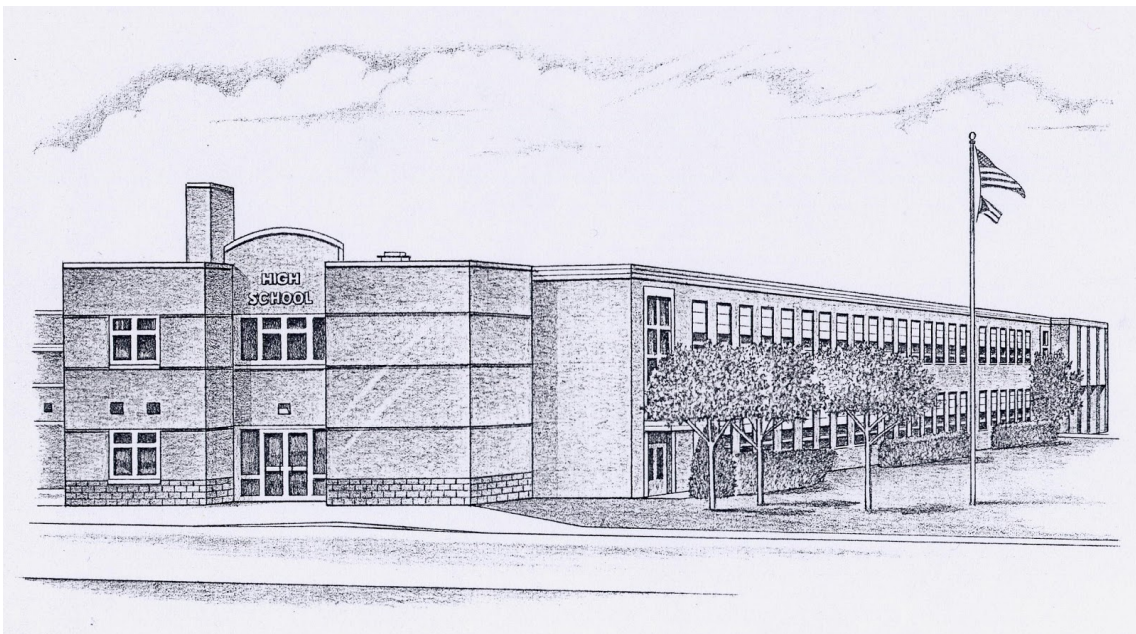


# James A. Garfield H.S. Curriculum Guide 2018-2019

January 24, 2018



---

**James A Garfield High School**

10233 State Route 88  
Garrettsville, OH 44231

**Phone Numbers**

Athletic Office	330-527-0039
Attendance Office	330-527-0027
Main Office	330-527-4341
Special Services	330-527-5524
Transportation Office	330-527-4250

**District Administration**

Ted Lysiak	Superintendent
Sue Boyle	Director of Special Services

**High School Administration**

Kathleen Kisabeth	Principal
Jim Pflieger	Assistant Principal/Athletic Director

**High School Guidance Counselors**

Renee Bell	Grades 10-12
Shelby Scirocco	Grades 7-9

**Board of Education**

Guy Pietra	President
David Vincent	Vice President
Patricia Brett	
Gary Foy	
Deral White	

**High School Website**

<http://www.jagschools.org/o/jag-high-school>

**District Website**

<http://www.jagschools.org>

The James A. Garfield Schools are an equal opportunity provider & employer.

## Table of Contents

Graduation Requirements.....	4-5
Diploma Levels.....	5-6
College Credit Plus.....	6-9
College in High School/Dual Credit.....	6-9
Credit Flexibility.....	9
Classification of Students.....	9
College Preparatory Curriculum.....	9-10
Career & Technical Education.....	10
Maplewood Career Center Admissions.....	10
Maplewood General Information.....	10
Registration Process.....	11
Schedule Changes.....	11
Grade Point Average and Class Rank.....	12-14
Semester/Yearly Grade Calculations.....	14
Athletic Eligibility.....	14
Course Descriptions	
Art and Photography.....	15-17
Business.....	17-18
Computers.....	18-19
Guidance.....	19-20
English.....	20-24
Health / Physical Education.....	24-25
Industrial Arts.....	26
Mathematics.....	27-30
Music.....	30-31
Science.....	31-34
Social Studies.....	34-37
World Languages.....	37-39
Appendix A.....	40-41

## Credit Requirements

It is the student's responsibility to see that requirements for graduation are met. The Guidance and Counseling Department makes every effort to keep students and parents informed. However, the final responsibility rests with the student and parents. If you have questions regarding scheduling or other questions, please contact Renee Bell ([rbell@jagschools.org](mailto:rbell@jagschools.org)) or Shelby Scirocco ([sscirocco@jagschools.org](mailto:sscirocco@jagschools.org)).

---

### Minimum Requirements for Graduation

English	4 Credits	Health	0.5 Credit
Mathematics*	4 Credits	P E	0.5 Credit
Science**	3 Credits	Electives	5 Credits
Social Studies***	3 Credits	Fine Arts	Required as one of your elective credits****

Total: 20 Credits

\*Mathematics units must include 1 unit of Algebra II or the equivalent of

\*\*Science units must include 1 unit of Physical Science, 1 unit of Life Science and 1 unit advanced study in one or more of Chemistry, Physics, Advanced Biology, or Earth Science

\*\*\*Social Studies units must include ½ unit of American History and ½ unit of American Government

\*\*\*\*Maplewood students are exempt from the fine arts credit

All students must receive instruction in Economics and Financial Literacy (covered in Government).

The James A. Garfield School District has adopted a policy that exempts students who participate in interscholastic athletics, band or cheerleading for two full seasons from the physical education requirement. Students must take another course of at least 60 contact hours in its place.

---

## Graduation Requirements

# Earning an Ohio High School Diploma Classes of 2018 and beyond

*There is no one-size-fits-all way to graduate. Ohio gives you several options to qualify for a high school diploma. Choose the way that works best for you!*

To earn a high school diploma in Ohio, you must complete courses and then choose an option on the right to show that you are ready for college or a job. Here's what you need to do to graduate. Your school counselor will give you more details.

### Complete Courses

Take and earn a state minimum of 20 credits in specific subjects.

English language arts	4 credits
Health	½ credit
Mathematics	4 credits
Physical education	½ credit
Science	3 credits
Social studies	3 credits
Electives	5 credits

### Other Requirements

You also must receive instruction in economics and financial literacy and complete at least two semesters of fine arts. Your district may require more than 20 credits to graduate.

### Show That You Are Ready

Use at least one option to show that you are ready for college or a job.

#### Ohio's State Tests

Earn at least 18 points on seven end-of-course state tests. End-of-course tests are:

<b>Algebra I or Integrated Math I</b>	<b>English I</b>
<b>Geometry or Integrated Math II</b>	<b>English II</b>
<b>American Government</b>	<b>Biology</b>
<b>American History</b>	

Each test score earns you up to five graduation points. You must have a minimum of four points in math, four points in English and six points across science and social studies. Your school and district receive grades on the Ohio School Report Cards for all students' scores and participation on state tests.

OR

#### Industry credential and workforce readiness

Earn a minimum of 12 points by receiving a State Board of Education-approved, industry-recognized credential or group of credentials in a single career field and earn a 13 on WorkKeys, a work-readiness test. The state of Ohio will pay one time for you to take the WorkKeys test.

OR

#### College and career readiness tests

Earn the "remediation-free" scores\* on either:

<b>ACT</b>	<b>SAT</b>
English - 18 or higher	Writing - 430 or higher
Mathematics - 22 or higher	Mathematics - 520 or higher
Reading - 22 or higher	Reading - 450 or higher

Your district will choose either the ACT or SAT for all students in your district to take for free during a one-time statewide spring test in grade 11.

\*Ohio's university presidents set these scores, which are subject to change.

and

You have choices. Check them out at [education.ohio.gov](http://education.ohio.gov), search *graduation requirements Classes of 2018 and beyond*. Then talk to your school counselor.

August 2016

## Honors Diploma Criteria – Class of 2018, 2019, 2020

An honors diploma will be granted if a student has met the requirements for a regular diploma, passed all state testing requirements and has met at least seven of the following eight criteria for a college preparatory or seven of the following eight criteria for a career-technical education curriculum.

High School Academic Diploma with Honors (must meet 7 of the 8 criteria)		Career Technical Diploma with Honors (must meet 7 of the 8 criteria)	
Subject	Criteria	Subject	Criteria
English	4 credits	English	4 credits
Math	4 credits, including Algebra I, Geometry, Algebra II and another high level course	Math	4 credits, including Algebra I, Geometry, Algebra II and another high level course
Science	4 credits, including Physics and Chemistry	Science	4 credits, including 2 credits of advanced science
Social Studies	4 credits	Social Studies	4 credits
World Language	3 credits, including at least two credits in each language studied	Career Technical	4 credits 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.
Fine Arts	1 credit	Grade Point Average	3.5 on a 4.0 scale
Grade Point Average	3.5 on a 4.0 scale	ACT/SAT Score (exclude writing section)	27 ACT/1210 SAT
ACT/SAT Score (exclude writing section)	27 ACT/1210 SAT	Additional Assessment	Achieve the proficiency benchmark established for the appropriate Ohio Career-Technical Competency Assessment or the equivalent.

### Honors Diploma Criteria – Class of 2021 & Beyond

See Appendix A

### College Credit Plus

Dual Credit classes allow high school students to enroll in a college course and earn college credit while still in high school. This may be done in multiple ways:

- The student may take Dual Credit courses on our campus
- The student may take classes at the college or university of their choosing
- The student may take classes online
- The student may take any combination of these
- The student may take classes at multiple postsecondary institutions

Interested students and their parents are required to meet with their school counselor to review guidelines. Following the informational meeting, students who wish to participate in the program are required to complete an intent form (available in the counselor's office). This form requires signatures of the student,

a parent, school counselor, and must be completed and returned to the counselor's office no later than **March 30<sup>th</sup>** of the school year preceding the year in which the student plans to participate in the program. **Students must be accepted as a CCP student at the individual institution they wish to attend.**

Students must also adhere to the eligibility requirements set forth by the OHSAA and the James A. Garfield Board of Education to participate in athletics.

James A. Garfield High School has partnered with Hiram College and Cleveland State University to offer JAG students the opportunity to take courses for both high school and college credit **on our campus**. All dual credit classes that take place on our campus will be taught by a James A. Garfield teacher at the high school, as approved and certified by the respective departments at each university. Students will remain at the high school for all instruction. The curriculum for the college course will be followed in order to offer college credit. Students will take the university final at the completion of the course. Students successfully completing the course will receive college credit. The student will have a transcript reflecting the credits earned and a college GPA. The grade in the dual credit course will also be reflected as the grade earned as the JAG course and will be calculated into the student's cumulative high school GPA. **If a student is not accepted to the partner institution associated with a course offered on our campus, they may remain in the class and earn high-school only credit on a weighted GPA scale.**

### **Course Offerings:**

The following courses are offered as dual credit at JAG HS with credits earned through Hiram College and Cleveland State University:

Dual Credit Biology (HC)	Dual Credit Calculus (HC)
Dual Credit Psychology (HC)	Dual Credit Statistics (HC)
Dual Credit French (HC)	Dual Credit Pre-Calculus (HC)
Dual Credit Computer Science (CSU)	
Dual Credit Crossroads: Writing in the Liberal Arts (HC)	

### **Costs and Grades of College Credit Plus:**

Students have two options for College Credit Plus

Option A: allows students to take classes for college credit **ONLY** at their own expense.

Option B: allows students to take college classes for **BOTH** high school and college credit.

Option A Cost: The rate of credit hours per the higher education institution you wish to attend

Option B Cost: Students will **NOT** be required to pay for the cost of tuition, textbooks, materials, or fees associated with such courses. (Fees will be

assessed if the student does NOT pass the class and/or does not return the textbook to the school).

Option A Grades: grades for courses taken under Option A are not included on the high school transcript nor do they affect GPA.

Option B Grades: grades for courses under Option B (for high school as well as college credit) will be included in calculations of GPA and class rank and may affect eligibility for graduation.

CCP forms can be found online on the school counselor's website. Mrs. Bell's website can be found under the high school staff directory.

### **Procedural Guidelines:**

- Interested students and their parents are required to meet with their school counselor to review guidelines
- Attend an informational meeting
- Fill out the intent form (available in the counselor's office)
- Return no later than March 30th of the school year preceding the year in which the student plans to participate in the program
- Student must have a qualifying GPA and ACT score that meets the requirements of the university in which they are attending

### **Requirements:**

Hiram College:

Application and credential review is holistic and there is no single set of fixed criteria that solely determines admissibility to Hiram College. Each admission application and its supporting credentials are carefully read and given individual consideration. Hiram College reserves the right to make the final determination of a student's admissibility to the College.

Cleveland State University:

- Overall GPA of 2.3 on a 4.0 scale
- Composite ACT score of 16 or higher
- ACT English score of 20
- ACT Math score of 22 or higher
- SAT critical reading and math score of 770
- SAT critical reading score of 470 AND SAT math score of 520

### **College Credit Pathways:**

Below are possible examples of ways students can earn up to 15 or 30 college credit hours. There is flexibility in these pathways and if students are interested in earning all 15 or 30 hours they should discuss these pathways with their counselor.

### **Possible 15 Hour Pathway**

English Composition 1	3 hours
Calculus or College Mathematics	3 hours
Humanities or Fine Arts Course	3 hours
Social Science Course	3 hours
Biology I	3 hours

### **Possible 30 Hour Pathway**

15 hours from list above	15 hours
English Composition 2	3 hours
Calculus II or Statistics	3 hours
Humanities or Fine Arts Course	3 hours
Social Science Course	3 hours
Biology II or Physics or Chemistry	3 hours

---

### **Credit Flexibility Options**

Credit Flexibility is designed to broaden the scope of curricular options available to students, increase the depth of study available for a particular subject and tailor the learning time or conditions needed to customize students' needs and interests. Credit flexibility options are designed for those students who demonstrate the ability, interest, and maturity to accept personal responsibility for their learning in a selected curricular area and have the opportunity to pursue it outside of James A. Garfield High School. If there are any questions pertaining to the James A. Garfield credit flexibility options, please contact the guidance counselors.

---

### **Classification of Students**

Students are required to be scheduled in a class for six (6) periods per day.

- This translates into a Minimum load for Freshmen & Sophomores: 5 3/4 credits per year
- Minimum load for Juniors: 6 credits per year
- Senior Exception: 5 credits with the option to have an adjusted school day if the student is in good standing for graduation, has good attendance, and/or passed state testing requirements
- Any student taking less than 6 credits must have it approved by the administration.

---

### **College Preparatory Curriculum**

Recommendations for Ohio's State-Assisted Universities

College-bound students should be aware that the state universities in Ohio (Akron, Bowling Green, Central State, Cincinnati, Cleveland State, Kent, Miami,

Ohio State, Ohio University, Shawnee, Toledo, Wright State, and Youngstown) endorse the minimum core curriculum for college preparation in Ohio, which consists of the following:

English	4 credits
Math	4 credits (Algebra, Geometry, Algebra II, 4 <sup>th</sup> Required Math Course)
Science	3 credits (Physical Science, Biology, Chemistry)
Social Studies	3 credits
World Language	2 credits of the Same Language
Visual/Performing Arts	1 credit (Fine Arts Curriculum)

Private and out-of-state colleges and universities may require more extensive preparation in specific subject areas (e.g., 3 credits of world language). Check with the college or university of your choice for additional information.

### College Preparatory Pathways

Please see the appendix for a suggested/required pathway for each core subject.

### Career & Technical Education

The following curriculum is designed for those students planning to attend their 11<sup>th</sup> & 12<sup>th</sup> grade at Maplewood Career Center for Career & Technical Education.

Grade 9		Grade 10	
English 9	1 Credit	English 10	1 Credit
Algebra I	1 Credit	Geometry	1 Credit
Physical Science	1 Credit	Biology I	1 Credit
Modern World History	1 Credit	American History	1 Credit
Physical Education I	0.25 Credit	Physical Education II	0.25 Credit
Electives	1.5 Credit	Health	0.5 Credit
		Electives	1 Credit

### Maplewood Career Center Admissions

Two-Year Program - beginning in Grade 11

#### Junior Year

Lab 3 Credits  
 English 1 Credit  
 Math 1 Credit

#### Senior Year

Lab 3 Credits  
 English 1 Credit  
 Math 1 Credit

A third credit of Science and Social Studies will be taken during the Junior and Senior years.

## **Maplewood General Information**

### **Purpose**

Maplewood Career Center was established to provide a broad range of career and technical preparation programs for students who want to prepare for career employment immediately after high school.

### **Admissions Requirements**

Any student who is 16 years old or older by October 1st of the school year, has attended two years of high school, and has earned at least 7 credits, is usually eligible for admission to Maplewood. Students will be accepted conditionally with 6 credits if the 7<sup>th</sup> credit is completed prior to the beginning of the following school year.

### **Application Procedures**

Eligible students should contact their home school guidance counselor to apply.

### **Expenses**

There is no tuition charge for high school students from a participating school district. Students may be required to purchase tool kits or other special items needed for certain courses.

### **Academic Electives**

Maplewood offers most students the opportunity to enroll in one additional academic class during each year at Maplewood. Students planning to attend college after graduation or students who are short credits for graduation may elect to schedule an additional class. Maplewood's goal is to prepare students both academically as well as vocationally for employment after graduation.

### **Transportation**

Students will be transported by bus from their home to and from Maplewood each day. A limited number of work experience programs require students to furnish their own means of transportation.

### **Student Activities**

Students are encouraged to participate in co-curricular activities and commencement (graduation) at Garfield. In addition, Maplewood also offers many clubs for the students.

### **Graduation**

Students remain members of Garfield, and graduate from their home school. In addition to their high school diploma, students receive a vocational certificate awarded by Maplewood. Full-time employment, potential self-employment, apprenticeship, technical school, and college are some of the opportunities open to the career center graduate.

---

## The Registration Process

During the scheduling process, students are only requesting classes. No student is guaranteed that any course requested will be available. Students may have to make alternative selections at some time during the scheduling process. Some students may be assigned to specific classes for academic reasons, because of scheduling conflicts, or because classes may be offered in alternate school years. Classes may also be added to incomplete schedules. While the intent of the registration process is to give the widest possible range of choices to the student, the practical matter of building a schedule for the high school staff and students may require necessary changes in individual student schedules. Requests for a specific teacher will not be considered before, during, or after the registration is completed.

---

## Schedule Changes

Schedule changes, adds and drops, will be handled by the guidance counselor.

### Procedure

1. Schedule changes will only be considered during the 1<sup>st</sup> week of each semester for electives. Core courses (Math, English, Science, History, AP and/or CCP) courses may be changed until interims of the 1st nine weeks with a meeting with student, parent, teacher and counselor.
2. Students must turn in a completed add/drop form to their counselor.
3. An appointment must be made with a counselor to arrange an alternative schedule.
4. After the 1st week of each semester, no classes will be added and the credit requirement must be maintained. Students dropping a course after the 1st week of the semester will receive a “WF” (withdraw fail) on their transcript.

**Exceptions to this policy can be made depending on specific circumstances.**

---

## Grade Point Average and Class Rank

GPA is determined by adding the quality points and dividing by the credits earned. The quality points are determined by multiplying the value assigned by the grade and the value of the credit. Class rank is based on all courses studied in grades 9-12 where letter grades are issued. **Final rank** is computed at the completion of **eight** semesters.

### Non-Weighted Classes

- 0.25 credit x 4.0 = 1 quality point
- 0.50 credit x 4.0 = 2 quality points
- 1 credit x 4.0 = 4 quality points

### Weighted Classes

- 1 credit x 5.0 = 5 quality points

### Example GPA calculation

English 9	1 credit	88%	3.5 QP
PE	0.25 credit	91%	0.95 QP
Algebra I	1 credit	79%	2.6 QP
Modern World History	1 credit	98%	4.0 QP
Desktop Applications	<u>0.50 credit</u>	65%	<u>0.70 QP</u>
Total	3.75 credit		11.75 QP

11.75 QP divided by 3.75 Credits = 3.13 GPA

### **Grading Scale**

<b><u>Letter Grade</u></b>	<b><u>% Range</u></b>	<b><u>Point Value</u></b>	<b><u>Weight Point Value</u></b>
A	95-100	4.0	5.0
A-	90-94	3.8	4.8
B+	87-89	3.5	4.5
B	83-86	3.2	4.2
B-	80-82	3.0	4.0
C+	77-79	2.6	3.6
C	73-76	2.3	3.3
C-	70-72	2.0	3.0
D+	67-69	1.7	2.7
D	63-66	1.4	2.4
D-	60-62	1.0	2.0
F	<60	0	0

Weighted Classes Include:

- All AP Classes
- All College Credit Plus Classes (Dual Credit & Post Secondary)

The GPA is calculated at the end of each semester.

### **CUM LAUDE SYSTEM**

Outstanding student achievement will be recognized with the distinctions of Cum Laude, Magna Cum Laude, and Summa Cum Laude. The following chart illustrates how the grade point averages will be calculated for all students. Students will be recognized at commencement according to their GPA based upon the following:

Summa Cum Laude	GPA of 4.00 or Above
Magna Cum Laude	GPA of 3.75-3.99
Cum Laude	GPA of 3.5-3.75

The top five students according to class rank after seven semesters will be the five commencement speakers at graduation.

Cum Laude honors are based on grades earned at the end of the **seventh** semester of a student's high school career.

### **Class Rank**

Class rank will be used for scholarship purposes, commencement speakers, and official transcripts.

---

### **Semester/Yearly Grade Calculations**

#### Semester Calculation

Average of 1<sup>st</sup> nine weeks = 40% of total grade

Average of 2<sup>nd</sup> nine weeks = 40% of total grade

Average of semester exam grade = 20% of final grade

Example Calculation:

1<sup>st</sup> 9 weeks = 78% x .40 = 31.2

2<sup>nd</sup> 9 weeks = 89% x .40 = 35.6

Exam = 53% x .20 = 10.6

Grade = 77%

---

#### **Yearly Calculation**

(Semester 1 + Semester 2) divided by 2

Example Calculation: 77% + 89% divided by 2 = 83%

---

#### **Athletic Eligibility**

Athletes must pass 5 credits *not including Physical Education I & II* the preceding 9 weeks to be eligible to participate in athletics.\* For eligibility purposes, ½ credit courses count as 1 credit.

\*Summer School will not qualify for the last 9 weeks grades.

# **COURSE DESCRIPTIONS**

## **Dual Credit and AP Offerings**

Dual Credit Computer Science (page 19)  
Dual Credit Crossroads (page 23)  
AP English (page 22)  
Dual Credit Pre-Calculus (page 29)  
Dual Credit Calculus (page 29)  
Dual Credit Statistics (page 30)  
Dual Credit Biology (page 32-33)  
AP U.S. History (page 35)  
AP U.S. Government (page 36)  
Dual Credit Psychology (page 36)  
Dual Credit French (page 37-38)

---

## **Art and Photography Department**

### ***Art I***

Grade Level: 9,10,11,12

Credit: 1

Prerequisite: None

Length: Year

Course Number: 0010

Fee: \$30.00

Art I is a basic course in drawing and design necessary for further study in art. In specific assignments students demonstrate their understanding of art concepts and develop good craftsmanship and care of equipment. There will be an introduction to art criticism. All students will be expected to spend at least 1-2 hours per week out of class on their weekly sketchbook drawing.

---

### ***Art II***

Grade Level: 10,11,12

Credit: 1

Prerequisite: Art I

Length: Year

Course Number: 0015

Fee: \$30.00

The second-year course is for students interested in pursuing a career in art. The course will be divided into four groups: 1) drawing, 2) painting, 3) sculpture and pottery, 4) commercial art. A stronger concentration in each area will be made so as to achieve projects of higher quality than in Art I. Students will have a weekly sketchbook assignment to be completed outside of class.

---

### ***Art III***

Grade Level: 11,12

Credit: 1

Prerequisite: Art II

Length: Year

Course Number: 0020

Fee: \$30.00

The third-year course is for students interested in pursuing a career in art.

Students will experiment and explore new areas of art along with developing individual preferences. Commercial art, printmaking, crafts, mixed media, performance art, and a continuation of previously studied media will be presented. Students will have a weekly sketchbook assignment to be completed outside of class.

---

### ***Art IV***

Grade Level: 12

Credit: 1

Prerequisite: Art III

Length: Year

Course Number: 0023

Fee: \$30.00

The fourth-year course is for students interested in pursuing a career in art. Portfolio preparation will be stressed as well as preparation of entries in various contests and exhibitions. An advanced approach to previously studied media and techniques is intended to develop individual style. Art criticism of professional and personal work will be studied. Journals/sketchbooks will be kept.

---

### ***Crafts I***

Grade Level: 10,11,12

Credit: 0.5

Prerequisite: Art I

Length: Semester

Course Number: 0040

Fee: \$35.00

Crafts are often thought of as useful objects that an artist made beautiful. The art you will create in this class is intended to be used and enjoyed, rather than hung on a wall. Participants will explore a variety of media related to crafts. Depending on the class size and students' interest, activities may include reed basket making, coiled basket making, fabric painting, pulled rug-design and ceramics.

---

### ***Crafts II***

Grade Level: 10,11,12

Credit: 0.5

Prerequisite: Art I

Length: Semester

Course Number: 0041

Fee: \$35.00

Participants will further explore the art of craft making. Activities may include stained glass, jewelry making, decoupage, wood carving and collage.

---

### ***Building & Design***

Grade Level: 9, 10, 11, 12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0045

Fee: \$35.00

This course will be an interdisciplinary class that combines fine art elements, design principles and building techniques. The class will be team taught and alternate its time in the industrial arts room learning basic woodworking and electrical skills and the art room where students will design and finish projects using a variety of art materials. The class will offer many opportunities for

students to envision and build their own creations with help from the teachers. Students with a strong interest in building and designing will be most successful.

---

### ***Digital Photography I***

Grade Level: 9,10,11,12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0031

Fee: None

This is an introductory class that will introduce students to the world of digital images and how they are used and created. Students will learn how to create a variety of digital images. We will use some of the latest online editing programs and apps to learn how to edit a photo into a quality digital image. We will cover topics such as composition and its various rules, focus, clarity and the ability to recognize what makes a good photograph. **This class will require students to have their own digital camera and acceptable smartphone at the start of class.**

---

### ***Digital Photography II***

Grade Level: 9,10,11,12

Credit: 0.5

Prerequisite: Successful completion of Digital Photography I

Length: Semester

Course Number: 0032

Fee: \$15.00

This class will interest students who are looking to expand on the photo editing techniques learned in Digital Photography I. Students will create a portfolio of the best of their work which will consist of 5 8x10 color prints. They will have the opportunity to independently explore a variety of techniques to enhance their photos. Self guided study will combine with classroom instruction to build upon what they previously learned in Digital Photography I. **This class will require students to have their own digital camera or acceptable smartphone at the start of class.**

## **Business Department**

### ***Accounting 1***

Grade Level: 10,11,12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0465

Fee: None

Fundamentals of Accounting is an introductory accounting course that presents a complete accounting cycle for a proprietorship and partnership using a debit/credit approach. Topics include analyzing transactions, journalizing, posting, petty cash, financial statements, and adjusting and closing entries. This class incorporates computer programs such as Microsoft Excel and Automated Accounting to bring more of a technological approach to accounting.

*Fundamentals of Accounting* is a great starter course for students planning on studying accounting at the college level.

## ***Accounting 2***

Grade Level: 11,12

Credit: 0.5

Prerequisite: Successful completion of Accounting I

Length: Semester

Course Number: 0466

Fee: None

Accounting 2 covers the accounting cycle for a merchandising business organized as a corporation. Topics include journalizing purchases, cash payments, journalizing sales, subsidiary ledgers, payroll records, taxes, and distributing dividends. Throughout the course, students must pass a 3 part C.G.A. (Certified Garfield Accountant) exam to show mastery in the subject area.

---

## **Computer Department**

### ***Intro to Web Design***

Grade Level: 9,10,11,12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0111

Fee: \$5.00

Introduction to Web Design is a course designed to teach students how to code and design a functional website. Students will be expected to work independently as well as in groups to create websites using HTML coding. The course will include lessons on HTML accompanied by activities to reinforce what the students will be taught, individual web site projects, and a group project. By the end of the semester students should feel comfortable writing HTML code and using image editing software to create web sites for both personal and educational uses.

---

### ***Advanced Web Design***

Grade Level: 10,11,12

Credit: 0.5

Prerequisite: Successful completion of Web Design

Length: Semester

Course Number: 0112

Fee: \$5.00

Advanced Web Design takes what students have learned in Web Design and expands on it. In addition to going more in depth on HTML5 coding, Advanced Web Design students will learn Macromedia Flash to create custom animations and slideshows using ActionScript as well as the ability to control the styles of the web site using CSS. Students will also be introduced to online HTML / CSS validation services to check their codes for errors and make sure it is up to current web standards. Using these three programming languages, students will be able to create professional looking websites for business or personal use.

---

**Desktop Applications**

Grade Level: 9,10,11,12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0113

Fee: \$5.00

Desktop Applications is a one semester course that teaches students how to use the computer as a productivity tool. This course will cover a wide range of features using Microsoft Office, Google Apps, touch typing, image / video editing software, as well as an introduction to computer programming using JavaScript. Student will also keep up to date with an ever changing technological world by reviewing and reacting to technology related articles in the news and on the web. Finally, students will learn important search strategies to assist them in researching information in an online setting.

---

**NXT Programming (Robotics)**

Grade Level: 10,11,12

Credit: 0.5

Prerequisite: B or better in Web Design or Desktop Apps

Length: Semester

Course Number: 0114

Fee: \$10.00

In NXT Programming students will use a hands-on approach to introduce basic concepts in robotics, focusing on micro controllers, autonomous mobile robots and real world applications. Information presented in class will be linked to lab experiments where students will work in teams to build and test increasingly more complex LEGO-based mobile robots. Depending on class size students will work independently or in groups using pair programming techniques to complete assignments. An individual robotics research project will culminate the experience and showcase the students growth at the end of the semester.

---

**Computer Science Principles (Dual Credit)**

Grade Level: 11, 12

Credit: 1

Prerequisite: Advanced Web Design or NXT Programming

Length: Year

Course Number: 0115

Fee: None

Computer Science Principles is best suited for any 10th - 12th grade student who is considering a major in computer science or has an interest in learning more about computer science principles. This class will cover the fundamentals of computer science. By using a simple programming language called Alice, students will get the chance to direct the computer very specifically. Alice will let you tell a story by making an "animated movie" or a "video game" (an interactive animation). Alice is simpler than other ways of controlling a computer -- but the ways it works underlies all the more complex applications or games you use on the computer. By learning how Alice works, students will be able to "see" how other computing programs, applications and tools work.

---

## Guidance Department

### ***College & Career Planning***

Grade Level: 10,11,12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0600

Fee: None

Students will explore a variety of issues involving possible career and college options, beginning with a self-inventory of strengths and weaknesses. They will look at job outlooks and research career paths others have taken. Students will hear from a variety of speakers, visit a college, tour a manufacturing facility, practice public speaking, set up and travel to individual job shadowing experiences, participate in mock interviews, and write their resumes. The final unit of the class will allow students focus on their next steps (researching jobs, career training, applying for colleges, etc. Students will need to be organized, motivated and hard-working.

---

### ***ACT Prep***

Grade Level: 10,11,12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0605

Fee: \$16.50

The ACT Prep class is designed to familiarize students with the ACT test. Well-prepared students are more likely to score higher on the ACT, which may increase their chances of receiving scholarships and enable them to have more options when selecting a college. Students will learn test-taking strategies, review English, Reading, Math, and Science content, take practice tests and discover ways to reduce test anxiety. The \$16.50 fee will be used to purchase either ACT Prep software or an ACT Prep book.

## English Department

### ***English 9***

Grade Level: 9

Credit: 1

Prerequisite: None

Length: Year Course

Number: 0305

Fee: None

This course provides tools for communication acquired through inquiry and research. The students will use technology, library skills, and study skills to develop their critical thinking, speaking, and writing ability. They will learn strategies that enhance their independent reading and writing. Students will discover different genres, and how to write to accomplish different objectives.

**English 9 Advanced**

Grade Level: 8, 9

Prerequisite: Selection process

Course Number: 0310

Credit: 1

Length: Year

Fee: None

This course provides many of the same tools and skills obtained in English 9 for communication, use of technology, library skills, study skills and learning strategies that enhance students' reading and writing. This course follows an accelerated pace and includes a great deal of independent reading with a heavy emphasis on varied forms of writing. To be accepted into this class, the following will be considered: 8<sup>th</sup> Grade Language Arts Grade, 8<sup>th</sup> Grade Literature Grade, Teacher Recommendation, and the most recent standardized test score.

---

**English 10**

Grade Level: 10

Prerequisite: Successful completion of English 9

Course Number: 0320

Credit: 1

Length: Year

Fee: None

This course provides students an opportunity to develop their writing skills as they study a variety of genres of literature including short stories, poetry, drama, and Holocaust literature. Sophomores will also engage in the "source citation" step of the research process.

---

**English 10 Advanced**

Grade Level: 9, 10

Prerequisite: Successful completion of English 9A or teacher recommendation

Course Number: 0321

Length: Year

Fee: None

Credit: 1

This course provides students an opportunity to develop their writing skills as they study a variety of genres of literature including short stories, poetry, drama, and Holocaust literature. This class will have an emphasis on research and analytic writing.

---

**English 11**

Grade Level: 11

Prerequisite: Successful completion of English 10

Course Number: 0335

Credit: 1

Length: Year

Fee: None

The eleventh grade college preparatory course focuses on the new Common Core academic standards that focuses on analytical reading and formal writing skills needed for college. Students will read approximately five major works of Literature and respond to them through a variety of writing techniques. A research project will be completed in the second semester. Oral presentations will be a key component in the curricula. Skill Development for the SAT and ACT will be studied.

---

**English 11 Advanced**

Grade Level: 10, 11

Credit: 1

Prerequisite: Successful completion of English 10A or teacher recommendation

Course Number: 0336

Length: Year

Fee: \$10.00

This course is a college preparatory course and focuses on many of the same elements as English 11 and is aligned with the Common Core academic standards that concentrate on the analytical reading and formal writing skills needed for college. This course follows an accelerated pace, has an emphasis on independent reading and is writing intensive. Students will read a varied array of major literary works and respond to each through a variety of writing techniques. Many writing assignments will involve elements of research. Oral presentations will be a key component in the curricula. Skill Development for the SAT and ACT will be studied.

---

**English 12**

Grade Level: 12

Credit: 1

Prerequisite: Successful completion of English 11

Length: Year

Course Number: 0340

Fee: None

The twelfth grade college preparatory course focuses on the new Common Core academic standards focusing on literature and composition. This course draws upon world classic and modern literature through the short story, novel, drama, and poetry. Composition focuses on various narrative styles as well as an emphasis on persuasive and expository writing. The students will focus on an in-depth evaluation and practice with five of the dominant literary criticism theories using the course literature. The student is expected to become an independent reader and writer throughout the course of the year.

---

**Advanced Placement English**

Grade Level: 11, 12

Credit: 1

Prerequisite: Successful completion of English 11A or teacher recommendation

Course Number: 0350

Length: Year

Exam Fee: \$85.00

This course is designed for academically talented seniors. The curriculum of AP English is enriched and the course prepares the student for the Advanced Placement English test administered each spring. Emphasis is placed on intensive reading, essay writing, and the interpretation of literature and poetry. Student taking this course will be expected to read various novels over the summer and complete readers logs in order to be prepared for class discussions and lectures on the first day of class. Students must perform well on the Advanced Placement exam in order to receive college credit.

---

### ***Creative Writing***

Grade Level: 10,11,12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0361

Fee: None

This course engages students in a wide variety of exercises to enhance students' abilities in expressing themselves creatively through writing. Students will assess and reflect upon the writing process, and read various examples of creative writing. Students will read and write in a vast number of realms such as persuasion, reflection, synthesis and interpretation. Students will also learn techniques for evaluating writing and will use these techniques to provide positive assessments for fellow class members.

---

### ***The Literature of Lyrics in Popular Music***

Grade Level: 11,12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0362

Fee: None

This is not a music appreciation class. It examines and explores the Literature found in popular music. The goal of this class is to make connections between classical literary devices and popular song lyrics. Students will study song lyrics from a variety of genres including Rock and Roll, Country, Folk, Rap, and others. Students will study these as literature, uncovering literary elements such as poetic devices of sound and sense, theme, tone, mood, speaker, etc. The students will write literary analysis of lyrics in order to better understand the complexities of popular music.

---

### ***Mythology***

Grade Level: 11,12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0364

Fee: None

This course will explore the myths and legends of ancient and past cultures such as those of Greece, Rome, Scandinavia, Native America, Eastern Europe and Africa. Students will analyze similarities and differences in these civilizations' beliefs, customs and traditions, as well as focus on the influence and effects that folklore of these societies continues to have on modern day culture.

---

### ***Dual Credit Crossroads: Writing in the Liberal Arts***

Grade Level: 11,12

Credit: 1.0

Prerequisite: Acceptance to Hiram College

Length: Year

Course Number: 0368

Fee: None

Hiram College requirements: DC students should anticipate a minimum of 3-4 papers, totaling 20-25 pages of formal writing and research. Further, DC students will be responsible for approximately 150 pages of reading per week. Writing in the Liberal Arts (WRLA) provides an exposure to college-level intellectual inquiry through an engagement with interesting and important ideas.

Each course is centered on some idea, theme, or topic fundamental to understanding and living. Through the careful and considerate examination of the course topic, the student will learn the following:

- Ideas have complexity and generality
- Ideas are connected to one another, and depend on and illuminate one another: knowledge is interdisciplinary in nature
- Much goes into understanding something well: students need to develop the capacity of critical inquiry
- Histories and traditions of systematic inquiry can guide (and obscure) insight and understanding
- Reflective learning integrates these ideas into various spheres of students' own lives—coursework, career, calling character, and community

---

### ***Crossroads***

Grade Level: 11,12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0367

Fee: None

This course will attempt to break down barriers and build understanding within and among students. In this discussion based class, students will learn about themselves, each other, and begin to understand the significance of intolerance in our world. Students will also explore their roles as victims, perpetrators, and bystanders in issues of intolerance and learn ways to deal with these issues in and out of school.

---

## **Health / Physical Education**

### ***Physical Education I***

Grade Level: 9

Credit: 0.25

Prerequisite: None

Length: Semester

Course Number: 0480

Fee: None

Physical Education I is a required course for all freshmen. The curriculum will consist of softball, basketball, volleyball, physical fitness, soccer and other team sports and activities. ***A Phys. Ed. waiver may be earned by participating in sports, band or cheerleading. See page 4.***

---

### ***Physical Education II***

Grade Level: 10,11,12

Credit: 0.25

Prerequisite: Physical Education I

Length: Semester

Course Number: 0485

Fee: None

A required course where students will be involved with a lifetime sports curriculum such as golf, bowling, physical fitness, etc. The purpose of this course is to help students develop recreational skills which will assist them in making wise use of leisure time. ***A Phys. Ed. waiver may be earned by participating in sports, band or cheerleading. See page 3.***

---

**Advanced Physical Education**

Grade Level: 11,12

Credit: 0.5

Prerequisite: Physical Education I

Length: Semester

Course Number: 0487

Fee: None

This class will build on the foundations learned in PEI and PEII. Students will participate in many different types of athletic activities as determined by the instructor. Students must have passed in PEI to take Advanced Physical Education.

---

**Health**

Grade Level: 10,11,12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0490

Fee: None

This course is a requirement for graduation and should be taken by all sophomores. It deals with the social issues of health and well-being including a study of wellness, physical and emotional health, safety, chemical dependency, sexuality, and choosing medical care, nutrition, fitness, basic anatomy/systems, and abstinence based sexuality. Course includes CPR certification, organ donor information, healthy relationships, and domestic violence identification.

---

**Health and Wellness for Females**

Grade Level: 11,12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0493

Fee: None

This elective course is designed to provide students with opportunities to develop knowledge, skills and necessary attitudes for a lifetime of healthy choices, personal fitness and activity. This class will include health topics, different forms of exercise, nutrition, and overall mental and physical well being.

---

**Personal Fitness**

Grade Level: 11,12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0495

Fee: None

This class is designed to help students participate and plan a healthy lifestyle. This class will include health topics, different forms of exercise, nutrition, and overall mental and physical well being. The class will be tailored depending on the wants/needs of the students in the class.

---

**Strength & Conditioning**

Grade Level: 9, 10, 11, 12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0496

Fee: None

This class is designed to help students participate and plan a yearlong training

---

program for their personal goals. This class will include the proper way to program a weightlifting regimen, perform different forms of lifts, nutrition, and overall mental and physical well-being. Students will create their own weightlifting program and implement to see whether or not it helped them obtain their goals set at the beginning of course.

---

### ***Body & Mind Fusion***

Grade Level: 9, 10, 11, 12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0497

Fee: None

This course consist of ways to reduce anxiety. Students find ways like yoga, pilates, exercise, zumba, meditation, drawings, coloring to reduce stress in their daily lives.

---

## **Industrial Arts Department**

### ***Industrial Arts I***

Grade Level: 9,10,11,12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0705

Fee: \$10.00 (plus wood)

This Industrial Arts I course consists of woodworking, wood identification, and planning/constructing a variety of projects. You will become familiar with the safe operation of all the power and hand tools that are typically used in the woodworking industry. You will also be introduced to a variety of wood types and their uses. We will also cover blueprint reading, tape measure reading, and project design.

---

### ***Industrial Arts II***

Grade Level: 10,11,12

Credit: 1 Prerequisite:

Industrial Arts I

Length: Year

Course Number: 0710

Fee: \$20.00 (plus wood)

This Industrial Arts II course consists of an advanced study of the design, layout, planning and construction of a more complex variety of woodworking projects. It includes a more in depth knowledge of machining and machine processes as well as tool and machine set-up.

---

### ***Industrial Arts III***

Grade Level: 11,12

Credit: 1

Prerequisite: Industrial Arts II

Length: Year

Course Number: 0715

Fee: \$20.00 (plus wood)

This Industrial Arts III course is designed for students to take on more advanced, individual project work. Students will be able to plan, layout and construct projects of their choice using a variety of materials and techniques.

---

### ***General Maintenance I***

Grade Level: 9,10,11,12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0716

Fee: \$10.00

This course is a completely hands-on course designed to introduce students to the typical maintenance and repair of household systems and light construction. This includes surveying, concrete work, bricklaying, wall and floor framing, electrical, plumbing, drywall, insulation and roofing.

---

## **Mathematics Department**

### ***Algebra I***

Grade Level: 8,9

Credit: 1

Prerequisite: None

Length: Year

Course Number: 0765

Fee: None

The fundamental purpose of this course is to formalize and extend the mathematics that students learned in the middle grades. The critical areas, called units, deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend, and students engage in methods for analyzing, solving, and using quadratic functions. The critical areas are as follows: Unit 1- Relationships Between Quantities and Reasoning with Equations, Unit 2- Linear and Exponential Relationships, Unit 3- Descriptive Statistics, Unit 4- Expressions and Equations, Unit 5- Quadratic Functions and Modeling. A scientific calculator is mandatory. **A graphing calculator (TI-Nspire) is highly recommended.**

---

### ***Geometry***

Grade Level: 9,10

Credit: 1

Prerequisite: Algebra I

Length: Year

Course Number: 0780

Fee: None

The fundamental purpose of the course in Geometry is to formalize and extend students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. The critical areas, organized into six units are as follows: Unit 1- Congruence, Proof, and Constructions, Unit 2- Similarity, Proof, and Trigonometry, Unit 3- Extending to Three Dimensions, Unit 4- Connecting Algebra and Geometry through Coordinates, Unit 5- Circles With and Without Coordinates, Unit 6- Applications of Probability. A scientific calculator is mandatory. **A graphing calculator (TI-Nspire) is highly recommended.**

### **Geometry A**

Grade Level: 9,10

Credit: 1

Prerequisite: B or better in Algebra I and/or teacher recommendation

Course Number: 0781

Length: Year

Fee: None

Accelerated Geometry – The depth and design of this course is intended to prepare students for the **Precalculus A** curriculum. The fundamental purpose of the course in Geometry is to formalize and extend students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. The critical areas, organized into six units are as follows: Unit 1- Congruence, Proof, and Constructions, Unit 2- Similarity, Proof, and Trigonometry, Unit 3- Extending to Three Dimensions, Unit 4- Connecting Algebra and Geometry through Coordinates, Unit 5- Circles With and Without Coordinates, Unit 6- Applications of Probability. A scientific calculator is mandatory. **A graphing calculator (TI-Nspire) is highly recommended.**

---

### **Algebra II**

Grade Level: 10,11

Credit: 1

Prerequisite: Geometry

Length: Year

Course Number: 0790

Fee: None

Building on their work with linear, quadratic, and exponential functions, students extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. The critical areas for this course, organized into four units, are as follows: Unit 1- Polynomial, Rational, and Radical Relationships, Unit 2- Trigonometric Functions, Unit 3- Modeling with Functions, Unit 4- Inferences and Conclusions from Data. **A graphing calculator is a mandatory component of the course content standards (TI-Nspire is recommended).**

---

### **Algebra IIA**

Grade Level: 9,10

Credit: 1

Prerequisite: B or better in Geometry A and/or teacher recommendation

Course Number: 0792

Length: Year

Fee: None

Accelerated Algebra II - The depth and design of this course is intended to prepare students for the **Dual Credit College Algebra & Trigonometry** curriculum. Building on their work with linear, quadratic, and exponential functions, students extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties

of logarithms. The critical areas for this course, organized into four units, are as follows: Unit 1- Polynomial, Rational, and Radical Relationships, Unit 2- Trigonometric Functions, Unit 3- Modeling with Functions, Unit 4- Inferences and Conclusions from Data. **A graphing calculator is a mandatory component of the course content standards (TI-Nspire recommended).**

---

### ***Precalculus***

Grade Level: 11-12

Credit: 1

Course Number: 0795

Length: Year

Fee: None

This course involves the in depth study of polynomial, rational, radical, exponential, logarithmic, and trigonometric functions. Students may also study analytic trigonometry, applications of trigonometry, systems and matrices, analytic geometry and discrete mathematics. A graphing calculator is mandatory (TI-Nspire recommended). The prerequisite is Algebra II with a minimum of a C average.

---

### ***Dual Credit Pre-Calculus (Math 197 4 s.h.)***

Grade Level: 11,12

Credit: 1

Prerequisite: Algebra IIA with a minimum of a B average

Algebra II with an A average

Hiram College Mathematics Placement Test – Algebra 16

Course Number: 0796

Length: Year

Fee: None

The depth and design of this course is intended to prepare students for the **Dual Credit Calculus (MATH 198)** curriculum. Topics include: Real and complex numbers; equations and inequalities; linear, quadratic, polynomial, exponential, and logarithmic functions; graphing techniques, systems of equations, binomial theorem, unit circle, angle measurement, similar triangles, trigonometric ratios in the plane, and right triangle trigonometry. Polar coordinates. Cosine and sine laws. Six trigonometric functions and their graphs. Fundamental identities, equation solving and inverse trigonometric functions. Complex number. Real life applications. **A graphing calculator is mandatory (TI-Nspire recommended).**

---

### ***Dual Credit Calculus***

Grade Level: 12

Credit: 1

Prerequisite: Dual Credit Pre-Calculus (MATH 197)

Hiram College Mathematics Placement Test – Algebra 16 and Math

Placement-Trig/Function 9 and Math Placement-Calc Readiness 13

Course Number: 0797

Length: Year

Fee: None

This course is an introduction to Calculus. The main concepts to be studied are limits, continuity, rates of change, derivatives, integrals and applications.

The goals for the course include:

1. Developing an understanding of the fundamental concepts and techniques of

differential and integral calculus.

2. Understanding the importance of differential and integral calculus in a variety of applications.

3. Developing the ability to read mathematics with understanding and to write mathematics understandably.

**A graphing calculator is mandatory (TI-Nspire recommended).** This course also follows the syllabus for the Advanced Placement Calculus Exam (AB). Students may opt to take the AP Exam. The cost of the exam is approximately \$85.00.

---

### ***Dual Credit Statistics***

Grade Level: 11,12

Credit: 1

Prerequisite: Dual Credit College Algebra with a minimum of a B average

Course Number: 0798

Length: Year

Fee: None

A course designed for students from different disciplines who desire an introduction to statistical reasoning. Topics include collecting and summarizing data, concepts of randomness and sampling, statistical inference and reasoning, correlation and regression.

The purpose of this course is for students to learn some basic statistical concepts and methodology. The goals for students in the course include:

1. Developing an understanding of the fundamental concepts in statistics and the applications.
2. Developing data analysis, report writing and critical thinking skills.
3. Developing the ability use the modern computer technology in basic model building, data analysis and decision making.

Extensive use of Microsoft Excel, PowerPoint, Word (or comparable applications) and a graphing calculator will be applicable throughout the course. **A graphing calculator is a mandatory component of the course content standards (TI-Nspire is recommended).**

---

### ***Applied Mathematics***

Grade Level: 11, 12

Credit: 1

Prerequisite: Algebra II

Course Number: 0793

Length: Year

Fee: None

This course consists of the practical application of advanced mathematical concepts including power, exponential, logistic, logarithmic, trigonometric functions and statistics. Following an introductory study of the selected mathematical concepts the students will design and complete a series of projects that involve applying advanced mathematics to evaluate data, develop functioning physical, analytical and graphical models, synthesize conclusions, make inferences, and predict results. Extensive use of Google Applications and a graphing calculator will be applicable throughout the course. A TI-Nspire graphing calculator is optional.

---

## Music Department

### ***Instrumental Music***

Grade Level: 9,10,11,12

Credit: 1

Prerequisite: Successful completion of GMS Band or audition with director

Course Number: 0805

Length: Year

Fee: \$45.00

The high school band performs during the fall as the “Marching Pride”.

Mandatory practices prepare for the season’s performances to include band shows, parades, and football games. During the winter and spring months, students perform in a concert band showcasing their musicianship at concerts and contests. Further performance opportunities are available to our band members, such as solo and ensemble contest, and jazz and pep bands.

Because our students take great pride in fine performances, attendance is a must. Please see the directors if you have any questions. ***A physical education waiver may be earned by participating in sports, band or cheerleading. See page 4.***

---

### ***Chorus***

Grade Level: 9,10,11,12

Credit: 1

Prerequisite: None

Length: Year

Course Number: 0810

Fee: none

This course consists of practice and performance of choral music for class, school, and civic functions. Vocal development and performance skills are stressed. Attendance at several weekend and evening programs is required.

Students must wear a choir uniform for events. The uniform will consist of a choir t-shirt, available for \$8.00 and clean blue jeans without holes.

## Science Department

### ***Physical Science***

Grade Level: 8, 9

Credit: 1

Prerequisite: None

Length: Year

Course Number: 0855

Fee: None

Physical Science is an introductory-level course that is required for all incoming students not selected for Physical Science A, an accelerated course. It will introduce students to basic key concepts in Chemistry, and Physics that provide a foundation for further study in other science courses.

---

### ***Biology I***

Grade Level: 9, 10

Prerequisite: Physical Science

Course Number: 0860

Credit: 1

Length: Year

Fee: None

This course covers all biological fields including cell functions, animal functions, plant functions, genetics, and evolution. This class is required to meet state requirements. This course covers the Life Science objectives required by the Ohio Department of Education. ***Biology I is required for Anatomy & Physiology and DC Biology.***

---

### ***Chemistry***

Grade Level: 10,11,12

Prerequisite: B or better in Algebra I, 10<sup>th</sup> graders-teacher recommendation

Course Number: 0870

Length: Year

Fee: \$26.00

Credit: 1

This course is recommended for the students in the college preparatory curriculum. Emphasis is placed on atomic structure, chemical reactions, calculations involving reactants & products, gases, nuclear chemistry, solutions, acids & bases, and thermodynamics. Fee includes price of goggles. A scientific calculator is required.

---

### ***Environmental Biology***

Grade Level: 11,12

Prerequisite: Biology I

Course Number: 0874

Credit: 1

Length: Year

Fee: \$15.00

This is an elective course for students that are looking for a third science credit. The primary focus is on how life is sustained in different ecosystems. This course will examine a wide range of objectives covering: tropical biology, water ecology, biodiversity, pollution, ecology, biomes, energy, and conservation. Most assessment will be based on projects, research, and labs.

---

### ***Anatomy & Physiology***

Grade Level: 10, 11,12

Prerequisite: Biology I

Course Number: 0875

Credit: 1

Length: Year

Fee: \$30.00

This course is designed to emphasize anatomy and physiology. In the first nine weeks, we will mainly focus on insects. This nine week period will also include a mandatory insect collection. The following grading periods will focus on human physiology and comparative cat anatomy. The cat dissection is also mandatory.

---

### **Physics**

Grade Level: 11,12

Credit: 1

Prerequisite: B or better in Alg 1 & 2 and enrollment in Dual Credit Math or Trig

Course Number: 0880

Length: Year

Fee: \$12.50

This course is recommended for students in the college preparatory curriculum. Emphasis is placed on motion, heat, electricity, energy, sound, light, and atomic structure. The course fee includes a carbonless lab notebook. A graphing calculator is required (TI 83+, TI 83+SE, TI 84, TI 84+SE).

---

### **Dual Credit Biology I**

Grade Level: 11,12

Credit: 1

Prerequisite: Chemistry and Biology I

Length: Semester

Course Number: 0881

Fee: \$20.00

This course is offered in conjunction with Hiram College. It is an introduction to the scientific process as exemplified by the study of ecology and evolution. The scientific process will be used to understand how scientists make progress in understanding nature works and how science differs from other ways of human understanding. Ecology, the sum of the interactions of organisms with their living and nonliving environment, and evolution, how organisms change and adapt to their surrounds over time, will be explored using examples from all kinds of organisms. Laboratory experience will include many opportunities to work on various aspects of the scientific process (hypothesis generation, data gathering and analysis, hypothesis testing) through a focus on the diversity of life.

---

### **Dual Credit Biology II**

Grade Level: 11,12

Credit: 1

Prerequisite: Chemistry and Biology I

Length: Semester

Course Number: 0882

Fee: \$20.00

This course is offered in conjunction with Hiram College. The purpose of this course is to explore the myriad ways organisms reproduce, develop, acquire nutrients and energy, manage waste, respond to the environment, and exhibit distinctive adaptations that have resulted from evolution. One recurring key concept is the conservative nature of all life's processes in all organisms. This is evident in the similarities found in primary energy metabolism (i.e., cellular respiration and photosynthesis), other aspects of metabolism (biomolecular building blocks and the macromolecules they form), reproduction, protein synthesis, energy flow and nutrient cycling, and managing/regulating water intake and retention. All organisms also detect and respond to their environment on many levels (organismal, organ, cellular, and subcellular), and biologists find both similarities and differences among all of life in these respects.

---

### ***Geology***

Grade Level: 11,12

Prerequisite: Biology I

Course Number: 0886

Credit: 1

Length: Year

Fee: None

Geology is an elective course for students needing a third science credit. This course is aligned with the State of Ohio's standards for a Core Geology class. In Geology, students will be introduced to key concepts and theories about Earth while incorporating basic Biology, Chemistry and Physics components. The areas of focus include: Solar system and Earth's beginnings, geologic time and the rise and fall of dinosaurs, rock and minerals formation, and natural geologic process that form earthquakes, volcanoes, and glaciers. Lab activities will include opportunities to explore how volcanoes and glaciers form and how they transform the Earth.

---

### ***Astronomy***

Grade Level: 11,12

Prerequisite: at least C in Physical Science, C in Biology

Course Number: 0887

Credit: 0.5

Length: Semester

Fee: None

This one semester course provides the opportunity to develop knowledge and understanding about the solar system, galaxy, and universe in which we live. This course will provide the student with an introduction to the concepts of modern astronomy, the origin and history of the Universe and the formation of the Earth and the solar system. The course gives a description of astronomical phenomena using the laws of physics.

## **Social Studies Department**

### ***Modern World History***

Grade Level: 9

Prerequisite: None

Course Number: 0504

Credit: 1

Length: Year

Fee: None

Modern World History examines world events from 1600 to the present. It explores the impact of the democratic and industrial revolutions, the forces that led to world domination by European powers, the wars that changed empires, the ideas that led to independence movements and the effects of global interdependence. Understanding how these events came to pass and their meaning for today's citizens is the purpose of this course. The concepts of historical thinking introduced in earlier grades continue to build with students locating and analyzing primary and secondary sources from multiple perspectives to draw conclusions.

---

### ***Modern World History Advanced***

Grade Level: 9

Prerequisite: Selection Process

Course Number: 0508

Credit: 1

Length: Year

Fee: None

This course will study the same topics as Modern World History with an emphasis placed on critical thinking skills, enrichment, and analysis of historical events. Modern World History examines world events from 1600 to the present. It explores the impact of the democratic and industrial revolutions, the forces that led to world domination by European powers, the wars that changed empires, the ideas that led to independence movements and the effects of global interdependence. The episodes of its past have shaped the nature of the country today and prepared it to attend to the challenges of tomorrow. Understanding how these events came to pass and their meaning for today's citizens is the purpose of this course. The concepts of historical thinking introduced in earlier grades continue to build with students locating and analyzing primary and secondary sources from multiple perspectives to draw conclusions.

---

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

Grade Level: 10

Prerequisite: None

Course Number: 0505

Credit: 1

Length: Year

Fee: None

This course examines the history of the United States of America from 1877 to the present. The federal republic has withstood challenges to its national security and expanded the rights and roles of its citizens. The episodes of its past have shaped the nature of the country today and prepared it to attend to the challenges of tomorrow. Understanding how these events came to pass and their meaning for today's citizens is the purpose of this course. The concepts of historical thinking introduced in earlier grades continue to build with students locating and analyzing primary and secondary sources from multiple perspectives to draw conclusions.

---

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

Grade Level: 10

Prerequisite: B or better in World History Advanced or an A in World History

Course Number: 0506

Length: Year

Exam Fee: \$85.00

Credit: 1

Advanced Placement U.S. History may be taken to meet the graduation requirement and in lieu of the regular American History course. It is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in American History. This program prepares students for college courses by making demands upon them equivalent to those of a full year introductory college course. Students should be well above average in reading and writing abilities. Students must perform well on the Advanced Placement exam in order to receive college credit.

---

**Psychology**

Grade Level: 11,12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0520

Fee: None

This is a junior/senior social studies elective to help toward graduation requirements. The course involves the study of human behavior and the mind. Students will explore topics like perception, intelligence, learning, personality and mental disorders. The aim of the class is to prepare upperclassmen for a 100 level college psychology class.

---

**Dual Credit Psychology**

Grade Level: 11,12

Credit: 1.0

Prerequisite: Dual Credit Eligibility through Hiram College

Length: Semester

Course Number: 0521

Fee: None

This is a Dual Credit Psychology course taught on-line by a Hiram College professor. Students must meet Dual Credit eligibility and be independent learners in order to complete the curriculum and testing requirements.

---

**U.S. Government**

Grade Level: 11

Credit: 1

Prerequisite: None

Length: Year

Course Number: 0525

Fee: None

How the American people govern themselves at national, state and local levels of government is the basis for this course. Students can impact issues addressed by local governments through service learning and senior projects. This course will also explore the fundamentals that guide individuals and nations as they make choices about how to use limited resources to satisfy their wants. More specifically, it examines the ability of individuals to use knowledge and skills to manage limited financial resources effectively for a lifetime of financial security.

---

**AP U.S. Government**

Grade Level: 11

Credit: 1

Prerequisite: B or better in AP US History or an A in US History

Course Number: 0528

Length: Year

Exam Fee: \$85.00

This course follows the syllabus for the Advanced Placement American Government and Politics Exam. Students will study the constitutional foundations of the United States, the branches of government, the bureaucracy, and the development of public policy, civil liberties and civil rights, political theory, development of political parties and public policy. Students must perform well on the Advanced Placement exam in order to receive college credit.

---

### ***Economics & Financial Literacy II***

Grade Level: 11,12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0530

Fee: None

This course explores the fundamentals that guide individuals and nations as they make choices about how to use limited resources to satisfy their wants. More specifically, it examines the ability of individuals to use knowledge and skills to manage limited financial resources effectively for a lifetime of financial security.

---

### ***Sociology***

Grade Level: 10,11,12

Credit: 0.5

Prerequisite: None

Length: Semester

Course Number: 0550

Fee: None

This is a social studies elective to help toward graduation requirements. The course involves the study of society and the interaction of people. Students will explore topics like culture, diversity, socialization, deviance, and racism. The aim of the class is to prepare upperclassmen for a 100 level college sociology class.

---

## **World Languages Department**

### ***French I***

Grade Level: 8, 9,10,11,12

Credit: 1

Prerequisite: C or better in Language Arts or teacher recommendation

Course Number: 0405

Length: Year

Fee: None

Level I students develop skills in listening, speaking, reading, and writing. Students experience language patterns, phonetics, and culture through activities involving music, art, role-playing, foods, and authentic French resources. College preparatory course content..

---

### ***French II***

Grade Level: 9,10,11,12

Credit: 1

Prerequisite: French I

Length: Year

Course Number: 0410

Fee: None

Level II students will continue to develop and strengthen their skills in listening, speaking, reading, and writing with emphasis on increasing vocabulary and grammar skills. Classroom experiences are similar to French I with more emphasis on proficiency in using the language through music, art, role-playing, foods, and authentic French resources. College preparatory course content.

---

***French III with Dual Credit Option***

Grade Level: 10, 11,12

Prerequisite: French II

Course Number: 0415

Credit: 1

Length: Year

Fee: None

In level III, students continue to grow in ability using all four language skills—listening, speaking, reading, and writing. Oral and written projects in class may be in the form of recorded exercises, group and pair work, role plays, discussions, interviews, and videos. Written projects include prewriting, writing, and rewriting of composition and other written work. This course follows the syllabus for the partner college or university course. Interested students who qualify may enroll in the dual credit option and earn four semester hours of college credit upon successful completion of the course. Workbook and French/English dictionary are required. College level course content.

---

***French IV with Dual Credit Option***

Grade Level: 11, 12

Prerequisite: French III

Course Number: 0420

Credit: 1

Length: Year

Fee: None

Level IV students continue to grow in ability using all four language skills—listening, speaking, reading, and writing. Oral and written projects in class include recorded exercises, group and pair work, role plays, discussions, interviews, and videos. Written projects are comprised of prewriting, writing, and rewriting of composition and other written work. In addition to reading level-appropriate texts, students will practice oral presentation skills. This course follows the syllabus for the partner college or university course. Interested students who qualify may enroll in the dual credit option and earn four semester hours of college credit upon successful completion of the course. Workbook and French/English dictionary are required. College level course content.

---

***Spanish I***

Grade Level: 8, 9,10,11,12

Prerequisite: C or better in Language Arts or teacher recommendation

Course Number: 0425

Length: Year

Fee:\$10.00

Credit: 1

Students develop skills in communicating in Spanish through listening, grammar and vocabulary usage, speaking, reading, and writing Spanish. The course also includes an introduction to the study of Spanish-American cultures (food, art, music, and social customs). This course is recommended for college preparatory curriculum.

---

***Spanish II***

Grade Level: 9, 10,11,12

Prerequisite: Spanish I

Course Number: 0430

Credit: 1

Length: Year

Fee: \$10.00

Level II students continue to develop skills in communicating in Spanish through

listening, grammar and vocabulary usage. The study of Spanish/American Culture which includes food, art, holidays, geography, history and customs will continue. This course is recommended for college preparatory curriculum.

---

**Spanish III**

Grade Level: 10, 11,12

Credit: 1

Prerequisite: Spanish II

Length: Year

Course Number: 0435

Fee: \$10.00

Level III continues to incorporate speaking, reading and writing in Spanish. Students learn a more advanced vocabulary and idioms through selected reading materials from Spanish-American literature. A Spanish novel is read each semester. These selected materials offer insights into the life, thought, and civilization of Spanish-speaking people, and are enriched by cultural mini-lessons in Spanish (art, cuisine, currency, music, sports, etc.). This course is strongly recommended for college preparatory curriculum.

---

**Spanish IV**

Grade Level: 11, 12

Credit: 1

Prerequisite: Spanish III

Length: Year

Course Number: 0440

Fee: \$10.00

Level IV continues to incorporate speaking, reading, and writing in Spanish. Students learn a more advanced vocabulary and idioms through selected reading materials from Spanish literature. Authentic literary works will be read, discussed, translated and critiqued. Spanish customs, history, art, and culture will be stressed. This course is recommended for college preparatory curriculum.

***\*If a student does not meet a prerequisite, he/she can only be in the class with teacher or principal approval***

# High School Honors Diploma

Criterion	Ohio Diploma	Academic Honors Diploma	International Baccalaureate Honors Diploma	Career Tech Honors Diploma	STEM Honors Diploma (New)	Arts Honors Diploma (New)	Social Science & Civic Engagement Diploma (New)
<b>English Math</b>	4 units 4 units, must include one unit of algebra II or equivalent	4 units 4 units, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content	4 units 4 units, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content	4 units 4 units, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content	4 units 5 units, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content <sup>1</sup>	4 units 4 units, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content	4 units 4 units, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content
<b>Science</b>	3 units	4 units, including two units of advanced science <sup>2</sup>	4 units, biology, chemistry, and at least one additional advance science <sup>2</sup>	4 units, including two units of advanced science <sup>2</sup>	5 units, including two units of advanced science <sup>2</sup>	3 units, including one unit of advanced science <sup>2</sup>	3 units, including one unit of advanced science <sup>2</sup>
<b>Social Studies</b>	3 units	4 units	4 units	4 units	3 units	3 units	5 units
<b>World Languages</b>	N/A	3 units minimum, with at least 2 units in each language studied	4 units minimum, with at least 2 units in each language studied	2 units of one world language studied	3 units of one world language, or no less than 2 units of two world languages studied	3 units of one world language, or no less than 2 units of two world languages studied	3 units of one world language, or no less than 2 units of two world languages studied
<b>Fine Arts Electives</b>	2 Semesters 5 units	1 unit N/A	1 unit N/A	N/A 4 units of Career/Technical minimum <sup>3</sup>	1 unit 2 units with a focus in STEM courses	4 units 2 units with a focus in fine arts course work	1 unit 3 units with a focus in social sciences and/or civics
<b>GPA</b>	N/A	3.5 on a 4.0 scale	3.5 on a 4.0 scale	3.5 on 4.0 scale	3.5 on a 4.0 scale	3.5 on a 4.0 scale	3.5 on a 4.0 scale
<b>ACT/SAT/WorkKeys<sup>4</sup></b>	N/A	27 ACT/1280 SAT <sup>5</sup>	27 ACT/1280 SAT <sup>5</sup>	27 ACT/1280 SAT/WorkKeys (6 Reading & 6 Math) <sup>7</sup>	27 ACT/1280 SAT <sup>5</sup>	27 ACT/1280 SAT <sup>5</sup>	27 ACT/1280 SAT <sup>5</sup>
<b>Field Experience</b>	N/A	N/A	Complete a field experience and document the experience in a portfolio specific to the student's area of focus <sup>5</sup>	Complete a field experience and document the experience in a portfolio specific to the student's area of focus <sup>5</sup>	Complete a field experience and document the experience in a portfolio specific to the student's area of focus <sup>5</sup>	Complete a field experience and document the experience in a portfolio specific to the student's area of focus <sup>5</sup>	Complete a field experience and document the experience in a portfolio specific to the student's area of focus <sup>5</sup>
<b>Portfolio</b>	N/A	N/A	Develop a comprehensive portfolio of work based on the student's field experience or a topic related to the student's area of focus that is reviewed and validated by external experts <sup>5</sup>	Develop a comprehensive portfolio of work based on the student's field experience or a topic related to the student's area of focus that is reviewed and validated by external experts <sup>5</sup>	Develop a comprehensive portfolio of work based on the student's field experience or a topic that is related to the student's area of focus that is reviewed and validated by external experts <sup>5</sup>	Develop a comprehensive portfolio of work based on the student's field experience or a topic that is related to the student's area of focus that is reviewed and validated by external experts <sup>5</sup>	Develop a comprehensive portfolio of work based on the student's field experience or a topic that is related to the student's area of focus that is reviewed and validated by external experts <sup>5</sup>
<b>Additional Assessments</b>	N/A	N/A	N/A	Earn an industry-recognized credential or achieve proficiency benchmark for appropriate Ohio Career-Technical Competency Assessment or equivalent	N/A	N/A	N/A

*NOTE: Items shaded in blue are proposed changes to the current honors diploma system, including the entire STEM, Arts, and Social Science and Civic Engagement Honors Diplomas*

## High School Honors Diploma

For the Academic, International Baccalaureate, and Career Tech Honors Diplomas, students who entered the ninth grade between July 1, 2013 and June 30, 2017 may choose to pursue the diploma by meeting the requirements of these criteria or the previous criteria. Students entering the ninth grade on or after July 1, 2017 must meet these criteria.

Completion of any advanced standing program, which includes Advanced Placement, International Baccalaureate, College Credit Plus, and may include Credit Flexibility, can be counted toward the unit requirements of an Honors Diploma.

Students must meet all or all but one of the criteria to qualify for an Honors Diploma, and any one of the criteria may be the one that is not met.

Diploma with Honors requirements pre-suppose the completion of all high school diploma requirements in the Ohio Revised Code including:

½ unit physical education (unless exempted)

½ unit health

½ unit in American history

½ unit in government

<sup>1</sup> Writing sections of either standardized test should not be included in the calculation of this score. The Locating information test is not included in the calculation of the WorkKeys score.

<sup>2</sup> Advanced science refers to courses that are inquiry-based with laboratory experiences and align with the 11/12th grade standards (or above) or with an AP science course, or with an entry-level college course (clearly preparing students for a college freshman-level science class, such as anatomy, botany, or astronomy).

<sup>3</sup> Program must lead to an industry recognized credential, apprenticeship, or be part of an articulated career pathway which can lead to post-secondary credit.

<sup>4</sup> The fifth mathematics and science credit for the STEM honors diploma may be fulfilled with a single course.

<sup>5</sup> Field Experience refers to experiential learning in either an internship or apprenticeship. Students will document their experiences by describing their understanding in a portfolio.

<sup>6</sup> The student portfolio is a collection of experiential learning and competencies based on the student's field experiences. Students will engage with professionals or scholars in the field while developing their own portfolio or ePortfolio of original work that documents their technical, critical and creative skills representative of their honors focus; students' work must be reviewed and evaluated by scholars or professionals within the field/area of study in which the students' work is focused, and the scholars or professionals must be external to the district staff; students will give a presentation to showcase the work and provide an analysis of it to the school and local community. If the student does not complete a field experience, the portfolio can be based on a collection of work related to the student's honors diploma area of focus.

<sup>7</sup> Students must score a minimum of a 6 on the Math WorkKeys Assessment and a minimum of 6 on the Reading WorkKeys Assessment in order to meet the WorkKeys score requirement. The WorkKeys option applies only to the Career Tech Honors Diploma.

<sup>8</sup> These scores are based on the 2016 ACT and SAT assessments. ODE will publish a concordance document outlining equivalent scores for past and future tests that differ from the 2016 versions.

9/30/16