

# ***HIGHLAND HIGH SCHOOL***



## **Curriculum Guide 2022/2023**

Please keep this guide for future reference.

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## Highland High School believes...

*Students learn and grow at their own pace*

*Students should grow in every area of learning (Whole Child)*

*Every student should be known (Positive Relationships)*

*Students deserve a safe and caring learning environment*

## FORWARD

Course Selection is one of the most important decisions you will make while in high school. Careful course selection will guide you into post secondary education and a career of your choice. This curriculum guide has been prepared to help parents assist their student to select the courses that will best fit his/her needs. Wise and thoughtful decision making is very important as high school courses are planned. The curriculum at Highland High School has been developed to meet the State of Ohio core curriculum requirements as well as local Board of Education adopted standards. The Highland High School Faculty and Administration is available to lend any assistance necessary to interpret this curriculum guide and help students make good scheduling decisions.

## EQUAL OPPORTUNITY

The Highland Local School District does not discriminate in employment practices or in any student activities on the basis of sex, national origin, handicap, religion, or race. Anyone having a concern is urged to contact the school.

## GRADUATION REQUIREMENTS

The class of 2023 and beyond must complete **each** of the three requirements:

### **1) Cover The Basics:**

English	4 units	
Mathematics	4 units	* <b>MUST</b> HAVE ALGEBRA II
Science	3 units	* UNIT REQUIREMENTS <b>MUST</b> INCLUDE PHYSICAL SCIENCE AND BIOLOGY
Social Studies	3 units	* UNIT REQUIREMENTS <b>MUST</b> INCLUDE AMERICAN HISTORY, WORLD HISTORY AND GOV/ECONOMICS
Physical Ed.	.5 unit	* 2 SEMESTERS OF PE CLASS (1/4 PE CREDIT CAN BE WAIVED USING A PE WAIVER)
Health	.5 unit	
Business Tech	1 unit	*CAN BE EARNED WITH THE COMPLETION OF A CAREER TECHNICAL PROGRAM
Fine Arts	1 unit	*CAN BE EARNED WITH THE COMPLETION OF A CAREER TECHNICAL PROGRAM
Other	4 units	* THE CLASS OF 2026 AND BEYOND <b>MUST</b> INCLUDE FINANCIAL LITERACY
TOTAL	21 units	

### **2) Show Competency:**

Earn a passing score of at least a 684 on Ohio's High School End of Course exams in Algebra I and English II.

Students who do not earn passing scores on Algebra I and English II can do one of the three following options:

#### A) Demonstrate Two Career-Focused Activities:

- Proficient scores on WebXams
- A 12-point industry credential
- A pre-apprenticeship or acceptance into an approved apprenticeship program
- Work-based learning
- Earn the required score on WorkKeys

-Earn the Ohio Means Jobs Readiness Seal

This option is most easily obtained through a Career Center. (Tri-Rivers, Knox or Delaware)

B) Enlist in the Military.

-Show evidence that you have signed a contract to enter a branch of the U.S. Armed Services upon graduation.

C) Complete College Coursework.

-Earn credit for one college-level math and one college-level English course through Ohio's free College Credit Plus program.

**3) Show Readiness:**

Earn two of the following seals. At least one of the two must be Ohio-designed.

-Ohio Means Jobs Readiness Seal (Ohio)

-Industry-Recognized Credential Seal (Ohio)

- Military Enlistment Seal (Ohio)

-Citizenship 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)

**ACADEMIC AWARDS**

Because of the competitive nature of Highland High School, students are not ranked for college admission purposes. The high school will instead honor students based upon the following standards of achievements:

Students will be honored at commencement based on the following cumulative GPA scale:

- Summa Cum Laude: 3.900 - 4.000
- Magna Cum Laude: 3.700 - 3.899
- Cum Laude: 3.500 - 3.699

**COLLEGE PREPARATORY AWARDS**

Students will be recognized for completing the course requirements for graduation with honors. (Certain classes may be replaced with a course of equivalent or higher expectations.) The top college preparatory students will be awarded medallions at graduation ceremonies. To be eligible for this award, the student must meet the criteria for a Diploma with Honors according to the Ohio Department of Education. Students must also complete any two (2) Advanced Placement or college level courses to be selected from those offered at Highland High School.

- Advanced Placement (AP)
- College Credit Plus (CCP)

**VOCATIONAL AWARDS**

The top five (5) vocational students will be awarded medallions at graduation ceremonies. The award will be based upon completion of a two-year program at a career center and the accumulated GPA (minimum 3.0) received while attending Highland and/or Delaware Area Career Center, Knox County Career Center, or Tri-Rivers Career Center.

## **DIPLOMA WITH HONORS**

The Diploma with Honors recognizes graduating seniors who have successfully completed academic requirements beyond the requirements for a graduation diploma. The Diploma with Honors requirements differ slightly, depending on whether a student is completing a college preparatory or career-technical curriculum.

According to the Ohio Department of Education, the student who completes **the college preparatory** curriculum in high school **must meet any six of the following seven criteria:**

- 1) Four units of mathematics that shall include algebra I, algebra II, geometry, and another higher level or complete a four-year sequence of courses that contains equivalent content
- 2) Four units of science that include an advanced science with lab experiences
- 3) Four units of social studies
- 4) Either three units of one foreign language or two units each of two foreign languages
- 5) One unit of fine arts
- 6) Maintain an overall high school grade point average of at least 3.5 on a four-point scale. GPAs must be calculated on an unweighted 4.0 scale.
- 7) Obtain a composite score of 27 on the American College Testing (ACT) tests or an equivalent composite score of 1280 on the Scholastic Assessment Tests (SAT).

The student who completes **an intensive vocational or technical education** curriculum in the high school **must meet any nine of the following ten criteria:**

- 1) Four units of mathematics that shall include algebra I, algebra II, geometry, and another higher level or complete a four-year sequence of courses that contains equivalent content
- 2) Four units of science that include an advanced science with lab experiences
- 3) Four units of social studies
- 4) 2 units of one world language
- 5) Four units of Career-Technical minimum, Program must lead to an industry recognized credential, apprenticeship, or be part of an articulated career pathway which can lead to post secondary credit.
- 6) Maintain an overall high school grade point average of at least a 3.5 on an unweighted 4.0 point scale.
- 7) Achieve proficiency benchmark established for appropriate Ohio Career-Technical Competency Assessment or equivalent.
- 8) Obtain a composite score of 27 on the American College Testing (ACT) tests or an equivalent composite score of 1280 on the Scholastic Assessment Tests.
- 9) Complete a field experience and document the field experience in a portfolio.
- 10) Develop a comprehensive portfolio of work based on the student's field experience.

## **EARLY GRADUATION**

Highland High School is dedicated to the philosophy of a four-year high school program and does not encourage early graduation. With the requirements of 21 credits and four years of English and math, early graduation is difficult. A wide variety of educational opportunities are provided with the availability of three career centers, College Credit Plus, and Senior Capstone Options (**Seniors ONLY**). HHS does not encourage early graduation, however if you are still interested please seek the process through the high school administration team.

## **SEMESTER CREDIT**

One half credit for full year courses will be awarded (upon receiving a passing grade) at the end of each semester. Any failed course could be made up outside of Highland High School according to district policy and retaking the class would not be necessary.

### **SUMMER SCHOOL AND CORRESPONDENCE SCHOOL**

All requests for granting of credit other than credit provided by the normal school curriculum must be approved in advance by the high school principal. **Only courses previously failed** will be approved for summer school and correspondence courses with the exception of Health and PE. All credits issued must comply with the minimum standards of the State of Ohio Board of Education.

### **SCHEDULE CHANGES**

Changes will only be made for academic reasons. The following regulations will be followed:

1) Due to commitments for staff assignments and supplies, no schedule changes can be made except for the following:

- A. Mechanical error changes.
- B. Changes necessitated by failures.
- C. Class balancing (guidance and administrative).
- D. Subject-level changes (teacher recommendation).
- E. Addition of a class in lieu of study hall the same period.
- F. Administrative (teacher/guidance) recommendation.

**\*Schedules must be changed within the first five school days after the semester begins.**

### **COURSE REPLACEMENT**

A student may retake a course if they desire. The point value of the higher of the two grades (retake course grade or original grade) will be the only one averaged into the student's cumulative grade point average (GPA). However, the academic record of both courses will be reflected on the student's transcript. Credit for the course will not be duplicated. This retake policy applies only to classes offered through the Highland Local School District. This policy is only available to students who earn a D or higher in a class. Students must notify the Guidance Department.

### **ADVANCED PLACEMENT TESTING PROGRAM (AP Exams)**

The Advanced Placement Testing Program is part of the College Board. Various exams are administered in May of each school year. Colleges and universities **may** accept an AP exam score in place of taking a comparable course depending on their established policy. The Highland Board of Education will pay the current exam fee for students enrolled in that specific AP Course at HHS. Students are not required to take the AP exam (even if they have completed the AP course at HHS) but are encouraged to do so. Students requesting exams in courses not offered or not taken at HHS are responsible for the entire exam fee. Students who sign up for the AP exam and then decide not to test will be responsible for the exam fee as well.

### **COLLEGE CREDIT PLUS**

College Credit Plus (CCP) allows students to earn high school and college credit simultaneously. Any student wanting to participate in any of CCP programs **must attend our CCP informational meeting, along with a parent**. This is mandated by the state of Ohio for funding purposes. The CCP meeting with parents will take place in January/February. Specific dates will be advertised. The qualified high school students will be expected and required to perform at the same level as the college's regular students. If the student successfully completes the courses, the college shall award full credit for the course and Highland will award high school credit. For those students enrolled in college courses for college and high school graduation credit, the college will be reimbursed for tuition, fees, materials, and textbooks in accordance with the computational procedures specified in Section 3365.07 of the Revised Code. Reimbursement to the state for any failed courses is required. The only cost the student will be responsible for is transportation. If, however, a student fails a CCP class or drops the course after 14 days and they are taking it as college credit, they will have to reimburse Highland the college's approved tuition per semester credit hour.

### **THERE ARE THREE WAYS TO PARTICIPATE IN COLLEGE CREDIT PLUS**

1. One option with College Credit Plus involves instructors from the college coming to the high school campus. These classes are *college courses* taught by college instructors while high school credits are received.
  - Marion Technical College (MTC) instructors come to our high school campus to teach a variety of classes. These classes are only offered to juniors and seniors; students must be accepted to MTC as a CCP student.
  - If you are taking the “track” of classes offered, you must take both classes each semester.
2. The second CCP option available is when our high school teachers work with an adjunct college instructor. CCP classes are *high school* courses taught by high school teachers while students earn college credit through MTC. The CCP classes that are available are CCP Composition I and II, Computer Applications II, and Business Communications.
3. The third CCP option is offered to students who wish to travel to an approved college/university that Highland has created a partnership. Students attend classes on the college campus and earn enough credits to put them at a higher status in college by the time they graduate from high school. In order to be eligible for this program, the student must have their own transportation (if not taking an online option) and be accepted into the college of their choice.

### **CAREER TECHNICAL PROGRAMS**

The Career Centers offer a wide variety of training so that a student can have a skill to begin a career upon graduation, or to advance to further education programs. Transportation is provided to Tri-Rivers as long as Highland High School is in session. All sophomores will attend a field trip to Tri-Rivers Career Center to preview the career center. Students may attend Knox County Career Center or Delaware Area Career Centers but no transportation will be provided and acceptance is at the discretion of the career center..

### **ATHLETIC ELIGIBILITY**

Students must be passing 5 credits with the appropriate grade point average at the end of each grading period. Physical Education classes, study halls and Senior Capstone Academies do NOT count toward your 5 full credits needed. Katie, this is correct. Thank you

### **OHIO HIGH SCHOOL ATHLETIC ASSOCIATION**

Attention Athletes: By the OHSAA (Ohio High School Athletic Association) and the Highland Board of Education, an athlete must be passing 5 full credits each six weeks to be eligible. In order to participate in fall sports, eligibility is determined by the last grading period of the previous year, not the yearly final grade.

### **NCAA DIVISION 1 FRESHMAN ELIGIBILITY STANDARDS**

All Student-Athletes Must Register With the NCAA Initial-Eligibility Clearinghouse

Any athlete that is planning to play sports at the collegiate level must register with the NCAA for Divisions I, II and III.

High School Timeline

- Start planning now! Take the right courses and earn the best grades possible.
- Find your high school's list of NCAA-approved core courses at [eligibilitycenter.org/courselist](http://eligibilitycenter.org/courselist). Please put in code 364-755 as the CEEB/ACT Code for Highland. Click on Show All Approved Courses for a list of currently approved Highland High School courses through NCAA.

\*If you are taking CCP (College Credit Plus) courses, you will need to submit these courses separately to NCAA by requesting your college transcript be sent to NCAA. \*Note: The high school cannot list CCP courses on the high school approved course lists and the high school does not have control over which CCP courses NCAA will approve.

- Any athlete planning on playing a sport in college should meet with our Athletic Director, Mike Delaney.
- Sign up for a free Profile Page at [eligibilitycenter.org](http://eligibilitycenter.org) for information on NCAA requirements.

[NCAA Guide for the College Bound Student Athlete](#) (you can find a link for this guide on our website) provides everything needed to ensure you are meeting the requirements for NCAA eligibility including a timeline to follow. You may set up an account with NCAA as early as your sophomore year in high school to ensure you are as prepared as possible. **You must set up an account with NCAA no later than the summer before your senior year in high school.**

[http://fs.ncaa.org/Docs/eligibility\\_center/Quick\\_Reference\\_Sheet.pdf](http://fs.ncaa.org/Docs/eligibility_center/Quick_Reference_Sheet.pdf)



## ENGLISH DEPARTMENT

### ENGLISH 9 (ENG)

1 Credit, Full Year

9

The course deals with the fundamentals of communication in the English language with concentration on grammar, vocabulary, sentence development, paragraph formation, short composition writing, term papers, and study skills. Literature including short stories, poetry, novels, and essays are explored in terms of its literary and aesthetic value. Course includes required writings, projects, and speeches.

### ADVANCED ENGLISH 9 (ENG)

1 Credit, Full Year

9

This is an accelerated course for the serious student who is AP bound. Emphasis will be in areas of writing, reading, interpreting, analyzing, and orating. Critical and analytical thinking, along with opportunities for creative expression, study skills, sentence development, MLA formation, and a brief punctuation and grammar review with some OTES skills building provide a foundation for future college expectations for English. Material encompasses short stories, poetry, novels, non-fiction informational texts, Shakespearean drama, mixed media, and essays are explored in terms of its literary and aesthetic value. Course includes required literary and research writings, personal essays, projects, and speeches. A "B" or better in the student's previous class is recommended.

### ENGLISH 10 (ENG)

1 Credit, Full Year

10

This course focuses on improving writing, reading, interpreting, analyzing, and orating skills, language development, advanced grammar and sentence structure, and vocabulary expansion. Literature includes short stories, novels, drama, poetry, and essays. The course includes required literary and term papers, projects, and speeches.

### ADVANCED ENGLISH 10 (ENG)

1 Credit, Full Year

10

This is an accelerated course for the serious student who expects to be challenged in the areas of writing, reading, interpreting, analyzing and orating. Students will cover poetry, essays, short stories, novels, dramas as well as advanced grammar and sentence structure and vocabulary development. Course includes required writings, projects and speeches. A "B" or better in the student's previous class is recommended.

### ENGLISH 11(ENG)

1 Credit, Full Year

11

Students will be challenged in all areas of writing, reading, interpreting, analyzing, and orating. Emphasis will be on critical and analytical thinking with opportunities for creative expression. Literature includes poetry, essays, short stories, drama, and novels from American authors only. Course includes required literary and research papers, personal essays, poetry, projects, and speeches.

### A.P. ENGLISH Literature Offered 2022-2023 (ENG)

1 Credit, Full Year

11.12

The course content of AP English Literature/Composition is guided by the College Board's guidelines and course description. Students will engage in the precise reading of novels, poetry, short stories, essays, and literary criticisms. The course contains brief grammar, spelling, and vocabulary review; however, focuses on the diction, syntax and essay patterns required in college English. College writing and critical analysis of literature are inherent to the course. This course **will require** summer activities in preparation for the school year. Taking the Advanced Placement Exam is expected.

*Prerequisite: Must have earned a C or higher in previous English courses*

**A.P. ENGLISH Language Offered 2023-2024 (ENG)**                      **1 Credit, Full Year**                      **11,12**

The course content of AP English Language/Composition is guided by the College Board's guidelines and course description. Students will participate in analyzing and writing in various modes and stylistic approaches. Students will become aware of how stylistic effects are achieved through rhetorical and linguistic choices and apply these techniques to their own writing. Students will also focus on the research process and demonstrate an ability to synthesize information from primary and secondary sources. This course **will require** summer activities in preparation for the school year. Taking the Advanced Placement Exam is expected.

*Prerequisite: Must have earned a C or higher in previous English courses*

**Composition 1 CCP Opportunity (ENG)**                      **1 Credit (½ Year)**                      **11,12**

This is a CCP credit course through Marion Technical College in expository, argument, and research writing and critical reading. Students read a variety of nonfiction works and write summaries, analysis, and essays in response to their reading. Students learn to read actively and accurately; students research and incorporate valid ideas and quotations from sources in both MLA and APA styles. Students also learn to organize, develop, and revise coherent papers appropriate for a college-educated audience. Grading policies and grading scale will follow the college and not Highland.

*Prerequisite: Acceptance in to MTC*

**Composition 2 CCP Opportunity (ENG)**                      **1 Credit (½ Year)**                      **11,12**

This is a CCP credit course through Marion Technical College in expository, argument, and research writing and critical reading. Students read a variety of nonfiction works and write summaries, analysis, and essays in response to their reading. Students learn to read actively and accurately; students research and incorporate valid ideas and quotations from sources in both MLA and APA styles. Students also learn to organize, develop, and revise coherent papers appropriate for a college-educated audience. Grading policies and grading scale will follow the college and not Highland.

*Prerequisite: Composition 1 and acceptance in to MTC*

**ENGLISH 12 (ENG)**                      **1 Credit, Full Year**                      **12**

This course focuses on improving writing, reading, interpreting, analyzing, and orating skills, language development, grammar, and sentence structure-along with opportunities for creative expression. Literature/ Material includes short stories, novels, drama, poetry, resume and interview skills, and essays along with mixed media. The course includes required literary and term papers, projects-including a job shadow, speeches, and a career unit including OhioMeansJobs Seal requirements.

**COMMUNICATION ELECTIVES**

**CREATIVE WRITING (ENG)**                      **½ Credit - ½ Year**                      **10,11,12**

This course is a writing workshop. Students will write every day, and they will explore different writing techniques and styles. Writing skills will be developed through pre-writing, editing, re-writing, and critiquing. Students will also examine various styles of writing by reading well-known and not so well-known writers of poetry, songs, short stories, novels, plays, monologues, dialogues, and stream-of-consciousness selections. Students will research critically and/or commercially successful authors to find out their secrets to success. As a community, we will learn a great deal about each other by writing across various modes of and describing how our writing works and what it does by closely examining language and technique. Goals will be met through a variety of reading, writing, and speaking activities. Students must be willing to share their work; that is, they must be willing to read aloud and share their ideas with the group. Additionally, students will be asked to critique their own work and the work of others in a positive, gentle manner.

**BUSINESS COMMUNICATIONS (CCP Opportunity) (ENG)**      **½ Credit - ½ Year**      **11,12**

A focus on customer needs is essential for effective business communication. In this course, you will learn how to write friendly letters tailored to specific situations with the customer in mind. You'll also learn to write an effective e-mail and a formal report with graphics based on primary research. Other lessons include information on conducting and arranging a good business meeting and on creating good visual aids for presentations. Communication skills will also be developed throughout the course. In addition, you will construct a personal job package consisting of a resume, cover letter, and thank-you letter. All of these projects are designed to develop vital job skills.

**MATH DEPARTMENT**

**ALGEBRA 1 (MTH)**      **1 Credit, Full Year**      **9**

This course deals with the four basic operations using monomial and polynomials, some sets, factoring and graphing of equations and inequalities. Students will learn to use the TI-84 Graphing Calculator and its benefits towards Algebra and standardized testing. A Graphing Calculator (TI-84 or equivalent) is recommended for use outside of class. No Prerequisite.

**GEOMETRY (MTH)**      **1 Credit, Full Year**      **9,10**

This course is designed to emphasize the study of the properties and applications of common geometric figures in two and three dimensions. It includes the study of transformations, angles, polygons, and right triangle trigonometry, surface area, and volume. Inductive and deductive thinking skills are used in problem solving situations, and applications to the real world are stressed. It also emphasizes writing proofs to solve (prove) properties of geometric figures. Scientific calculator (TI-84 or equivalent) required. *Prerequisite: Algebra 1*

**ADVANCED GEOMETRY (MTH)**      **1 Credit, Full Year**      **9,10**

Similar topics as Geometry, but with a more in-depth look at the proofs of each of the theorems. More topics will also be covered to prepare for advanced placement courses in math. A compass, straightedge, and scientific calculator are required. Scientific calculator (TI-84 or equivalent) required. *Prerequisite: Algebra 1 (a "B" or better is recommended)*

**ALGEBRA 2 (MTH)**      **1 Credit, Full Year**      **9,10,11**

Algebra 2 is an extension of Algebra 1 to include quadratic equations and inequalities, graphs and functions, irrational and complex numbers, logarithms and exponents. Scientific calculator (TI-84 or equivalent) required.

*Prerequisite: Geometry or Advanced Geometry*

**ADVANCED ALGEBRA 2 (MTH)**      **1 Credit, Full Year**      **9,10,11**

Similar topics as Algebra 2 with an in-depth look at certain topics using a graphing calculator. This course will prepare students for Precalculus with more work in trigonometry at the end of the course. TI-NSPIRE or TI-84 graphing calculator (or equivalent) recommended. *Prerequisites: Advanced Geometry (a "B" or better is recommended)*

**ALGEBRA 3 (MTH)**      **1 Credit, Full Year**      **10,11,12**

This course focuses on the continuing study of Algebra, Trigonometry, and Statistics. This course is meant for students who look to continue their education past high school or sophomores – juniors who need another year of math before stepping into pre-calculus. Topics studied in this course include functions, polynomials, rational expressions, trigonometry, as well as probability and statistics.

**ADVANCED QUANTITATIVE REASONING (MTH)**      **1 Credit, Full Year**      **11,12**  
The course material models real world problems while developing students' investigative and problem solving skills. Students will use Geometry and Algebra to solve realistic problems that will be presented through math concepts such as: use of percents, trigonometry, modeling real world problems, finance and taxes, scale modeling, coding, and recognizing math in mapping and navigation.

*Prerequisite: Algebra 2*

**PRECALCULUS (MTH)**      **1 Credit, Full Year**      **10,11,12**  
This is a college preparatory course, which deals with advanced math topics including trigonometry and pre-calculus. A graphing TI-NSPIRE or TI-84 graphing calculator (or equivalent) calculator is required.

*Prerequisite: Advanced Algebra 2 (a "B" or better is recommended)*

**AP CALCULUS AB and BC (MTH)**      **1 Credit, Full Year**      **11,12**  
This class provides students with the necessary foundation, understanding, and aspects of differential and integral calculus, and skills that are needed to be successful in an introductory college calculus course. Taking the Advanced Placement Exam is expected. A graphing calculator is required. If you have previously taken AP Calculus AB, you may choose to take AP Calculus BC.

*Prerequisite: Pre-Calculus (a "B" or better is recommended)*

## **SCIENCE DEPARTMENT**

**PHYSICAL SCIENCE (SCI)**      **1 Credit, Full Year**      **9**  
In the area of physical science, students will demonstrate an understanding of the structure and properties of matter, materials and objects; chemical reactions and the conservation of matter; the nature, transfer, and conservation of energy; motion and the forces that affect it; nature of waves. This science includes understanding the properties and interconnected nature of the earth's systems, (ocean, atmospheric and forms); the principles of energy, matter, motion, and forces of our solar system and universe. Both areas will examine the historical perspectives, scientific approaches, and emerging scientific issues. This is a required class for all incoming freshmen unless they have completed and passed physical science in the 8th grade.

**ADVANCED PHYSICAL SCIENCE (SCI)**      **1 Credit, Full Year**      **9**  
Students will study the same content as Physical Science. The information and labs, however, will be more in depth and extensive. Students will be required to be more self-directed.

**BIOLOGY (SCI)**      **1 Credit, Full Year**      **9,10**  
Students demonstrate an understanding of how living systems function and how they interact with the physical environment. This includes an understanding of the cycling of matter and flow of energy in living systems. An understanding of the characteristics, structure, and function of cells, of organisms, and of living systems are developed as well as a deeper understanding of the principles of heredity, biological function, and the diversity and interdependence of life. Students also demonstrate an understanding of different historical perspectives, scientific approaches, and emerging scientific issues associated with the life sciences.

*Prerequisite Physical Science*

**ADVANCED BIOLOGY (SCI)**      **1 Credit, Full Year**      **9,10**  
Students will study the same content as Biology. The information and labs, however, will be more in depth and extensive. Students will be required to be more self-directed.

*Prerequisite Physical Science*

**PRINCIPLES OF SCIENCE (SCI)****1 Credit, Full Year****11,12**

This course provides a project-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied. The goal of this course is to provide students with hands-on application of labs and projects for physics and math based principles.

**FORENSIC SCIENCE (SCI)****1 Credit, Full Year****11,12**

Forensic science is a multidisciplinary applied science ('MAS') encompassing several sub-fields of biology, chemistry, physics, and crime science investigation (CSI). These sub-fields include genetics, toxicology, entomology, ballistics, pathology, computer forensics, fire debris and trace evidence. The primary emphasis will be to develop understanding of these concepts through hands-on, field inquiry.

*Prerequisite: Passing of Biology and Physical Science*

**CHEMISTRY (SCI)****1 Credit, Full Year****11,12**

Chemistry is the study of matter and the changes that it undergoes. Students will learn about the structure of atoms, properties of matter, bonding of elements, measurement, acids, bases and structure of hydrocarbons. You must pass the first semester to continue on with the second semester.

*Prerequisite: A "C" in Biology*

**ADVANCED CHEMISTRY (SCI)****1 Credit, Full Year****11,12**

Advanced chemistry 1 is a college-level course that is designed to not only provide students with a solid general chemistry education but also to develop the student's abilities in the following areas: (1) read, understand, and interpret information from a wide variety of sources, (2) use appropriate problem solving skills, (3) use mathematical reasoning in solving problems, and (4) complete lab experiments, including data acquisition, interpreting the results and acknowledging the uncertainties associated with the experimental outcome. This course meets 5 days a week for one period each day and covers the following topics: safety, lab equipment, measurement, matter, atomic structure, nuclear structure, electrons, periodic table, nomenclature and chemical reactions.

*Prerequisite: A "B" in Advanced Biology is recommended*

**ADVANCED CHEMISTRY 2 (SCI)****1 Credit, Full Year****11, 12**

Advanced chemistry 2 is a continuation of topics not covered in advanced chemistry that are imperative to preparing a student for a college chemistry course. It is designed to continue to provide critical chemistry content but also to increase the development of the student's abilities in the following areas: (1) read, understand, and interpret information from a wide variety of sources, (2) use appropriate problem solving skills, (3) use mathematical reasoning in solving problems, and (4) complete lab experiments, including data acquisition, interpreting the results and acknowledging the uncertainties associated with the experimental outcome. This course meets 5 days a week for one period each day and covers the following topics: moles, stoichiometry, acids and bases, thermochemistry, gas laws, bonding, solutions and organics.

*Prerequisite: A passing grade in Advanced Chemistry 1 or Chemistry.*

**PHYSICS (SCI)****1 Credit, Full Year****11,12**

This course will be one period long all year and would be **taken concurrently with Precalculus**. The goal of this course is to provide students with a basic understanding of the natural phenomena, which is part of his/her world. It will provide ample opportunity for the student to experience the laws of nature through laboratory investigations. There will be an emphasis on mathematical representation of all concepts discussed and observed.

**AP PHYSICS C Mechanics (SCI)****1 Credit, Full Year****11, 12**

This course is equivalent to a first-year college physics class and is designed to prepare students for the AP<sup>®</sup> Physics C Mechanics Exam. Students will gain an in-depth understanding of Mechanics and be able to explain problems conceptually and mathematically. The course requires and employs a basic understanding of calculus (differentiation and integration). **Previous or concurrent enrollment in AP<sup>®</sup> Calculus is required.** This course requires a large time commitment from students outside of class. Taking the Advanced Placement Exam is expected. College credit may be given for exam scores of 3 and above depending on the individual college or university attended. Students will also be able to create a procedure for a lab experiment, conduct the experiment, and analyze the data obtained and the procedure used. Students will leave the course with the ability to apply their understanding of physics to solve more complex problems and new scenarios. These objectives will be accomplished through lab work and lab reports, class activities, class discussions, and solving and presenting problems. Taking the Advanced Placement Exam is expected.

*Prerequisite: A "B" or better in Chemistry and a "B" or better in Pre-Calculus is recommended.*

**ENVIRONMENTAL SCIENCE (SCI)****1 Credit, Full Year****11, 12**

The goal of the Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand interrelationships of the natural world. We will identify and analyze environmental problems both natural and man-made and to examine alternative solutions for resolving and/or preventing them. Considerable emphasis is placed on field investigations, labs and extended projects. Students will practice techniques for ecosystem monitoring both in the local environment and in surrounding watersheds.

**HUMAN ANATOMY & PHYSIOLOGY (SCI)****1 Credit, Full Year****11,12**

This course will investigate the structure and function of the human body. Topics covered will include the basic organization of the body; biochemical composition; and major body systems along with the impact of diseases on certain systems. Laboratory experiences will allow the students to manipulate compounds, models, dissection of small animals either by virtual lab programs or by exploring prepared parts of anatomical structures.

**SOCIAL STUDIES DEPARTMENT****WORLD STUDIES (SS)****1 Credit, Full Year****9**

Students continue the study of the history of the world with emphasis on the period from 1750 to the present. As students study historic eras, they consider the geographic, cultural, economic, and governmental changes that have occurred. Students develop a deeper understanding of their role as citizens of the world and continue to expand their command of social studies skills and methods. Students will learn how to read historical material; analytically and critically, weigh historical evidence to draw conclusions on the basis of facts not prejudices.

**ADVANCED WORLD STUDIES (SS)****1 Credit, Full Year****9**

This is a more rigorous course that teaches **sophomores** the history of the world from 1750 to the present. The student will learn how to read historical material analytically and critically; weigh historic evidence to draw conclusions on the basis of facts; and may complete a research paper or project. This class will cover all the content statements required in the regular World Studies class, but may include more independent study and research.

**AMERICAN HISTORY (SS)****1 Credit, Full Year****10**

The general objectives of the course are to teach the basic facts of United States history from 1877 to the present. Although the emphasis will be on American history, all areas of the social studies will be interwoven into the course. This course will: develop skills and responsibilities needed to be an American citizen and voter; develop student understanding of cause and effect relationships and historical concepts; develop a student's love of country and American ideals. The student will learn how to: read historical material analytically and critically; weigh historical evidence to draw conclusions on the basis of facts not prejudices; and may complete a research paper on a given topic.

**ADVANCED AMERICAN HISTORY (SS)****1 Credit, Full Year****10**

This is a more rigorous course that teaches the basic facts of United States history from 1877 to the present. The student will learn how to: read historical material analytically and critically; weigh historical evidence to draw conclusions on the basis of facts not prejudices; and may complete research paper(s) on a given topic. This class is a more in depth analytical approach than regular U.S. Studies. It may include more independent study and research.

**ECONOMICS (SS)****½ Credit - ½ Year****11,12**

This course will assist students in developing skills, habits, and techniques that may lead to financial independence. Financial Literacy topics covered may include: stocks and bonds, insurance, credit, 401K plans, purchasing a car/home, careers, credit cards, and good money management habits. This course will also touch on the fundamentals of economics.. Sophomores may take this course (If earned a B or higher in Am. History).

**GOVERNMENT (SS)****½ Credit- ½ Year****11, 12**

Government is required for graduation. The course is designed to give the students a basic understanding of American Government on the national, state, and local levels. Students will learn to analyze public policy and the processes of government to interpret events in their daily lives. The course will consider the importance of the United States Constitution, and the rights and responsibilities of being a citizen. As students study the American government, they consider the geographic, cultural, economic, and historical changes that have occurred. Students develop a deeper understanding of their role as citizens of the U.S. and continue to expand their command of social studies skills and methods. Creation of an original fictional government, political party, and legal system is required for credit.

**AP GOVERNMENT & POLITICS (SS)****1 Credit, Full Year****11,12**

The course content of AP Government is guided by the College Board's guidelines and course description. Students in this class will engage in the study of a variety of government systems as well as the foundations of the Constitutional Government of the United States. In addition, students will explore the roles of Political Parties, Political Action Committees and the mass media in government. Students will analyze political beliefs and behaviors as well as their own personal roles as citizens in government. This class will also include topics on financial literacy. This class will move at a quick pace and is intended for the students that want to push themselves. Taking the Advanced Placement Exam is expected. (This course covers your ½ credit of Gov and ½ credit of Econ needed for graduation requirements.)

**WWII HISTORY (SS)****½ Credit- ½ Year****10,11, 12**

This semester elective course will address the causes and the effects of World War II. It is an in-depth look at both Pacific and European Theaters; including Pearl Harbor, Doolittle's Raid, island hopping, Iwo Jima, Kamikaze, the atomic bombs/Battle of Britain, D-Day, Battle of the Bulge and the Holocaust will be studied. Also the role of women and minorities in the war effort will be included as we understand how America became the 'Arsenal of Democracy' with our great industrial production. Students will also be interviewing the 'Greatest Generation' by participating in the Veteran's History Project which is in cooperation with the Smithsonian Institute and the Library of Congress in Washington, DC or completing a research paper.

**VIETNAM and the 60's (SS)****½ Credit- ½ Year****11, 12**

Students in this course will explore the causes and effects of the Vietnam War and the political culture of the sixties. Students will analyze how events such as the war in Southeast Asia, the Civil Rights movement, women's rights movements, assassinations and the "counterculture" impacted society in the United States both then and now.

**HUMAN GEOGRAPHY****½ Credit- ½ Year****11, 12**

Students will be studying the distribution, processes, and effects of the human population on our planet through the use of maps, data sets, and geographic models. Through our study of geography, we will draw from the physical, cultural, economic, and political spheres in order to investigate the places we live in, why they matter, and how they are connected to the world. We will also learn to appreciate the diversity of landscapes, peoples, and cultures and to think critically about the complexities of place in connection with human movement and interaction.

**NAVAL SCIENCE - NJROTC****Overview**

Naval Junior Reserve Officer Training Corps (NJROTC) courses carry full elective credit toward graduation from Highland High School. NJROTC can be a four-year program for those students who enter in the ninth grade. Cadets must wear a Navy uniform (provided free of charge) once a week and must maintain military grooming standards. The NJROTC unit participates in a number of extra-curricular activities including armed and unarmed drill teams, color guard, athletic and academic team competition with other NJROTC units, air rifle/marksmanship teams, and community service projects. Students must be enrolled in NJROTC to participate in NJROTC extracurricular activities.

**NAVAL SCIENCE ONE (NJROTC1) (ELE)****1 CREDIT, Full Year****9,10,11,12**

During this course cadets will become familiar with proper uniform wear, physical fitness training, and military drill. Academic work will consist of an introduction to Naval Junior Reserve Officer Training Corps, followership, leadership and basic citizenship principles, foundations of our government, navy ships and naval aviation.

**NAVAL SCIENCE TWO (NJROTC1) (ELE)****1 CREDIT, Full Year****10,11,12**

During this course cadets will continue to demonstrate proper uniform wear and military drill and will continue with physical fitness training. Academic work will consist of continued leadership training, naval history through World War II, meteorology, weather, oceanography, astronomy, basic electricity, naval electronics, and basic survival training.

*Prerequisite: Passing Naval Science 1*

**NAVAL SCIENCE THREE (NJROTC3) (ELE)****1 CREDIT, Full Year****11,12**

During this course cadets will continue to demonstrate proper uniform wear, military drill, and will continue with physical fitness training. Academic work will consist of advanced leadership training, military justice, international law, and the law of the sea. Additional study includes sea power, national security, oceanography, naval operations, communications and intelligence gathering, basic electricity, and naval electronics.

*Prerequisite: Passing of Naval Science 2*

**NAVAL SCIENCE FOUR (NJROTC4) (ELE)****1 CREDIT, Full Year****12**

During this course cadets are expected to work independently and assume a large portion of the leadership responsibilities of managing and operating the NJROTC unit. NS4 cadets will serve as teacher aides during Naval Science 1 and Naval Science 2 classes. They will spend time each week conducting precision military drill, uniform inspections, and will also teach some basic course work, all under the close supervision of one of the Naval Science instructors.

*Prerequisite: Passing of Naval Science 3*



**MILITARY PROTOCOL AND DRILL (ELE)****1 CREDIT. Full Year****9,10,11,12**

During this course cadets will focus on Military Drill, including unarmed, armed (with drill rifles), color guard, and exhibition. Classes will meet in both the NJROTC classroom and in the gym. Participation in the drill teams is mandatory for a minimum of four competitive events during the school year. Competitions are normally held on Saturdays and last from early morning to late afternoon. Should the team become competitive in the NJROTC Area Three level the possibility exists that participation at the National Drill Meet would be required.

Prerequisite: Concurrently enrolled in Naval Science 1, 2, 3, or 4

**FOREIGN LANGUAGE DEPARTMENT****Overview**

Spanish is the study of the culture and language of the Spanish-speaking world. While studying Spanish, students will develop language skills in the following areas: vocabulary, grammar, listening comprehension, reading comprehension, composition, and conversation. In addition, students will study the geography and customs of Latin America and Spain. All Spanish courses are college preparatory classes requiring intensive memorization and solid study skills. *Furthermore, students should also expect assignments requiring the use of online resources.*

**SPANISH 1 (ELE)****1 Credit. Full Year****9,10,11,12**

Spanish 1 is an introduction to the culture and language of the Spanish-speaking world. Students should expect multimedia assignments that heavily depend on access to online resources.

*Prerequisite: A "C" or better in 8<sup>th</sup>-grade English is recommended for incoming freshmen.*

**SPANISH 2 (ELE)****1 Credit. Full Year****9,10,11,12**

In Spanish 2, students will continue to study the language and culture of the Spanish-speaking world with a greater emphasis on cultural literacy and the development of speaking, reading, and listening skills. Students should expect multimedia assignments that heavily depend on access to online resources.

*Prerequisite: A "C" or better in Spanish 1 is recommended.*

**SPANISH 3 (ELE)****1 Credit. Full Year****11,12**

Students will have the opportunity to learn and apply more refined grammar skills as speaking, reading, and listening skills are sharpened. A more in-depth look at the Hispanic culture is provided along with a basic introduction to Hispanic literature. Students should expect multimedia assignments that heavily depend on access to online resources.

*Prerequisite: Due to the higher expectations of this course, a "B" or better in Spanish 2 is recommended.*

**SPANISH 4 (ELE)****1 Credit. Full Year****12**

Students will have the opportunity to learn and apply more refined grammar skills as speaking, reading, and listening skills are sharpened. A more in-depth look at the Hispanic culture is provided along with a basic introduction to Hispanic literature. Students should expect multimedia assignments that heavily depend on access to online resources.

*Prerequisite: Due to the higher expectations of this course, a "B" or better in Spanish 3 is recommended.*

## **MUSIC DEPARTMENT (Fine Arts)**

### **CONCERT BAND (FAR)**

**1 Credit, Full Year**

**9,10,11,12**

The Band exists to broaden the culture of the community and to continue the long tradition of school bands in the United States of America. Literature of the highest quality will be studied and performed. Emphasis will be placed on a continued development of musical skills including instrument technique, note reading, writing and musical interpretation. Members will participate in several performances throughout the school year. These performances will include the following: Fall Concert, Winter Concert, Spring Concert, Arts Festival, Graduation, Solo and Ensemble, OMEA Large Group Event. This list may be altered to meet the needs of the school and/or community. Students should expect to practice at home as well as during rehearsals. Grading is based on rehearsal and performance participation, concert participation, performance evaluations of assigned music, written assignments, tests and reflective writing.

### **PERCUSSION ENSEMBLE (FAR)**

**1 Credit, Full Year**

**9, 10, 11, 12**

No experience necessary. Students will learn how to read simple rhythms/notes and be required to perform at least one piece of music at each high school music concert as part of their grade. Students will be required to purchase a pair of drumsticks (Vic Firth SD1 Generals, \$12.00). Unconventional instruments like buckets may be utilized during a performance. Current or past drum set players and piano players are encouraged to join. If interested, a pathway to join the marching band in the future can be arranged.

### **CHOIR (FAR)**

**1 Credit, Full Year**

**9,10,11,12**

Choir is a mixed choral ensemble made up of men and women from grades 9-12. The group performs many different styles and genres of music ranging from Renaissance Madrigals to Top 40 hits. Students do not need to audition to become a member of this ensemble. Choir students will participate in several performances throughout the school year. These performances include the Fall Concert, Winter Concert, Spring Concert, Arts Festival, Graduation, school assemblies, and various community events. This list may be altered to meet the needs of the school and/or community. Students enrolled in Choir are eligible to participate in the annual Solo and Ensemble Contest, OMEA District 10 Honors Choir, and other audition-only events in our area. Students are expected to practice at home in order to succeed in this course. Grading is based on rehearsal progress, concert attendance, singing quizzes, listening assignments, and written assignments. **Students interested in accompanying the choir with guitar are encouraged to join.**

### **HISTORY OF ROCK AND ROLL (FAR)**

**1/2 Credit- 1/2 Year**

**9,10,11,12**

History of Rock and Roll is a semester-long elective course open to all students interested in gaining a better understanding of the origins of popular music in America. There are no prerequisites for this course and music skills are not required. The goal of this class is for students to develop a better understanding of the significance of Rock and Roll in American culture and to study the social and historical context that gave birth to it and other related musical genres. Students will familiarize themselves with the music, movements, and major figures of American music in the 20th Century and analyze important musical works through song analysis, group discussion, and in-class activities. Students will discover how their favorite types of music evolved and will benefit from a deeper understanding of the context of the music by looking at connected aspects of American culture, including movies, tv, fashion, and the music industry.

## TRADITIONAL ART (Fine Arts)

### ART FUNDAMENTALS (FAR)

½ Credit- ½ Year

9,10,11,12

This course is the prerequisite for all other fine art classes.

Art Fundamentals is an introduction to the use and purposeful application of the elements of art and the principles of design. Basic drawing skills and color theory will also be studied extensively. Essential questions answered within this course define basic art philosophies such as what is art and why do we make it. Art Criticism is also included that assists the student in reflecting on artistic choices and personal reflections during art making.

### DRAWING I (FAR)

½ Credit- ½ Year

9,10,11,12

This is an introductory drawing course in which students will explore various art and media using a variety of drawing tools. Subject matter will range from drawing from observation to imagination. Students' activities will be individualized, dependent upon each student's ability level. Basic techniques are presented to encourage personal creativity and exploration of drawing and its connections between other arts and disciplines and as a source of inspiration for making art.

*Prerequisite: Art Fundamentals*

### CERAMICS (FAR)

½ Credit- ½ Year

10,11,12

Ceramics is a studio class that includes a study of the process of creating sculptures made of clay as well as art making. This course includes a study of the stages of clay, hand building skills, glazing techniques, and the firing process. Students will gain an understanding of the role of clay within the pages of art history, other cultures and in artistic expression.

*Prerequisite: Art Fundamentals*

### ART AROUND US (FAR)

½ Credit- ½ Year

10,11,12

Art around Us is a course that concerns the public artwork within the school and local community. Students within this course design and create artwork that will be permanent installations at Highland High School. Themes to be studied surround how artists and designers get ideas through environment, history and current events and implement these themes into art making. Past projects within this course are designing and painting ceiling tiles, murals and installation pieces.

*Prerequisite: Art Fundamentals*

## TECHNOLOGY BASED ART (Fine Arts)

### BEGINNING PHOTOGRAPHY (BUS/TEC) or (FAR)

½ Credit- ½ Year

9,10,11,12

An introduction to art photography and photo editing. Students will learn how a DSLR camera works including how to have full manual control over the camera's settings such as aperture and shutter speed. Students will also learn basic compositional techniques, beginner photo editing skills in Adobe Photoshop, and image analysis. Students will learn about why we edit photographs and the basic types of edits to use on photographs. In Adobe Photoshop they will work with how to properly edit a photograph so as not to completely change it, but to improve the quality of it. Through project critiques the students will learn about how to analyze an image and learn to talk about how a piece of art uses the different elements of art and principles of design. Lastly we will explore the history of photography and look at some famous photographers in history and study their work. This is a project based class that requires time spent outside of class taking photographs for assignments and projects.

**INTERMEDIATE PHOTOGRAPHY (BUS/TECH) or (FAR)**      **½ Credit- ½ Year**      **10,11,12**

An extension of Beginning Photography, students will use previously gained knowledge of art photography and Adobe Photoshop to develop more complex and creative images. Students will delve into portrait photography, commercial photography, and social photography to further their photographic skills. Students will learn how to get creative using manual settings such as aperture and shutter speed. This class will help the students to also further their photo editing skills, they will learn more tools and functions in the Adobe Photoshop program through different projects. Students will continue to explore image analysis through class critiques. This is a project based class that requires time spent outside of class taking photographs for assignments and projects.      *Prerequisite: Passing of Beginning Photography*

**BEGINNING VIDEOGRAPHY (BUS/TEC) or (FAR)**      **½ Credit- ½ Year**      **10,11,12**

This class takes the basic skills learned from the photography courses and applies it to learning video skills and video editing skills. Students will work with digital cameras to shoot their own video for projects and learn how to create, edit, and export a video in Adobe Premiere. Students will learn more shooting techniques to add to what they previously learned in the photography course(s). In this class we will discuss the role of video technology in news broadcast, television and motion picture films, art and more. This is a project based class that requires time spent outside of class shooting video for assignments and projects.      *Prerequisite: Passing of Beginning Photography*

**YEARBOOK (BUS/TEC) or (FAR)**      **1 Credit, Full Year**      **10,11,12**

This class is for sophomores through seniors who have an interest in pursuing journalism, photography, and/or computer graphics as a possible career. **Students need to fill out an application form for approval upon submission into this class.** This class will require the students to do real life applications. Students will be required to participate in ad sales and book sales, contacting local businesses, parents, and community members. In this course, students will design, create, write and publish the annual yearbook. More specifically the students will have to capture pictures of various events throughout the school year, as well as write professional articles and captions that center on the yearbook's theme. Students will be asked to do a lot of tasks outside of class and should have basic computer knowledge. Yearbook students must be self-driven, have well developed problem solving skills, and be willing to do a lot of outside class work in order to complete what is expected in this class. It is important that students take their work seriously and take pride in it, as the end product is seen by the whole school as well as the community. The student's grade will be determined on completion using professional publication standards.

**BUSINESS / TECHNOLOGY**

**COMPUTER APPLICATIONS I (BUS/TEC)**      **½ Credit- ½ Year**      **9,10,11,12**

In this semester course, students will learn a variety of computer application concepts along with keyboarding skills. Students will become proficient with Microsoft Office® software. Students will create professional documents in MS Word, Excel and PowerPoint. Students will create and format business letters, reports, fliers, tables, reports and presentations. Personal finance concepts and job-seeking skills will be incorporated within the course. Industry Credentials as well as Web Xams will be offered during this course.

**COMPUTER APPLICATIONS II (BUS/TEC)****½ Credit- ½ Year****10,11,12**

This advanced Computer Applications course is project-based and students will integrate the software applications Microsoft® Word, Excel, PowerPoint and Access to solve business problems. Students will use the Internet and e-mail as they research topics and prepare documents using the appropriate software applications. Students will create and present presentations. Course builds upon Computer Applications I curriculum at a higher level. Industry Credentials as well as Web Xams will be offered during this course.

*Prerequisite: Computer Applications I with a “C” or better is required.*

**COMPUTER APPLICATIONS II CCP OPP (BUS/TEC)****1 Credit- ½ Year****10,11,12**

This integrated, project-based course will help students use the software applications Microsoft® Word, Excel, PowerPoint, and Access for a PC, to solve business problems. Students will use the Internet and e-mail as they research topics and prepare documents using the appropriate software applications. Course topics include technology history, future trends in technology, and the role of technology in a professional environment.

*Prerequisite: Acceptance into Marion Technical College*

**BUSINESS FOUNDATIONS (BUS/TEC)****1 Credit, Full Year****9,10,11,12**

This is the first course for the Business and Administrative Services, Finance and Marketing career fields. It introduces students to specializations within the three career fields. Students will obtain knowledge and skills in fundamental business activities. They will acquire knowledge of business processes, economics and business relationships. Students will use technology to synthesize and share business information. Employability skills, leadership and communications and personal financial literacy will be addressed.

**BUSINESS FINANCE (BUS/TEC)****1 Credit, Full Year****9,10,11,12**

This is the first course specific to Finance. It introduces students to the specializations offered in the career field. Students will obtain fundamental knowledge and skills in accounting, banking services, corporate finance, insurance, and securities and investments. They will acquire knowledge of financial analysis and application, business law and ethics, economics, international business and business relationships. Knowledge management and information technology will be emphasized. Employability skills, leadership and communications will be incorporated in classroom activities.

**BUSINESS ADMINISTRATION (BUS/TEC)****1 Credit, Full Year****9,10,11,12**

Students will develop knowledge and skills in financial analysis, financial reporting and corporate investments. They will predict corporate performance and profitable investments using financial statements, ratio analysis and other financial analysis techniques. They will calculate cash needs using the time value of money and track, record and summarize a business's financial transactions. Compliance, internal controls, business governance and personal financial management will be addressed. Technology, employability skills, leadership and communications will be emphasized.

**BUSINESS MANAGEMENT (BUS/TEC)****1 Credit, Full Year****9,10,11,12**

Students will apply techniques used to manage people and information in a business environment. Students will learn to build relationships with clients, employees, peers and stakeholders and to assist new employees. They will manage business records, gather and disseminate information, and preserve critical artifacts. They will also examine contracts, internal controls and compliance requirements. Business office tools and applications will be emphasized.

**ROBOTICS 1-ENGINEERING DESIGN (BUS/TEC)**      **1 Credit, Full Year**      **9,10,11,12**

The focus of Engineering Design is the application of the engineering design process. Topics include work-processes, optimization methods, design optimization, and risk management tools. Students will use 2D and 3D modeling software to help them design solutions to solve proposed problems, document their work, and communicate solutions. Additionally, students will interpret industry prints, and create working drawings from functional models. Emphasis is given to experimental problem solving in real systems.

**ROBOTICS 2-PRINCIPLES OF ENGINEERING (BUS/TEC)**      **1 Credit, Full Year**      **10,11,12**

This course will introduce students to fundamental engineering concepts and scientific principles associated with engineering design applications. Topics include mechanisms, energy, statics, materials, and kinematics. Additionally, students will learn material properties and electrical, control and fluid power systems. Students will learn to apply problem solving, research and design skills to create solutions to engineering challenges.

*Prerequisite: Passing of Engineering Design*

**ROBOTICS 3 (BUS/TEC)**      **1 Credit, Full Year**      **11,12**

Students will apply the knowledge and skills necessary to program and operate Robots, using the teach pendant as the main interface point. The Students will learn robotic operations and system configurations. Students will code, compile, and debug programs using the robotic programming language.

*Prerequisite: Passing of Robotics 2*

**ROBOTICS 4 (BUS/TEC)**      **1 Credit, Full Year**      **12**

In this course, students will be introduced to all aspects of computer-integrated manufacturing. They will learn about robotics and automation, manufacturing processes, computer modeling, manufacturing equipment and flexible manufacturing systems language.

*Prerequisite: Passing Robotics*

**PHYSICAL & HEALTH EDUCATION**

Two semesters of Physical Education and one semester of Health are required of all students. P.E. is required unless the student presents a physician's statement showing he/she is not physically capable of taking such work. Exemptions from physical education do not reduce the minimum units required for graduation. Students must complete two different P.E. courses prior to retaking a P.E. course. Students who participate in two seasons of any sport including band may complete a PE waiver for .25 credits. You must take one PE course through HHS.

**HEALTH (HTH)**      **½ Credit - ½ Year**      **9,10,11,12**

Health Education provides information related to the mental, physical, and social aspects of daily living. Topics reviewed include mental and physical health, stress management, physical fitness, nutrition, reproductive system & STD's, tobacco, alcohol, drugs and first aid.

**LIFETIME FITNESS (PHE)**      **¼ Credit- ½ Year**      **9,10,11,12**

This semester class focuses on fitness as a way to achieve and maintain a healthy lifestyle after you leave school. You will gain an understanding of the importance of fitness and learn the skills necessary to develop your own workout routines. High intensity team sports & games will also be introduced to demonstrate how games can increase your fitness level. Grades will be determined by the amount of student participation and observation of class rules as well as improvement in fitness aspects of the class according to the Ohio Standards for Physical Education.

**STRENGTH & CONDITIONING (PHE)****¼ Credit- ½ Year****9,10,11,12**

This semester class will give each student an opportunity to improve total physical fitness through weight training as well as fitness based exercise. Students will have the opportunity to work both in the weight room, fitness room and outdoors when weather permits. The goal of this class is to assist the student in exercise techniques to keep the body in good physical condition. Grades will be determined by the amount of student participation and observation of class rules as well as improvement in fitness aspects of the class according to the Ohio Standards for Physical Education.

**5K TRAINING & PLANNING (PHE)****¼ Credit- ½ Year****9,10,11,12**

This class will train, participate in and help plan for a Community 5K in the spring.

**ADVANCED TEAM SPORTS FITNESS (PHE)****¼ Credit- ½ Year****11,12**

This semester class will give the student the opportunity to participate in team sport activities. Students will experience basic training of the activities with the emphasis of safety, proper form, mental focus, concentration and conditioning. Students will be evaluated on in- class assignments, participation, and activity level. **This course may only be taken once a student has taken two other PE courses).**

**AGRICULTURE EDUCATION****AG 1- AGRICULTURE, FOOD, NATURAL RESOURCES (ELE)** **1.25 Credits, Full Year****9,10,11,12**

This first course in the career field is an introduction to Agricultural and Environmental Systems. Students will be introduced to the scope of the Agricultural and Environmental Systems career field. They will examine principles of food science, natural resource management, animal science & management, plant & horticultural science, power technology and bioscience. Students will examine the FFA organization and Supervised Agricultural Experience programs. Throughout the course, students will develop communication, leadership and business skills essential to the agriculture industry.

**AG 2- ANIMAL AND PLANT SCIENCES (ELE)****1.25 Credits, Full Year****10,11,12**

Students will apply knowledge of animal and plant science to the agriculture industry. They will be introduced to the value of production animals relative to the agricultural marketplace. Students will engage in animal classification and selection, body systems, along with animal welfare and behavior in relation to the production of animals. Students will learn principles of plant anatomy and physiology, and the role of nutrition, deficiencies and growing environment on plant production. Throughout the course, business principles and professional skills will be examined.

*Prerequisite- AG 1 for Sophomores. No prerequisite for Juniors and Seniors*

**AG 3- BUSINESS MANAGEMENT (ELE)****1.25 Credits, Full Year****11,12**

Students will examine elements of business, identify organizational structures and apply management skills while developing business plans, financial reports and strategic goals for new ventures or existing businesses. Learners will use marketing concepts to evaluate the marketing environment and develop a marketing plan with marketing channels, product approaches, promotion and pricing strategies. Throughout the course, students will apply concepts of ethics and professionalism while implications of business regulations will be identified.

*Prerequisite- None*

**AG 4- MECHANICAL PRINCIPLES (ELE)****1.25 Credits, Full Year****12**

Students will engage in the mechanical principles utilized in animal and plant production systems. They will learn electrical theory, design, wiring, hydraulic and pneumatic theory, along with metallurgy in relation to hot and cold metals. Students will apply knowledge of sheet metal fabrication applicable to the agricultural industry along with identify, diagnose, and maintain small air-cooled engines. Throughout the course, students will learn critical components of site and personal safety as well as communication and leadership skills.

*Prerequisite- None*

**REAL WORLD 101 (ELE)****½ Credit- ½ Year****10,11,12**

A semester course designed to expose students to possible decision-making scenarios that they may face after high school. Topics covered may include buying/renting a place of residence; purchasing/leasing an automobile; basic household maintenance and repairs.

**WOODWORKING (ELE)****½ Credit- ½ Year****10,11,12**

This course provides students with an in-depth introduction to the woodshop and the student will gain practical knowledge needed to work on their own projects or continue on with lifelong skills in woodworking and construction. Students will construct various teacher assigned projects as well as the opportunity to create, design and build personal projects of their choice with teacher guidance and close supervision.

**ADVANCED WOODWORKING (ELE)****½ Credit- ½ Year****10,11,12**

This is an excellent foundation course for a career in woodworking or construction. It is designed to instruct students in the areas of reading project drawings, knowledge of woods and uses, calculations of materials, numerous joinery designs, wood lamination and project procedures. A major emphasis will be placed on shop safety, proper hand and power tool usage and wood processes. This course provides students with an in-depth introduction to the woodshop and the student will gain practical knowledge needed to work on their own projects or continue on with lifelong skills in woodworking and construction. Students will construct various teacher assigned projects as well as the opportunity to create, design and build personal projects of their choice with teacher guidance and close supervision.

*Prerequisite: Passing Woodworking*

**LEADERSHIP ELECTIVE & SENIOR WORK CAPSTONE****LEADERSHIP ACADEMY (ELE)****½ Credit- ½ Year****11,12**

Leadership academy will build upon two-years of high school/social experience. The class will direct student's efforts toward school, community, and individual leadership, teamwork, team-building, and relationship enhancement. Students will work together to coordinate school-wide projects, community support events, and brainstorm ideas to create a more accepting and positive school environment. Intertwined will be high school and college level leadership principles, real world news events, and classroom discussions around true-to-life leadership issues. Students will explore personal attitudes and change management.

**SENIOR CAPSTONE ACADEMY****1-3 Credit(s)****12**

This class is available to seniors only. The Senior Capstone Academy has a multifaceted assignment that serves as a culminating academic and intellectual experience for students. This academy requires a part time job with a minimum of 5 hours per week. This academy does not count towards athletic eligibility. You must be in good credit standing in order to participate.