for student use.
AP Statistics 10,11,12
3601 Credit/Year
*Prerequisite - B average in Algebra 1and
teacher recommendation. Statistics is NOT
a prerequisite.

Students will be taught major concepts and tools for collecting, analyzing, and drawing conclusions from data. Topics include four major themes: 1) exploring data (histograms, stem plots, boxplots, mean standard deviation, etc.); 2) sampling and experimentation; 3) anticipating patterns; and 4) statistical inferences (using data from a sample to make decisions about a
population). Highly capable, hardworking math students can take this class in addition to Calculus. TI 83/84 graphing calculator required.

Students registered for this AP course will be required to take the appropriate AP Exam in May. AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. The AP exam fee will be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.

## Research Statistics 11, $12 \quad 1 / 2$ Credit/Semester 3650 <br> *Prerequisite- Statistics or AP Statistics

This course provides a foundation for evaluating, analyzing and exploring the use of statistics in today's world. This course will explore topics including but not limited to (and look at the statistics associated with) Science, Politics, Business, Medical and Sports. Experimental Design, Summary Statistics, visual representations and analyzing questions related to these topics will be the focus.

## MATH 215121 Credit/Year

 Statistical Concepts*Prerequisite - Must have completed Algebra 2CP or currently enrolled in Algebra 2ADV

This course introduces the student to statistics with applications to various areas. The course covers both descriptive and inferential statistics. Topics included are: sampling techniques, data types, experiments; measures of central tendency, measures of dispersion, graphical displays of data, basic probability concepts, binomial and normal probability distributions, sampling distributions and Central Limit Theorem; confidence intervals, hypothesis tests of a mean, or a proportion for one or two populations, and linear regression. These topics will be covered using a basic knowledge of algebra and Microsoft Excel. College Credit Plus students will receive 4 credits from Franklin University upon completion of this course.

Math Modeling \& Reasoning
3041
*Prerequisite- Algebra 1 and Geometry
This elective course is intended for students who are not intending to pursue a pathway requiring calculus. This course is designed to promote reasoning, problem solving, and modeling through thematic units focused on mathematical practices while reinforcing and extending content in Number and Quantity, Algebra, Functions, Statistics and Probability, and Geometry. It is a year-long course taught using student-centered pedagogy. This course satisfies the Algebra 2 requirement.
Personal Finance 11,12 $1 / 2$ Credit/Semester
$\mathbf{3 0 8 1} \quad$ *Prerequisite - Algebra 1 and Geometry
Following the Dave Ramsey's Foundations in
Personal Finance, students will learn how to
responsibly manage money. Topics will include
budgeting, banking (checking and savings), credit
and debt, investing and retirement, insurance, taxes,
college planning, housing, and real estate.
******Personal Finance can be used to fulfill the
Financial Literacy requirement set by the State of
Ohio for graduation. Ohio for graduation.

| Math Skills | $\mathbf{9 , 1 0}$ | $1 / 2$ Credit/Semester |
| :--- | :--- | :--- |
| $\underline{0720}$ |  |  |

This semester course is an elective and will help students build essential skills in mathematics. Students will work on strategies to reinforce operations and algebraic thinking, real and complex number systems, graphing, geometry, and basic probability and statistics. Students are placed in the course based on teacher recommendation and MAP scores. This course is a supplement to the Geometry core course.

## SCIENCE DEPARTMENT FLOW CHART

| Advance College Preparatory Sequence |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Biology ADV (one credit full year) | $\square$ | Chemistry (one credit full year) | $\square$ | Physics (one credit full year) | $\square$ | AP Electives (see below) |
| College Preparatory Sequence |  |  |  |  |  |  |
| Biology CP (one credit full year) | $\square$ | Chemistry or Physical Science CP (one credit full year) | $\square$ | Physics (one credit full year) | $\square$ | AP Electives (see below) |
| Ohio Core Minimum Sequence |  |  |  |  |  |  |
| Biology (one credit full year) | $\square$ | Physical Science (one credit full year) | $\square$ | Physical Geology (one credit full year) | $\square$ | Electives (see below) |
|  |  |  |  |  |  |  |
| Full Year Course Science Electives (1 Credit/Year) |  |  |  | Semester Course Science Electives $1 / 2$ Credit/Semester |  |  |
|  | AP Biology <br> AP Environmental Science <br> AP Chemistry <br> AP Physics 1 <br> AP Physics 2 <br> AP Physics C: Mechanics <br> Human Body Systems <br> Medical Interventions <br> Biomedical Innovations |  |  |  | Astronomy Anatomy \& Physiology Forensic Science Marine Science |  |



This course fulfills all Ohio CORE requirements.

| Biology CP <br> 4020 | 9 |  |
| :--- | :--- | :--- |

This course is an Ohio CORE course that is considered college prep. All Ohio Academic Content Standards in Biology will be covered.

| Biology ADV |  |  |
| :--- | :--- | :--- |
| 4022 | 9 | Credit/Year |

This college-prep biology course will cover all Ohio CORE Standards in biology. Emphasis will be placed on diversity of life and various interactions in the biosphere. $9^{\text {th }}$ graders will need to demonstrate readiness based on a placement data and Jr. School Teacher recommendation.

| Physical | 10 | 1 Credit/Year |
| :--- | :--- | :--- |
| Science |  |  |
| 4082 |  |  |

This year long course is designed to fulfill the physical science requirement of the core curriculum. Students in the course will study forces and motion (physics), in addition to matter and its changes (chemistry). This class is not meant for college-prep students.

## Physical Science CP $10 \quad 1$ Credit/Year 4082

This year long course is designed to fulfill the physical science requirement of the core curriculum. Students in the course will study forces and motion (physics), in addition to matter and its changes (chemistry). This class is meant for college-prep students looking to pursue a college major not in the science field.

## Chemistry 10,11,12 1 Credit/Year 4031

This course is designed to examine the basic concepts of chemistry at a college prep pace and enhanced depth. It is an intense course requiring a strong math background. Chemistry also provides an opportunity
to develop thinking skills valuable in the study of science. Most nursing programs require a year of high school chemistry. Calculators are required. This course is weighted.

| Physics <br> 4100 | $10,11,12$ | 1 Credit/Year |
| :--- | :--- | :--- |

This course is designed to examine the basic concepts of physics at a college prep pace and enhanced depth. This course should enhance a student's problemsolving skills and provide a solid understanding of the laws of motion, thermodynamics, waves, electricity, and magnetism. Calculators are required. This course is weighted.

> SCIENCE COURSE ELECTIVE YEAR LONG SELECTIONS

| AP Biology 11,12 $\quad \mathbf{1}$ Credit/Year |
| :--- |
| $\mathbf{4 2 0 0} \quad$PPrerequisite -B average in Biology ADV <br> or A average in Biology CP, Chemistry and Teacher <br> recommendation |

This course is designed for the advanced student with a strong interest in biology. Topics typically covered in first-year college biology classes will be covered including genetics, botany, comparative anatomy, physiology, and current issues in science. This course is weighted.

Students registered for this AP course will be required to take the appropriate AP exam in May. AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. The AP exam fee will be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.

| AP Chemistry 11,12 1 Credit/Year |
| :--- |
| 4032 *Prerequisite - Student must have earned a |
| grade of "B" or higher in Chemistry, and Teacher |
| recommendation |

This course is designed for the advanced student. Topics typically included in first-year college courses will be covered. There will be a strong lab content
including qualitative analysis. Students entering medicine or chemical engineering should be well prepared for their first semester of college chemistry. Current issues in science and technology will also be discussed. Students will take the AP Chemistry Exam in May. This course is weighted.

Students registered for this AP course will be required to take the appropriate AP exam in May. AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. The AP exam fee will be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.

## AP Physics C: Mechanics 11, $12 \quad 1$ Credit/Year 4150 <br> *Prerequisite - B in Physics, Calculus or Pre-Calculus Advanced enrollment and Teacher recommendation

This course is designed for the advanced student with a strong interest in physics. Physics 2 will be a continuation of Physics 1 with topics explored in greater depth. Students entering engineering should be well prepared for their first year of college physics. Students will take the AP Physics Exam in May. This course is weighted.

Students registered for this AP course will be required to take the appropriate AP Exam in May. AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. The AP exam fee will be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.

## AP Physics 1 11,12 1 Credit/Year 4151

*Prerequisite - Algebra 2 enrollment or completion and Teacher recommendation AP Physics 1 is a national college-level course in physics. The curriculum for this course is designed by College Board. This course is the equivalent to a first-semester college course in physics which requires the application of algebra, geometry, and trigonometry. In addition, the course places a heavy emphasis on deep understanding of physics concepts and science practices. Students will learn to effectively communicate their understanding of essential physics concepts. The course addresses Newtonian mechanics (including rotational dynamics
and angular momentum); work, energy, and power; and mechanical waves and sound. It will also introduce electric circuits. This course includes a laboratory component to a semester-long, collegelevel physics laboratory. Students will spend approximately 25 percent of instructional time engaged in laboratory work. These investigations now foster student engagement in the practice of science through experimenting, analyzing, making conjectures and arguments, and solving problems in a collaborative setting, where they direct and monitor their progress toward an academic goal. Students will take the AP Physics Exam in May. This course is weighted.

Students registered for this AP course will be required to take the appropriate AP Exam in May. AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. The AP exam fee will be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.

| AP Physics 2 | $\mathbf{1 1 , 1 2}$ | 1 Credit/Year |
| :--- | :--- | :--- |
| 4152 |  |  |
| *Prerequisite-AP Physics |  |  |

AP Physics 2 is a national college-level course in physics. The curriculum for this course is designed by College Board. This course is the equivalent to a second-semester college course in physics which requires the application of algebra, geometry, and trigonometry. In addition, the course places a heavy emphasis on deep understanding of physics concepts and science practices. Students will learn to effectively communicate their understanding of essential physics concepts. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. This course includes a laboratory component to a semester-long, college-level physics laboratory. Students will spend approximately 25 percent of instructional time engaged in laboratory work. These investigations now foster student engagement in the practice of science through experimenting, analyzing, making conjectures and arguments, and solving problems in a collaborative setting, where they direct and monitor their progress toward an academic goal.

Students registered for this AP course will be required to take the appropriate AP Exam in May. AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. The AP exam fee will be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.

## AP Environmental Science 11,12 1 Credit/Year 4551

Prerequisite: B or better in Biology, B or better in Chemistry, teacher recommendation

This course is designed for the advanced student. Topics covered include those from an introductory college environmental science class. Students with engage with scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. Environmental Science is an interdisciplinary course embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography.

Students registered for this AP course will be required to take the appropriate AP Exam in May. AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. The AP exam fee will be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.

| Physical <br> Geology | 11,12 | 1 Credit/Year |
| :--- | :--- | :--- |
| 4960 |  |  |

This course explores the interactions and concepts of our geologic environment. If you like fossils, earthquakes, or volcanoes then this course might be a great choice for you. The earth is a dynamic planet that is under constant change. Students will also study minerals, rock types, energy resources and water resources as it relates to the geology of our planet. A pop culture component will also be included.

## SCIENCE COURSE ELECTIVE SEMESTER LONG SELECTIONS <br> Astronomy $\quad 9,10,11,12 \quad 1 / 2$ Credit/Semester 4901

Have you always wanted to look at the stars? This course examines the universe centering on the planets, stars, and galaxies. Harrison High School has its very own telescope so students will have the opportunity to attend star gazing events related to this class. This course will also briefly examine the role of astronomy in pop culture.

| Anatomy and | 10,11,12 | 1/2Credit/Semester |
| :---: | :---: | :---: |
|  |  |  |
| Physiology |  |  |
| 4250 |  |  |
| *Prerequisite - C or better in any Biology |  |  |
| course |  |  |

This course is for students who wish to learn about the structure and function of the human body. Units on the Nervous, Skeletal, Muscular, Digestive, Cardiovascular, Endocrine, and Reproductive systems will be presented. The course cumulates with fetal pig dissection. Certainly this course will be of greatest interest to students considering careers in medical related fields.
Forensic 10,11,12 $1 / 2$ Credit/Semester
Science
4601
*Prerequisite - C or better in Biology
Do you enjoy watching CSI, Bones, or NCIS? This
course might be for you! The course will explore the
history of forensics, methods of investigation, and
types of evidence and analysis of crime scene
evidence. Analysis of fingerprints, hair, fibers, drugs,
soil, blood, and DNA will be an important part of the
course. In addition we will study agencies that offer
forensic services, labs and explore forensic careers.
Marine Science $\mathbf{1 1 , 1 2} \quad 1 / 2$ Credit/Semester
*Prerequisite- C or better in Biology \&
Physical Science/Chemistry

Marine Science introduces students to oceanography by studying some basic earth science topics,
investigating the chemical and physical characteristics of the ocean, exploring marine organisms and ecology, and examining the role of climate change as it affects the oceans and the planet as a whole. Students will explore the connections between science and society, foster critical thinking skills, and dive into tough problems. A goal for this class is that students will develop into informed and scientifically aware global citizens, even if their future doesn't directly involve marine science.

PROJECT LEAD THE WAY (ENGINEERING)- offered on Harrison campus by the Great Oaks

Project Lead the Way is a nationally accredited engineering curriculum that engages students in compelling, real-world challenges allowing them to turn their ideas into reality and make the jump from 'dreamer' to 'doer'. Students learn and practice essential soft skills including problem solving, critical and creative thinking, communication, collaboration, and perseverance along with learning industry specific skills using software and equipment including AutoDesk Fusion, a Denford micromill, Pegasus robotic arm, Boss Laser, WAZER, and Makerbot 3D printers. The program offers students 5 different engineering classes with multiple industry certifications, up to 10 semester hours of college credit, and 3 co-curricular clubs including Society of Women Engineers, Technology Student Association, and VEX Robotics.

```
Introduction 9,10,11,12 1 Credit/Year
to Engineering
Design
4805
```

In Introduction to Engineering Design (IED), students are introduced to the engineering design process, applying math, science, and engineering standards to identify and design solutions to a variety of real problems. They work both individually and in collaborative teams to develop and document design solutions using the engineering design process and Autodesk Fusion 360, a 3D modeling software.

```
Principles of 10,11,12 1 Credit/Year
Engineering
4806
    *Prerequisite - IED
```

In Principles of Engineering (POE) students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation. Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation.

## Digital Electronics 11, 121 Credit/Year 4807 <br> *Prerequisite- Principles of Engineering

In Digital Electronics (DE), students explore the foundations of computing by engaging in circuit design processes to create combinational logic and sequential logic (memory) as electrical engineers do in industry. From smartphones to appliances, digital circuits are all around us. This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design.

## Aerospace Engineering 121 Credit/Year 4808 <br> *Prerequisite- IED and POE

In Aerospace Engineering (AE), students are introduced to 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. They learn basic orbital mechanics using industry-standard software. They also explore robot systems through projects such as remotely operated vehicles.

| Engineering Design |
| :--- |
| and Development |
| $4810 \quad 12$ |
| $\quad$ *Pre-requisites: IED, POE, and DE | Credit/Year

This is the Capstone Course for Project Lead the Way Engineering. The knowledge and skills students acquire throughout PLTW Engineering come together in EDD as they 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, completing EDD ready to take on any post-secondary program or career. Students are strongly encouraged to register for the Advanced Placement Capstone courses: AP Seminar and AP Research concurrently with EDD.

Applied Engineering 10,11,12 1 Credit/Year 4811
*Prerequisites: IED and POE
Students will discover how engineering and manufacturing can be blended to real world physical problems. Students will explore: Lean Manufacturing, Fanuc programmable controls, fluid power applications, CAD/CAM, Robotics, Machine and Material safety.

> PROJECT LEAD THE WAY (BIOMEDICAL SCIENCE)offered on Harrison campus by the Great Oaks

Biomedical Science Program - The sequence of courses in the Project Lead The Way Biomedical Sciences is a proven program modeled after the PLTW engineering program. This is a rigorous course sequence designed for students who wish to study in one of the medical fields or in advanced science at college. The Biomedical Science program will be a sequence of four courses, all aligned with the appropriate national learning standards:

```
Principles of 9**,10,11,12 1Credit/Year
Biomedical
Science
4 9 5 0
    * Prerequisite - C or better in Biology **
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Freshmen must be enrolled in Biology CP or Advanced

Students explore the concepts of human medicine and are introduced to research processes and bioinformatics. Hands on projects enable students to investigate human body systems and various health conditions, including heart disease, diabetes, sicklecell disease, hypercholesterolemia and infectious diseases.

## Human Body 10,11,12 1 Credit/Year <br> Systems <br> 4951

*Prerequisite - must have a C or better in Principles of Biomedical Science class as well as a score of 3 or higher on the Principles of Biomedical Science end-of-course exam.

Students examine the processes, structures, and interactions of the human body systems to learn how they work together to maintain homeostasis (internal balance) and good health

| Medical |
| :--- |
| Interventions |
| 4952 |

*Prerequisite - must have a C or better in Human Body Systems class as well as a score of 4 or higher on the Human Body Systems end-of-course exam.

Students investigate the variety of interventions involved in the prevention, diagnosis, and treatment of disease as they follow the lives of a fictitious family. The course is a "How to" manual for maintaining overall health and homeostasis in the body as students explore: how to prevent and fight infection; how to screen and evaluate the code in human DNA; how to prevent, diagnose, and treat cancer; and how to prevail when the organs of the body begin to fail. Through these scenarios, students are exposed to the wide 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 roles scientific thinking and engineering design play in the development of interventions of the future.
Biomedical $11,12 \quad 1$ Credit/Year
Innovations
4953 *Prequisite - must have a C or better in Human Body Systems class as well as a score of 4 or higher on the Human Body Systems end-of-course exam.

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 health challenges of the $21^{\text {st }}$ century as they work through progressively challenging open-minded 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 from a university, hospital, physician's office, or industry. 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 FLOW CHART

| Advance College Preparatory Sequence |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AP World History or AP Human Geography (one credit full year) | $\square$ | AP US History or American History Adv (one credit full year) | $\square$ | AP <br> American Government (one credit full year) | $\square$ | AP <br> Electives (see below) |
| College Preparatory Sequence |  |  |  |  |  |  |
| World History CP (one credit full year) | $\square$ | American History CP (one credit full year) |  | American Government CP/Financial Literacy (one credit full year) | $\square$ | Electives (see below) |
| Ohio Core Minimum Sequence |  |  |  |  |  |  |
| World History CP (one credit full year) | $\square$ | American History CP (one credit full year) | $\square$ | American Government/ Financial Literacy (one credit full year) | $\square$ | Electives (see below) |
|  |  |  |  |  |  |  |
| AP Full Year Social Studies Electives (1 Credit/Year) |  |  |  | Semester Course Science Electives $1 / 2$ Credit/Semester |  |  |
|  | AP United States History AP Psychology AP American Government AP Human Geography |  |  |  | Ancient World <br> Religions <br> Contemporary <br> World Issues <br> Sociology <br> World War <br> II/Holocaust <br> Cincinnati History <br> America in Global Conflict |  |

## SOCIAL STUDIES REQUIRED

 COURSE OFFERINGS
## American History CP $10 \quad 1$ Credit/Year 2007

The emphasis in this course will be on historical perspectives from 1877 to the present (economic, social, cultural, political), and the United States’ relationships in world affairs. This CP course will require additional research and writing assignments that may include quarterly research papers.

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American History ADV 10 1 Credit/Year
2006
*Prerequisite - Teacher recommendation
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The emphasis in this course will be on historical perspectives from 1877 to the present (economic, social, cultural, political), and the United States' relationships in world affairs. This advanced course will require additional research and writing assignments that may include quarterly research papers.

## American Government 11 2603

The purpose of this course is to introduce students to the theory and practice of American government. We will begin by outlining the broad logic underlying the formation of governments as a solution to collective action problems and then move to a specific focus on the formation and development of American democracy. During the second half of the course, attention will shift to the avenues for public influence on policy. We will conclude with a study of the continuing struggle over both the definition and the extension of civil liberties and rights. Overall, students will be provided real-world applications and given the opportunity to be participants in their local governing bodies (i.e., classrooms, schools, city and county units) to enhance participation and political knowledge.

## American Government $11 \quad 1$ Credit/Year CP <br> 2600 <br> *Prerequisite- Teacher recommendation

The purpose of this course is to introduce students to the theory and practice of American government. We
will begin by outlining the broad logic underlying the formation of governments as a solution to collective action problems and then move to a specific focus on the formation and development of American democracy. During the second half of the course, attention will shift to the avenues for public influence on policy. We will conclude with a study of the continuing struggle over both the definition and the extension of civil liberties and rights. Overall, students will be provided real-world applications and given the opportunity to be participants in their local governing bodies (i.e., classrooms, schools, city and county units) to enhance participation and political knowledge.
CP course will require additional research and writing assignments that may include quarterly research paper.

## Modern World History CP 91 Credit/Year 2003

Students will concentrate on the social, economic, and political interdependence of World History and its relation to our world's current state of affairs. This CP course will require additional research and writing assignments that may include quarterly research papers.

## AP World History $\quad 9,10,11,121$ Credit/Year 2002

AP World History focuses on developing students’ abilities to think conceptually about world history from approximately 8000 BCE to the present and apply historical thinking skills as they learn about the past. Five themes of equal importance - focusing on the environment, cultures, state-building, economic systems, and social structures - provide areas of historical inquiry for investigation throughout the course. AP World History encompasses the history of the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania, with special focus on historical developments and processes that cross multiple regions.

Students registered for this AP course will be required to take the appropriate AP Exam in May. AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. The AP exam fee will be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.

| AP American | $\mathbf{1 1}$ | $\mathbf{1}$ Credit/Year |
| :--- | :--- | :--- |
| Government |  |  |
| $\mathbf{2 6 0 1}$ |  |  |
|  | *Prerequisite - B average in American |  |
|  | History and Teacher recommendation |  |

Do you want to earn college credit while in High School? Do you have interest in discussing political issues of the day? In this course, the emphasis will be on the American political system, economics, and behavioral sciences. AP students will take the AP exam in May.

Students registered for this AP course will be required to take the appropriate AP Exam in May. AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. The AP exam fee will be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.

> SOCIAL STUDIES ELECTIVE COURSE OFFERINGS

## AP United States <br> 10,11,12 <br> 1 Credit/Year <br> History <br> 2301 <br> *Prerequisite - B average in American History and Teacher recommendation

Do you want to earn college credit while in High School? Do you like American History? If so, then this class could be a good fit for you. This challenging class requires an interest in American History as well as strong academic abilities, in particular, reading and writing skills. Students spend an entire year learning the social, political, military, diplomatic and economic history of the United States from Christopher Columbus through Barrack Obama. Students will be expected to take the AP exam in May. Those students who earn qualifying scores on the AP exam can receive college credit. The class will follow a syllabus and take examinations that closely mirror those offered in college and on the AP exam. Prospective students should be willing to do a small amount of summer homework prior to the actual start of this class.

Students registered for this AP course will be required to take the appropriate AP Exam in May.

AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. The AP exam fee will be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.
AP Psychology 11,12 $\mathbf{2 3 0 5}$ Credit/Year

* Prerequisite - B average in American
History, Biology completed, and Teacher
recommendation

More than two million students take the AP exams for college credit or advanced standing. Why not you? A major cause of boredom at school is due to a lack of variety. Human beings have a need for changes of stimulation. AP Psychology could be that change of stimulation for you, and your course load. The AP program offers a course and exam in Psychology to qualified students who wish to complete studies in high school similar to an introductory level college Psychology course. The course will be geared towards the behavior and mental processes of humans (and animals) as well as the psychological facts, principles, and phenomena associated with each of its major subfields. AP students will take the AP exam in May.

Students registered for this AP course will be required to take the appropriate AP Exam in May. AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. The AP exam fee will be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.

## AP Human Geography $9,10,11,12 \quad$ 1Credit/Year 2300

The AP Human Geography course is equivalent to an introductory college-level course in human geography. The course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications.

The curriculum reflects the goals of the National Geography Standards (2012). Students registered for this AP course will be required to take the appropriate AP Exam in May. AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. The AP exam fee will be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.
Cincinnati $\quad 9,10,11,12 \quad 1 / 2$ Credit/Semester
History
2910

Have you ever stood behind home plate at Great American Ballpark? Do you want to? Is Music Hall really haunted? Did you know that there is a secret subway system under the streets of Cincinnati? Did you know that there are secret tunnels under the streets of Harrison? What do flying pigs have to do with Cincinnati? Come explore the history of the Queen City and find the answers to these questions and many more. This half-year course is open to all students and focuses on the history of the city of Cincinnati and its surrounding areas. This course will include guest speakers and field trips to places such as Great American Ball Park and the Cincinnati Museum Center. Check out the class wiki at www.bairdsspot.wikispaces.com

## Sociology $\quad 9,10,11,12 \quad 1 / 2$ Credit/Semester 2915

This is a half year course open to all students that will introduce the basic concepts of the study of society and society's impact on the individual. Throughout the semester, students will examine how things like race, gender, and class affect their lives and the lives of those around them. Societal problems like poverty, discrimination, crime, populations, and problems with the family and at work will also be covered as all of these problems could affect the students within the school.

## World War 9,10,11,12 1/2Credit/Semeste II/Holocaust 2930

This is a half year course open to all students that covers in more detail the war that made what many historians have called the "Greatest Generation." World War II is covered during the 10th grade history, but this course focuses solely on the war that was the most devastating, cataclysmic and world
changing in all of history. But the Greatest Generation will not last forever since the youngest WWII veteran is approximately 88 years old. The hope is that this class will teach you enough history to be able to appreciate the extreme sacrifices that these men, women and their families made to keep the world free and stop the spread of the evil intentions of Nazi Germany and Imperial Japan. Students will examine the reasons why the war started, the war effort and how each country contributed to the end of this devastating war. A primary focus will be on the Holocaust and the importance that this event had during the war and the impact that it had on the years after the war had ended. The course will involve written assignments, video clips, readings, technology usage and veteran interview projects.
Ancient $\quad 9,10,11,12 \quad 1 / 2$ Credit/Semester
World
Religions
2800

The course examines the historical evolution, the fundamental doctrines and beliefs, the practices, institutions and cultural expressions of religious traditions. The course also deals with some of the essential differences and similarities which exist among each religious tradition, and points to the uniqueness of each of them. Goals for students enrolled in this course are 1) to develop the ability to think both empathetically and critically about conflicting religious claims, and 2) to gain knowledge of the history and culture of several major religious traditions.

## Contemporary 10,11,12 ½Credit/Semester World Issues 2005

If you have an interest in what is happening in the world around you, this is the class for you. This semester class is unique as many of its topics actually develop as the days and weeks pass! Current events from around the world and the United States are discussed and studied on a daily basis. Rather than learning from a textbook, students will have access to a weekly news magazine subscription in addition to other news articles to use as their guide to class discussions. This class requires you to be willing to read about and talk about topics both in small groups and in front of class. Prospective students also should be willing to write small essays or topic papers that are developed in class.

## America in Global $9,10,11,12 \quad 1 / 2$ Credit/Semester Conflict: The Vietnam <br> War to the War on Terror 2004

This course will study the United States involvement in the conflicts of Vietnam, Beirut, Panama, Grenada, Desert Storm, and the War on Terror (including the 9/11 attacks, Afghanistan, and Iraq). It will utilize media and first-person interviews from veterans of the conflicts. Students will be expected to be active participants in the learning process and be able to complete multimedia projects or book revies on the topic. It is designed for students interested in studying how wars can have devastating and culturally changing effects on a nation. The course will delve further into the causes of conflicts, the horrors of war and its results. A special emphasis will be placed on research into the veterans of the war and its impacts on them. Students will be exposed to the harsh realities of war and the pain it can bring to a nation.

ART COURSE OFFERINGS
Portfolio Prep-Advanced Art is the only full-year course, designed for those with interest in furthering their education in art following high school. The additional courses consist of eight semester offerings for those who have interest in taking a half-year course in a more specific area of art.

Students enrolled in all levels of art will be encouraged to participate in art contests and exhibits. Courses taken in this area will count toward the Fine/Practical Arts requirement for graduation as well as the Fine Arts requirement for Ohio colleges and universities.

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Art 1 9,10,11,12 1/2Credit/Semester
8000
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This is an introductory course for students to be introduced to and refine art skills in drawing, painting, design, printmaking and sculpture. Students will be taught artistic techniques using various art media, including but not limited to water colors, tempera paint, printing ink, and drawing pencils. This is a studio-based experience, a production-based class, where drawing and design skills will be the major focus. In addition to creating art work, students will have the opportunity to expand their understanding of art concepts, vocabulary, techniques, art history, and art criticism. Historical and Contemporary art will be explored as inspiration for student work. Students will be introduced to art professional and art careers. Passing this course is a requirement in order to take additional classes in the art department.

| Art 2 | $\mathbf{9 , 1 0 , 1 1 , 1 2} \quad 1 / 2$ Credit/Semester |
| :--- | :--- |
| $\mathbf{8 1 0 0}$ |  |
|  | *Prerequisite-Beginning Art |

This semester long course is designed for students to gain a deeper knowledge and understanding of art media and techniques. It expands upon the base knowledge and art making of Art 1-Beginning Art. The student will be encouraged to create a personal voice and style in their art work. In addition to drawing and painting students will gain experience in depth study in art history, art criticism, with an emphasis on writing and reflecting on their own art as well as contemporary artists.

## Portfolio Prep- 11,12 1 Credit/Year

 Advanced Art 8400*Prerequisite - Art 1, Art 2, and 2 elective art courses

This exciting and rigorous course is designed for the serious art student that has aspirations to continue in an art related field or art school/college after high school. This course will focus on students achieving and demonstrating a mastery of the Elements and Principles of Design through a wide variety of media and approaches to art. The course emphasis will be placed upon the creating of a cohesive body of work that is based upon individually focused assignments that are intended to increase their artistic development while providing them the opportunity to address issues through personal interpretation to develop a stronger conceptual base. Students will be required to complete a significant amount of work outside of class time. Students will also be required to purchase some materials for the generation of their artworks. In addition to drawing and painting, students will gain experience in depth study in art history, art criticism, with an emphasis on writing and reflecting on their own art as well as contemporary artists. Students will also be required to reflect and write numerous artist statements concerning their work and referencing art history and artistic influences.

## Drawing \& $\quad \mathbf{9 , 1 0 , 1 1 , 1 2 \quad 1 / 2 \text { Credit/Semester }}$ Painting <br> 8401 <br> *Prerequisite - Beginning Art

This course is designed for those who enjoyed drawing and painting in Art 1 or Foundations of Art and wish to expand their knowledge and skills in these areas. There will be a more in-depth study of different kinds of drawing and painting using different media. Students will also be exposed to reproductions of past and present works of art, giving direction towards drawing and painting ideas. Students will also explore the areas of animation, illustration and comic book art.

Ceramics I $\quad \mathbf{9 , 1 0 , 1 1 , 1 2} \quad 1 / 2$ Credit/Semester 8402
*Prerequisite- Beginning Art
If you enjoyed working with your hands in Art 1, this class is for you. You will explore basic hand building techniques with clay as well as throwing pots on the potter's wheel. Primitive firing
techniques as well as traditional electric kilns will be used. Students will also study the history of ceramics and explore trends in the contemporary art world. This is a one-semester course.

## Ceramics $2 \quad 10,11,12 \quad 1 / 2$ Credit/Semester 8412

*Prerequisite- Ceramics I
Note: Students may take Beginning Ceramics first semester and Ceramics ADV second semester

This course takes ceramics to the next level where hand building and wheel throwing techniques will be refined and expanded. Personal interpretation and voice will be discovered in this hands-on studio class.

## Ceramics 3 10,11,12 1/2 Credit/Semester 8413 <br> *Prerequisite- Ceramics 1\&2

Ceramics 3 is a studio based class for working in clay. Students will further develop hand-building and pottery skills.

| Digital <br> Photography |
| :--- |
| $\mathbf{8 4 0 5}$ <br>  <br> $\quad$ *Prerequisite- Beginning Art |

This semester course covers basic camera operation and the principles of composition. A variety of subject matter and artistic expression will be encouraged. Students must provide their own flash drive.

Digital 10,11,12 1/2Credit/Semester
Photography II
8415

> *Prerequisite - Digital Photography I

Find new inspirations and challenge yourself to develop your own photographic style. Learn to enhance your photographs through digital image manipulation and alternative processes. Students must provide their own flash drive.

Three Dimensional 9,10,11,12 1 1 2 Credit/Semester Art
8430

[^0]This is an advanced art course for students interested in three dimensional arts or wanting to explore art as a major. Students will explore three-dimensional forms in a variety of media. Sculptural styles from master artists may include mobiles, stabiles, and assemblages. Students will create work based on design principles as they are applied to sculpture and gain an understanding of unity in form, color, and repetition of movement.

```
AP Art History 11,12 1 Credit/Year
8200
*Prerequisite- B average in English CP or ADV and English Teacher Recommendation
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AP Art History is an introduction to interpreting the visual arts. The chief goal is to assist the student in understanding and appreciating key examples of architecture, sculpture, and painting. This history course does not assume artistic talent on the student's part, and anyone with a curiosity about the subject, an interest in history, and a willingness to do rigorous academic work is encouraged to enroll. AP Art History is an excellent complement to required and elective courses in all fields. The specific objectives of the course are to acquaint the student with the historical settings within which great works have been produced and develop viewing and writing skills necessary for recognizing and critically evaluating and comparing major works. The course covers prehistoric art through Greece and Rome, the Middle Ages, and the Renaissance, to Impressionism and Contemporary Art. Extensive use is made of visual materials, local museum collections, and local architecture. A major focus is on helping students to use and to improve their essay writing skills. Attention is given to developing writing approaches that effectively synthesize knowledge about history and art into concise and articulate essays.

Students registered for this AP course will be required to take the appropriate AP Exam in May. AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. The AP exam fee will be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.

## Computer Science and Information Technology

The Computer Science \& IT Department is structured so that students will receive a wellrounded introduction to computer science and information technology education for further study in college or simply to get ahead in a society increasingly more focused on technology. When pursuing college or career readiness, many programs or careers require the student to take a broad range of classes in technology before getting into the focus of the student's respective major. If going into the working world directly from high school, workers of all disciplines should understand computers, software and technology as a whole. With this in mind, students should take a broad range of technology classes before leaving Harrison High School.

## Intro to Computer 9,10,11,12 1 Credit/Year Science <br> 6170

This course is designed to offer an introduction to computer science. Students will learn the basics of computer programming using the Python Programming language, along with the basics of computer science. The material emphasizes computational thinking and helps develop the ability to solve complex problems. This course covers the basic building blocks of programming along with other central elements of computer science. It gives a foundation in the tools used in computer science and prepares students for further study in computer science, including AP Computer Science Principles and AP Computer Science A courses.

## AP Computer Science 10,11, 121 Credit/Year Principles <br> 6183 <br> *Prerequisite- C or better in Fundamentals of IT or Intro to Computer Science

This Advanced Placement course focuses on the use of computational thinking and creativity to produce applications that solve real-world problems. In addition to the end-of-course exam, students must complete two performance tasks--Explore and Create. These emphasize communication and collaboration as applied to research, documentation, social responsibility, and business practices. No specific programming language is used and students
are allowed and encouraged to produce an artifact of personal interest.

Students registered for this AP course will be required to take the appropriate AP Exam in May. AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. The AP exam fee will be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.

AP Computer 11, 121 Credit/Year Science A
6184
*Prerequisite: C or better in Fundamentals of IT or Intro to Computer Science

This course is intended to be the equivalent of a firstyear college level programming course using Java. The emphasis is on preparing students for the AP Computer Science exam and is recommended for students who plan to attend a university and major in computer science. As a continuation of the Programming 2 course, topics include classes, methods, data structures, algorithms, and other more advanced concepts.

Students registered for this AP course will be required to take the appropriate AP Exam in May. AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. The AP exam fee will be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.

## Computer 9, 10, 11, $12 \quad 1 / 2$ Credit/Semester Applications 6030

This course is designed to acquaint students with the computer and its capabilities as they relate to business, college, and real-world situations. Students will learn the basics of Office 365 software, including Microsoft Word, Excel, and PowerPoint. This course gives all students the opportunity to earn the Microsoft Office Specialist certification for Word, Excel, and PowerPoint.

## Graphic Design 1 9.10.11.12 ½ Credit/Semester 6180

This course covers basic graphic design concepts, including the application of the elements of design, copyright and fair use, logo design, and typography. Students taking this course will learn to use the basic tools in Adobe Illustrator and Photoshop. They will also be utilizing the print/production equipment in the high school Makerspace. This course is a prerequisite for Graphic Design 2. Students who complete both Graphic Design 1 and 2 will have the opportunity to earn professional certifications in Adobe Illustrator and/or Photoshop.

Graphic Design 2 9,10,11,12 ½ Credit/Semester 6181
*Prerequisite: Graphic Design 1
This course is intended to expand upon the concepts from Graphic Design 1 and engage student learning in the field of Graphic Design with hands-on projects. Students taking this course will learn more advanced applications of the Adobe Illustrator and Photoshop software which will then be applied to client projects. Students will also learn about User Interface (UI) design and Web Design concepts. At the end of this course, students will have the opportunity to earn a professional certification in Adobe Illustrator and/or Photoshop.

## University of Cincinnati Early IT

 ProgramStudents will have the opportunity to participate in the University of Cincinnati Early IT Program. The Early IT Program allow Harrison High School students who meet the College Credit Plus criteria and complete 6 college-level IT classes and 3 academic courses to earn automatic admission to UC as sophomore IT or Cybersecurity majors and are immediately eligible to pursue co-op opportunities.

## Fundamentals of IT $9,10,11,12 \quad 1 / 2$ Credit/Semester

 IT1050> *This course is a requirement to complete the UC Early IT Program

This course is an introduction to the field of Information Technology including technology concepts, terminology, hardware components, and software applications. Students will be introduced to , and asked to apply basic skills in the core areas of information technology such as programming, database management, networking, systems administration, web development, and the basic research, problem solving, and decision-making skills required to be successful in the field. The course emphasizes the role of technical communication, project management, languages, tools, models and application architectures within the IT development process.

Fundamentals of $\quad 10,11,12 \quad 1 / 2$ Credit/Semester Web Development IT2040
*Prerequisite: C or better in Fundamentals of IT- 6050
*This course is a requirement to complete the UC Early IT Program

This is a foundation course in Web Technology that covers the underpinnings of the technology and a variety of modern standards. The course covers modern web standards, well-formed and valid documents, semantic XHTML/HTML, user-centered design of static web sites, styling and layout of Web documents with CSS, common tools for Web Site development. Emphasis is on coding syntactically correct Web documents which are also visually appealing, and accessible to users using assistive technologies. This course covers material up to the use of scripting which is introduced in the next course in the sequence. You will learn HTML5, CSS3, responsive and user-centric design, XML, and SVG. Hands-on active learning required.

Database Mgmt 10,11,12 1/2 Credit/Semester IT2060

This is an introductory course to the technology used for database development. Topics include the key database concepts, writing queries to retrieve, insert, update, and delete data from databases, and additional database features. Enterprise database management system will be used. Hands-on active learning required.
Computer
Networking
IT1080
*Prerequisite: C or better in Fundamentals of IT- 6050
*This course is a requirement to complete the UC Early IT Program

The Computer Networking course explains, in a theoretical and practical framework, how communication occurs across a network. Students study such topics as computer/network hardware, network media, topologies, security, protocols, network architectures, IP addressing, and the Transmission Control Protocol/Internet Protocol (TCP/IP) model. Hands-on, active learning is required.

## System 11,12 $1 / 2$ Credit/Semester <br> Administration <br> IT1081

*Prerequisite: C or better in Fundamentals of IT- 6050
*This course is a requirement to complete the UC Early IT Program

This course will provide the knowledge and hands-on skills necessary to manage a Local Area Network and its resources. Topics covered include directory services, server management, file and print services, and user/client administration in a heterogeneous operating system environment. Students will setup and manage a fully functioning computer network of systems. Hands-on active learning required.

## Computer 11,12 1/2 Credit/Semester Programming IT1090

*Prerequisite: C or better in Fundamentals of IT- 6050
*This course is a requirement to complete the UC Early IT Program

The course introduces learners to computer programming and problem solving. In this course, students will learn about the basic elements of a computer program. Learners will learn and practice using expressions, repetition and decision-making mechanisms and structures. The concept of modularity will be introduced with the implementation of methods (functions). The Java programming language will be used for this course. Topics coverage focuses on console programming and general language syntax and carries through the use of file handling for data processing. It is designed to give general learners enough coding skills to support their day-to-day work. It is designed to give learners who are interested in pursuing softward futher a basis for Object Oriented Programming and advanced topics.

## HIGH SCHOOL OF BUSINESS

High School of Business ${ }^{\text {TM }}$ is designed much like a college business administration program. Students take approximately one course per semester, beginning with an introduction to business. The program continues with courses in various business functions, concluding with the capstone course, Business Strategies, which requires implementation of the principles addressed throughout the High School of Business ${ }^{\text {TM }}$ program.

There are four required courses in the program:
Business Applications and Economics
Business Administration Marketing
Business Administration Finance
Strategic Management

## DECA <br> CAREER TECHNICAL STUDENT ORGANIZATION

Students participating in the Harrison High School of Business will be strongly encouraged to participate in DECA, a co-curricular program. DECA is an association of marketing students that provides students the opportunity to participate in business competitions at the local, state and/or international level. Students will also have the opportunity to attend various leadership conferences, participate in online challenges and become eligible for many scholarships.

The Harrison High School of Business Curriculum naturally feeds into the DECA Competitive Events. In addition, the skills that students use to work on Harrison High School of Business projects (including teamwork, leadership and delivering oral presentations) strengthen the use of these skills in DECA Events.

## Business Applications $9 \quad 1$ Credit/Year and Economics (HSB 1) <br> HSB 1

*Pre-requisite: Application required
Business Applications, a project-based business course, develops student understanding and skills in such areas as business law, economics, financial analysis, human resources management, information management, marketing, operations, and strategic management. Through the use of three projects, students acquire an understanding and appreciation of the business world. They develop a business analysis report, conduct an environmental scan of the local business community, and investigate business activities. Current technology will be used to acquire
information and to complete the projects. Throughout the course, students are presented problem-solving situations for which they must apply academic and critical-thinking skills. Formal reflection is an ongoing component of the course. In Business Economics, a project-based business course, students expand their understanding that businesses are influenced by external factors that are often beyond their control. Consumer spending, government policies, economic conditions, legal issues, and global competition are addressed through practical, current applications to everyday societal and business life. Students develop their knowledge and skills in such areas as economics, entrepreneurship, and professional development.

## Business Administration $10 \quad 1$ Credit/Year Marketing (HSB 2) HSB 2

BA Marketing is a project-based business course that develops student understanding and skills in the functional areas of channel management, marketinginformation management, market planning, pricing, product/service management, promotion, and selling. Students acquire an understanding and appreciation of each of the marketing activities

## Business Administration 111 Credit/Year Finance (HSB 3) <br> HSB 3 <br> *SUCCESSFUL COMPLETION OF THIS COURSE WILL FULFILL THE FINANCIAL LITERACY COURSE REQUIRED FOR GRADUATION

BA Finance furthers student understanding of two specific business activities-accounting and finance-that were introduced in an earlier High

School of Business course, Principles of Business. Through team activities and a semester-long corporate investment project, students make connections between accounting and finance. Students acquire an understanding of financial statements, calculate financial ratios, and make corporate financial management decisions based on their analysis of that financial data. In addition, students apply the concepts of operating and overhead costs, internal accounting controls, and budgets to their class business. Lastly, cost/benefit analysis is introduced as an element of financial planning and decision-making.

## Strategic Management (HSB 4) 121 Credit/Year HSB 4

Management furthers student understanding of management that was introduced in an earlier High School of Business ${ }^{\text {TM }}$ course, Business Applications and Economics. Through individual and team activities and a semester-long project, students make connections between management and business success. Students acquire an understanding of legal and ethical issues associated with management; initiate, plan, implement and control, and close a project; motivate team members; delegate work; develop a chain of command; coordinate work efforts; and interpret statistical findings. Business Strategies, which is the capstone course for the High School of Business ${ }^{\text {TM }}$ program, develops student understanding and skills in such areas as business law, entrepreneurship, financial analysis, human resources management, and strategic management. By planning, organizing, staffing, directing, leading, and controlling business activities, students acquire a realistic understanding of what is required to open and successfully run a business. They conduct situational, market, and competitive analyses; select a target market; develop a business plan; recruit, interview, select, and hire staff; supervise staff; control use of resources; and evaluate the results of the business effort. Throughout the course, students make decisions and use problem-solving skills. Formal reflection is an on-going component of the course

```
    World of Foods
In this department, you will learn the
fundamentals of cooking and baking. Courses
focus on cooking techniques, food handling,
kitchen safety, and teamwork. The basic life
skills of meal preparation will help increase
confidence and excitement over cooking and
will provide skills throughout a student's life.
Chef Basics 10,11 1/2Credit/Semester
7805
```

The beginner chef will learn the basics of food preparation, equipment, and use of utensils, and how to read and follow a recipe. In this semester course we use more convenience foods combined with other ingredients, contributing to overall healthy eating habits. Practices of kitchen safety and sanitation are emphasized in every lab experience. Food choice guidance systems will also be covered enabling students to plan meals, make wise food choices, and analyze current eating habits with the goal of reducing the risk of Diet-related diseases in future health.

## Creative Cuisine 11,12 1⁄2Credit/Semester 7845

Students gain knowledge and skills in acquiring and practicing a healthy lifestyle using the dietary guidelines that will reduce the risks of chronic disease and unsafe habits. Students will understand the cultural, family, community, and economic implications of current health issues facing Americans. A lab experience is built into most units of the curriculum. Units are organized around different courses of a meal and advanced cooking skills are taught. It would be to the student's benefit to take Chef Basics prior to this class, but it is not required.

## WORLD LANGUAGES

One credit of a world language generally does not meet the minimum standards for those colleges and universities which require a foreign language for admission. A student must have at least two years in the same language.

| American Sign | 9,10,11,12 $\quad 1$ Credit/Year |  |
| :--- | :--- | :--- |
| Language 1 |  |  |
| 5100 |  |  |

American Sign Language 1 is an introduction to American Sign Language (ASL). Students will learn basic grammar, vocabulary, fingerspelling, numbers, and explore cultural information related to the Deaf Community

```
American Sign
Language 2
5110
*Prerequisite- ASL 1
```

American Sign Language 2, as a continuation of American Sign Language 1, is a more advanced study of ASL. Students will take their expressive and receptive skills to the next level. Skill building lessons will focus on the use of additional vocabulary and grammar, expanded fingerspelling practice, space and semantic use of agreement or spatial verbs, and use of negative signs. Storytelling will be utilized to expand students' skillset to process and analyze meanings of the concept versus individual signs. History and Culture will be explored more in depth.

| American Sign | 11,12 | 1 Credit/Year |
| :--- | :--- | :--- |
| Language 3 |  |  |
| 5120 |  |  |

American Sign Language is the next exciting step in your journey to mastering this beautiful visual language. Building upon the foundational knowledge acquired in ASL 1\&2, this course delves deeper into the intricacies of ASL, expanding your vocabulary and enhancing your communication skills with the Deaf community. In ASL 3, you will further develop your ability to engage in meaningful conversations and express complex ideas through signing. You will explore advanced grammatical structures, refine your receptive and expressive skills, and gain cultural insights into the Deaf world.

Spanish $1 \quad 9,10,11,12 \quad 1$ Credit/Year CP 5200

Spanish 1 introduces students to the Spanish language and Spanish-speaking people. Students learn basic vocabulary and grammar to start building communicative skills. English and Spanish are compared to improve the students' vocabulary in both languages. Students will study various aspects of the cultures in Spanish-speaking countries as well as Spanish influences in the United States. Students may participate in Spanish Club.

Spanish 2 CP 9,10,11,12 1 Credit/Year 5210
*Prerequisite - An average grade of C or better in Spanish 1. Exceptions to this must be approved by the teacher

Spanish 2, as a continuation of Spanish 1, is a more advanced study of the Spanish language. Since students learn a much wider range of vocabulary during the second year, they can begin to create original sentences in Spanish using familiar vocabulary. Students also begin to read and discuss cultural material in Spanish, while another emphasis of the class continues to be building communication skills.

Spanish 2 ADV 9,10,11,12 1 Credit/Year 5211
*Prerequisite - An average grade of B or better in Spanish 1. Must be recommended by the teacher

Spanish 2, as a continuation of Spanish 1, is a more advanced study of the Spanish language. Since students learn a much wider range of vocabulary during the second year, they can begin to create original sentences in Spanish using familiar vocabulary. Students also begin to read and discuss cultural material in Spanish, while another emphasis of the class continues to be building communication skills. This course is designed for students who like to be challenged and plan to study beyond Spanish 3 .

| Spanish 3 |
| :--- |
| $\mathbf{5 2 2 0}$ | | *Prerequisite - An average grade of B or |
| :--- |
| better in Spanish 2. Exceptions to this must |
| be approved by the teacher. |

Spanish 3 develops the proficiency of the student in speaking, listening, reading and writing. The class
begins with a thorough review of basic grammar. Also, several more advanced grammar concepts are introduced at this level. Students read a variety of materials in Spanish and explore Spanish-speaking cultures...Summer work will be required.

| Spanish 4 | 11,12 | 1 Credit/Year |
| :--- | :---: | ---: |
| 5230 |  |  |

*Prerequisite - An average grade of B or better in Spanish 3. Exceptions to this must be approved by the teacher.

Spanish 4 emphasizes the development of the students' speaking, writing and reading skills. Basic and specialized grammar will be reviewed, some new vocabulary will be introduced, and some new grammatical structures introduced. Short stories, articles, and a novel will be read and discussed. Students use Spanish to communicate as much as possible, in both formal and informal activities...Summer work will be required.

## Spanish 5121 Credit/Year 5240 <br> *Prerequisite - An average grade of B or better in Spanish 4. Exceptions to this must be approved by the teacher.

Spanish 5 strengthens the development through immersion of the students' speaking, listening, writing and reading skills and cultural awareness. Basic and specialized grammar will be reviewed and some new advanced grammatical structures will be introduced. Short stories, articles, a novel, and famous Latin and Spanish literature will be read and discussed. Spanish history and contemporary art and culture will also be explored...Summer work will be required.

Occupational 10,11,12 1/2 Credit/Semester Spanish
5221
*Prerequisite-Spanish 3
Occupational Spanish is an elective geared toward students who have already taken 3 years of Spanish and wish to expand their communicative skills for use in business, medicine, and military.

## Hispanic Countries 9,10,11,12 ½ Credit/Semester \& Culture <br> 5222

This course will explore major cities, food, music, art, people, holidays, and traditions of Hispanic countries. We will begin in Spain, make our way through the Caribbean countries, Mexico, Central America, and South America. The course will be taught in English with a few phrases taught in Spanish that relate to specific countries. It will be a project-based course that allows for cultural immersion through culinary samplings, cultural crafts, and celebrations. This is an elective credit and will not take the place of or fulfill the world language requirement for an honors diploma and/or university requirements.

## MUSIC

The following courses taken in music count towards the Fine/Practical Arts requirements for graduation as well as the Fine Arts requirement for Ohio colleges and universities.

## Band 9,10,11,12 1 Credit/Year 8500

Band is open to all students who have acquired a level of proficiency that meets the standards set by the band director(s). Traditionally we have had Marching Band and Concert band during the first ten weeks of school and then after the football season the members are placed into Symphonic Band or Wind Ensemble based on ability and musical instrumentation needs of each group. Those groups are described below, but based on possible staffing limitations we may only have the option of one band. Sign-ups will be as always 8500 is the choice for registration for instrumental music at William Henry Harrison High School.

Marching Band is open to all students who have acquired a level of proficiency that meets the standards set by the band director(s) and who are interested in performing music from the pop/rock/jazz/contemporary idioms. Rehearsals begin three weeks prior to the start of school. Marching fundamentals, motor skills, musicianship, and esprit de corps are stressed and evaluated through performances at football games, trips, and various community parades and events.

Symphonic/Concert Band is open to all band students who have acquired a level of proficiency that meets the standards set by the band director(s). The course is designed to enhance and improve the technical and musical abilities of the student performer by stressing fundamental performing skills and exposing the students to the appropriate level of music. During the school year various styles and types of music are studied in detail. Self-confidence, poise, selfdiscipline, and musicianship are taught through concerts, contests, and public performances. Some after-school rehearsals are required at different times throughout the year. Other activities, including participation in the various Ohio Music Education Association Adjudicated Events, are required.

Wind Ensemble is open to all band students who have acquired a level of proficiency that meets the
standards set by the band director(s). The course is designed to allow the more advanced instrumental students the opportunity to study and perform more advanced music literature. During the school year various styles and types of music are studied in detail. Self-confidence, poise, self-discipline, and musicianship are taught through concerts, adjudicated events, and other public performances. Some afterschool rehearsals are required at different times throughout the year. Other activities, including participation in the various Ohio Music Education Association Adjudicated Events, are required.

## MUSIC ELECTIVE COURSE

 SELECTIONS| Wildcat | $9,10,11,12$ | 1 Credit/Year |
| :--- | :--- | :--- |
| Concert |  |  |
| Choir |  |  |
| $\mathbf{8 5 2 0}$ |  |  |
|  |  |  |

This large mixed ensemble, with male and female singers, performs at concerts, competitions, and community functions. A wide selection of choral literature will be rehearsed and performed. Students will develop the skills necessary to read, understand, and perform music with and without instrumental aid. Performances, rehearsals, and competitions are all mandatory in meeting class requirements.

```
Treble Cats 9,10,11,12 1 Credit/Year
8530
*Prerequisite: Audition with music director
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The all women ensemble is a group of singers who perform for community, church, contest, and social events. A wide selection of multi-part treble choral literature will be rehearsed and performed with varying levels of choreography. Attendance at all performances, competitions, after-school rehearsals and/or choreography sessions is required for members of this class.

## A Capella <br> $\mathbf{9 , 1 0 , 1 1 , 1 2}$ 8540 <br> *Prerequisite: Audition with music director

A Capella is an advanced study and performance of vocal music as well as dance movement. This small mixed ensemble is for the competitive singer/dancer. Music performed is multi-part a cappella and accompanied music from traditional show
choir/swing/pop/rock/jazz/contemporary and Broadway styles. Singers/dancers must attend all rehearsals, performances, and competitions. Instrumentalists must attend required rehearsals, performances, and competitions. Students may take this course with or without enrollment in other music courses. However, it is recommended that the student participate in another school ensemble.
Fundamentals of $\quad \mathbf{9 , 1 0 , 1 1 , 1 2} \quad 1$ Credit/Year
Music Theory
$\mathbf{8 5 6 1}$

Fundamentals of Music theory is a class for any musician to further their understanding of written music. The class will focus on elements of music theory to help prepare students for reading and writing music at a higher level. Music theory will focus on scales, chords, musical structure, chord progressions, basic ear training, and basic composition. Students are expected to have a basic understanding of reading music before they sign up for this class. If you are new to music you still can take the course to learn to read music but will need to meet with Mr. Egan before the class starts to get a quick understanding of reading notated music.

| AP Music Theory 11,12 1 Credit/Year |
| :--- |
| $\mathbf{8 5 6 0}$ *Prerequisite- Fundamentals of Music |
| Theory and Teacher Recommendation |

AP Music Theory is a weighted course designed for the serious music student who wants to study the fundamentals of music composition. Music theory deals with the basic structure of music including scales, key signatures, rhythms, form, and harmonization. Some out-of-class observations will be required. A basic understanding of rhythm and music fundamentals is highly recommended for this class. A final project involving music composition is required as well as the AP Music Theory Test which is administered in May.

Students registered for this AP course will be required to take the appropriate AP Exam in May. AP courses are weighted for purposes of class rank. The exam fee will be collected as a school fee at the beginning of the school year. The AP exam fee will
be in addition to any other fees for this class. Students dropping this course will not be refunded fees due to the cost of purchasing materials for the student prior to the start of the school year.

## Exploring the $\quad \mathbf{9 , 1 0 , 1 1 , 1 2 \quad 1 / 2}$ Credit/Semester Creative Process through Songwriting 8551

This is a semester long class focused on teaching the creative process. Students will discover and explore introductory concepts used in music sequencing (Audiotool), notation (Noteflight) and recording (Soundtrap)software to combine original content and computer-generated materials in the creation of music. Melody, lyrics, harmony, form, "hooks," points of view and song logic will be covered. Participants will work individually and collaboratively to create tangible products. Music is the medium for group problem solving and implementing creativity within a critical thinking process. Aesthetic issues are considered in the pragmatic context of producing a desired musical result, whether these instructions are notated in prose, as graphic images, or in symbolic notation. No prior musical experience is needed, however, having training on an instrument or voice can be helpful. Weekly listening and composition assignments draw on a broad range of musical styles and intellectual traditions.

## Rock and Roll $\quad 9,10,11,12 \quad 1 / 2$ Credit/Semester History 8550

This course is designed to develop an appreciation of pop/rock music through the study of the various components that make up this style of music. Through listening and historical study, various significant solo artists and groups will be studied and associated with other historical American and world events from the $20^{\text {th }}$ century.

## PHYSICAL EDUCATION AND HEALTH COURSE SELECTIONS

One-half credit of Health and one-half credit of Physical Education are required and will count toward the 21 required credits to graduate.

To be eligible to attend the vocational school, a student must have one-half credit of Health and onehalf credit (two semesters) of Physical Education by the end of the sophomore year. All Physical Education courses are one semester in length, and students receive one-fourth credit for each course.

| Health <br> 9000 | $\mathbf{9 , 1 0}$ | $1 / 2$ Credit/Semester |
| :--- | :--- | :--- |

This one semester course is required for all students in order to graduate. The focus will be providing information to assist students on making healthy choices in regards to their physical, emotional/mental, and social well-being. This class will be an online course and will have a pass/fail status.

```
Physical 9,10,11,12 1/4CCredit/Semester
Education 1
9010
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This semester course is the introductory course for incoming freshmen. Students will participate in personal fitness activities at least twice per week that will include weight lifting techniques, strength training principles, plyometrics, circuit training, kick boxing, yoga, Pilates, and other related fitness exercises. The sports covered in P.E. 1 will include basketball, softball, soccer, archery, golf, bowling, volleyball, handball, floor tennis, table tennis, and team handball.

## Physical <br> Education 2 <br> 9030

This second level course which is required will include how to design an eight-week plan to achieve their personal fitness goal. At least twice a week, students will engage in a type of strength training program (weight lifting, circuit training, plyometric, etc....). Three days a week, students will be participating in flag football, tennis, hockey, lacrosse, bowling, dance, racquetball, table tennis, badminton, and softball.

## PHYSICAL EDUCATION ELECTIVE COURSE SELECTIONS

## Strength Training $\quad 9,10,11,12 \quad 1 / 4$ Credit/Semester 9061/9062

This semester class will focus on the proper techniques of weightlifting in conjunction with various types of training methods. Students will design their own weightlifting plan along with personal goals that can be attained by the end of the semester. This class is also offered as a " 0 " bell option for students.

## Team Sports $\quad \mathbf{9 , 1 0 , 1 1 , 1 2 \quad 1 / 4}$ Credit/Semester 9070

This one semester course will focus on team sports such as flag football, basketball, floor hockey, softball, bowling, volleyball, Ultimate Frisbee, and lacrosse. Offensive and defensive strategies will be emphasized as well as officiating techniques.

## Stress Relief \& 9,10,11,12 ¼ Credit/Semester Wellness <br> 9071

This course will emphasize the adaptation of a wellness lifestyle through behavior modification in the following areas: physical fitness, nutrition, weight management, stress management, cardiovascular health, and the reduction of risky lifestyle behaviors. This class will improve student's ability to "destress" through exercise, while increasing their strength, flexibility, and mindfulness. Youga will be included. Stress management consists of practicing a variety of different stress relief technizues, such as: muscle relaxation, progressive muscle relaxation, visualization/mental imagery, and journaling. These techniques, coupled with cardio activities such as aerobics, walking/running, and some individual sports will encourage/enable students to live a healthier life, both physically and mentally.

## Student Athletic Trainer 11,12 1⁄2 Credit/Semester 9091 <br> *Optional $1 / 4$ Credit for Volunteer Student Trainer Internship

The purpose of this class is to broaden the knowledge of students in the areas of allied health fields related
to sports medicine. The topics will explore human anatomy and physiology, basic First-Aid and CPR, use of the Defibrillator, injury prevention, injury and illness recognition, health education topics, and care of athletic injuries.

This course will require the student to apply knowledge for practical use. Assignments are designed to promote awareness of current events, problem solving skills, use of the Internet, and other resource materials. A research project will be a required part of the class assignments. Oral presentations and written reports will part of the class grades.

## PHYSICAL EDUCATION EXEMPTION

The Ohio Core allows school districts to adopt a policy that would exempt students who participate in interscholastic athletics, band or cheerleading for two full seasons or two full years of JROTC from the physical education requirement. Students will be exempt from taking the $1 / 2$ credit of physical education classes, however they will not receive credit for the exempted courses.

## NON-DEPARTMENTAL ELECTIVE COURSE SELECTIONS

As a Junior Reserve Officer Training Corps (JROTC) cadet, students participate in a class that teaches citizenship, health, and wellness, and service to the community. The curriculum includes cultural awareness as well as global history and such subjects as financial management. Students gain a sense of accomplishment and self-esteem, while learning personal responsibility, teamwork, and selfdiscipline. Students also better understand the personal rights, responsibilities, and privileges of American citizens. Cadets are involved in a wide range of school activities including drill teams, air rifle teams, orienteering, athletics, parades, and community events.

## Military Science $9,10,11,12 \quad 1$ Credit/Year AJROTC LET 1 <br> 2901

This course includes Introduction to AJROTC, Leadership Theory and Application, Foundations of Success, Lifetime Wellness, Fitness, and First Aid, Geography and Earth Science, Citizenship and American History, Personal Finance, Service Learning, and U.S. Government. Safety and Physical Fitness.

Military Science $\quad 10,11,12 \quad 1$ Credit/Year AJROTC LET 2 2902
*Prerequisite- Military Science AJROTC LET 1

This course includes intermediate level of instruction in the subjects of The Nation's Defense Forces, Knowing How to Lead, Communication Skills. Conflict Resolution, Teaching Skills, Maps, Map Reading and Land Navigation, You the People Citizenship Action Group Process, Founding and Growth of a Nation (history 1776 to present).

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Military Science 11,12 1 Credit/Year
AJROTC LET 3
2903
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*Prerequisite- Military Science AJROTC LET 2

This course provides advanced-level instruction in the subjects taught in first and second year AJROTC.

Emphasis is placed on how the various factors (communications, problem solving, decision making, planning and supervision) affect a cadets' effectiveness as a leader. Cadets are given increased opportunities to demonstrate leadership skills in the Cadet Battalion organization. In addition, cadets are exposed to opportunities available to them to enter the military as an officer, the steps that should be taken to apply/enroll in a college and how to obtain information about the various types of schools and colleges.
Military Science 12
AJROTC LET 4
2904

*Prerequisite- Military Science AJROTC
LET 3

This advanced level of AJROTC caps three years of progression in every phase of AJROTC. Students selected for this course have demonstrated proficiency in Leadership Education and Training (LET) 3 and
are presented with the challenge to study self-paced and to complete the exercises, case studies and vignettes in the programmed text. In addition, the students are taught techniques of command and staff procedures through text and practical exercises. Students demonstrate their ability to perform briefings
and to prepare staff reports.

| Yearbook |  |  |
| :--- | :--- | :--- |
| $\mathbf{6 9 0 0}$ | 9,10,11,12 | 1Credit/Year |
| *Prerequisite - Application and Teacher |  |  |
| recommendations |  |  |

Students in this course will be on the staff of the school yearbook. You will learn techniques of gathering information, writing articles, editing, picture selection, layout, and photography. The class will be responsible for all aspects of publishing the yearbook. Students will be expected to meet in August (prior to the start of the school year) for the start of the ad sales campaign and may need to work into June (after the end of the school year) to complete layouts. Students must complete an application to be considered for this class.

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Yearbook 2 10,11,12 1 Credit/Year
6901
    *Prerequisite - Advisor approval
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Students may be on the yearbook staff for a second, third, or fourth year, with advisor's approval. Students will improve and perfect techniques of
gathering information, writing articles, editing, picture selection, layout, and photography. Students will be expected to work as section leaders, designing layouts and critiquing double-page spreads completed by members of their staff. This class is responsible for all aspects of publishing the yearbook. Students will be asked to meet in August for the start of the ad sales campaign and may need to work into June to complete layouts.

| TV | $10,11,12$ | $1 / 2$ Credit/Semester |
| :--- | :--- | :--- |
| Production |  |  |
| Broadcast |  |  |
| Journalism |  |  |
| $\mathbf{1 7 1 0}$ |  |  |
|  |  |  |

This is an introductory course which involves the real-world study of television production techniques. Original programs will be produced and edited, with an emphasis on "Wildcat Wake-Up" the live broadcast of the daily morning announcements, and the Senior Video.

The class focuses on using proper camera shot composition, audio, lighting, and computer editing techniques, including the incorporation of graphics into final productions. Students will receive handson instruction using high-definition video cameras, production systems, and computer applications used for editing television media.

This is a "Zero Bell" class. Some out of school time and good attendance is required.

## Internship $10,11,12 \quad 1 / 2,1,11 / 2$, or 2 Credit Work-Based Learning $0071 \& 0072$

Students at Harrison High School can participate in an Internship or Work-Baseed Learning program for part or all of the school year. The Internship WorkBased Learning program allows our high school students to earn high school credit as an Internship volunteer or as a paid employee through the WorkStudy program.

The program is primarily aimed at juniors and seniors, however there can be some exceptions based on a student's educational needs. Students must register and complete the necessary paperwork which includes: parent approval, employer or agency approval, student acknowledgement and commitment to complete the program requirements, guidance counselor approval, and administrative approval. Student credit varies based upon the number of documented hours worked/volunteered and a grade is
awarded based upon the employer's or agency's evaluation of the student's work place performance.

## Law \& Public Safety 11, 121 Credit/Year 7991

This course is an introduction to the career clusters in Law and Public Safety. Students will complete the Federal Emergency Management Agency's National Incident Management System courses: FEMA NIMS $100,200,700$, and 800 as well as the OHSA 10-hour course, and CPR First/Aid. Students will be able to do ride alongs with the local police, participate in the fire department's Explorers program, and much more that will give students a better understanding of what careers in the Law and Public Safety can offer. Upon course completion and successful passage of the required credentialing exams, students will earn 12 industry credential points towards graduation.

## Workplace Leadership 11, 121 Credit/Year 7992

In this course of study, you will gain a solid general knowledge of the theory, composition, and implementation of a Lean Six Sigma initiative: a process improvement methodology used across the globe to maximize efficiency and improve profitability in business and industry. The Lean Six Sigma certification is highly respected and soughtafter by companies in every career sector. In this course, you will become proficient in all of the analytical tools necessary to define, measure, analyze, improve, and control (DMAIC) Lean Six Sigma improvement projects. You will also learn team leadership and project management skills. In short, you will master the skills necessary to lead a complex process improvement project that produces increased bottom-line results. After completing this course and successfully completing the culminating project and assessment, you will earn 6 industry credential points towards graduation and also earn the Lean Six Sigma Yellow Belt and Green Belt certificates.

## Entrepreneurship 10,11,12 1 Credit/Year 7994

Entrepreneurship is a full-year course offering an authentic entrepreneurship experience as students develop their own product or service startup. Students will learn and carry out the processes involved with Problem-Solution identification, Customer and Idea Exploration (Ideation, production, validation, etc), and culminating in a Pitch for Real

Funding, while working with their instructor and community coaches and mentors.

## Introduction to 9, 10, 11, 121 Credit/Year Advanced Manufacturing Year 1 7987

This course is an introduction to the career field of Advanced Manufacturing and contains courses 1 and 2 of the Ignite Mastering Manufacturing Program. In course 1 students are introduced to fundamental concepts in advanced manufacturing, designed to ignite interest and develop basic skills in: smart automation cells, robot programming, CNC programming, Computer Aided Design (CAD), electrical circuits, pneumatics, safety, and basic measurement. Course 2 is an introduction to systems where students will complete team-based projects applying concepts and problem solving to basic advanced manufacturing systems. Technical skills will be developed in Industrial Internet of Things (IIoT), materials and processes, lean manufacturing, electrical control systems and sensors, robotic flexible manufacturing systems, CAD modeling, precision measurement and tolerancing, machine and hand tools, and design process and idea generation. Students have potential to earn a total of 19 industry recognized credential points in this course. This course is a prerequisite to all other Industry 4.0 courses.

## Mechatronic 10, 11,12 1/2 Credit/Semester Systems (Course 3)

7988
*Pre-Requisite: Into to Advanced
Manufacturing Year 1
Mechatronics is technology combining electronics and mechanical engineering used in advanced automated manufacturing industry. In this projectbased course, students will learn technologies and develop skills in: Programmable Controller Programming (PLC), mechanical power transmission, hydraulics, ethernet point communications, 3D computer aided design assemblies, and mechatronics station programming. Students will also develop skills in: team decision making and development, and planning and conducting team meetings. In course 3 students have potential to earn 7 additional industry recognized credential points.

## Digital 10, 11,12 $1 / 2$ Credit/Semester Manufacturing Systems (Course 4) 7989 <br> *Pre-Requisite: Into to Advanced <br> Manufacturing Year 1

A Digital Enterprise is an organization that has completed a digitalization transformation to fully incorporate digital tools and technologies across all aspects of their operations, from ideation through realization to utilization. In this project-based course students will incorporate previous knowledge and further develop skill in: manufacturing metrics and lean manufacturing, computer aided manufacturing (CAD/CAM), fluid power control, process reliability and quality, robot system applications, ethernet switch networks, PLC applications with HMI, mechatronics station applications, and will learn Digital Enterprise with cloud-based data. In course 4 students have potential to earn 7 additional industry recognized credential points.
Advanced 11,12 1/2 Credit/Semester
Materials and Design (Course 5)
$7990 \quad$ *Pre-Requisite: Into to Advanced
Manufacturing Year 1

Advanced Materials and Design is a capstone course that deepens technical skills in advanced manufacturing processes, materials, and design while completing an advanced team project. Students will further develop skills in: 3D CAD applications, CAD/CAM applications, CNC machine applications, materials strength testing, plastics, and welding.

IIoT, Data 11,12 1/2 Credit/Semester Analytics, and Networking (Course 6) 7993
*Pre-Requisite: Into to Advanced
Manufacturing Year 1

This is also a capstone course, the last of the Ignite series, that enriches technical skills in Industry 4.0 systems and the Industrial Internet of Things using managed networks, data analytics software, cybersecurity, variable frequency drives, RFID, barcode and smart sensors. Students will complete an advanced team-based capstone project. Students have potential to earn 23 additional industry recognized credential points in this course.

Supply Chain 11,12 1 Credit/Year Automation 1
7986
*Pre-Requisite: Into to Advanced
Manufacturing Year 1

This course is designed to teach students to install, operate, support, upgrade, and maintain the automated material handling equipment and systems that support the supply chain. The Skill Boss Logistics system supports the MSSC Certified Technician-Supply Chain Automation (CT-SCA) certification to assess and train a learner's understanding of applications commonly performed in supply chain applications. This course is comprised of three separate certificates.

- Equipment Maintenance
- Equipment Repair
- Network Repair
Hope Squad $\quad 9,10,11,12 \quad 1 / 2$ Credit/Year HS
*Pre-Requisite: Must be nominated by staff
This course consists of training in sucide prevention and mental health awareness. Students are educated on recognizing suicide warning signs and how to properly and respectfully report concerns to an adult. All Hope Squad members are trained in the evidencebased suicide prevention training of QPR (Question, Persuade, refer). Gruant Us ope, a local non-profit suicide prevention organiation who supports Hope Squads throughout the region, provides the majority of the curriculum and the materials used for this course with additional activites and curriculum designed by the Hope Squad teacher/advisors. Hope Squad members will also plan school-wide activities around mental health awareness. Hope Squad is a course available only to Hope Squad members. This course is a pass/fail grade.


## ATHLETIC INFORMATION

Athletes are required to pass a minimum of $\underline{5}$ credits from the previous grading period to maintain their eligibility. A single Physical Education course will not count as one of the five credits because it has a credit value of only .25 for the semester. Eligibility is determined, preceding each quarter, subject to Ohio High School Athletic Association (OHSAA) rules, which are published at the beginning of each school year. Consult the Athletic Director for changes or questions regarding eligibility.

NCAA COLLEGE FRESHMAN ELIGIBILITY FOR DIVISION I OR DIVISION II SCHOOLS

Students who want to practice and play their freshman year at a NCAA Division I or Division II college must satisfy the requirements of NCAA Bylaw 14.3, commonly known as Proposition 48. See the NCAA Eligibility website for further information.

NAIA COLLEGE FRESHMAN ELIGIBILITY ALL SCHOOLS

Every student interested in playing sports at NAIA colleges need to register and receive an eligibility determination. This is a new requirement for NAIA colleges and universities. See the NAIA eligibility center website for more information.


[^0]:    *Prerequisite-Beginning Art

