

STRONGSVILLE CITY SCHOOLS



STRONGSVILLE HIGH SCHOOL

Program of Studies

Grades 9 -12

2023-2024

TABLE OF CONTENTS

Advanced Placement & Honors	13
Advanced Placement Courses Offered at SHS	14
Athletics and Eligibility	8
Class Rank and Grading	11
College Credit Plus	12
College Credit Plus Sample Pathways (Appendix A)	77
College Entrance Recommendations	8
Course Planner Sheet	8
Credit Flexibility	12
Dropping or Changing a Course	11
Early Graduation	11
Grade Placement	8
Graduation Requirements	4
Graduation Seals	4
Honors Diploma Requirements	5
Minimum Requirements for Graduation	4
NCAA Approved Courses	10
NCAA Eligibility	9
Ohio High School Honors Diploma	5
Physical Education Waiver	12
Planning Your Program of Studies	3
Repeating a Course / Credit Recovery	12
Schedule Changes	11
Senior Project	13
Suggested Four-Year Plan	8
Curricular Offerings	
AP Capstone Program	15
Art Department	16
Business and Marketing Department	20
Communication & Financial Literacy Courses	23
Computer Technology Courses	24
English Language Arts Department	27
Family and Consumer Science Department	33
Health and Physical Education Department	36
Industrial Technology Department	39
Mathematics Department	42
Music Department	47
Project Lead the Way – Engineering/Biomedicine Courses	51
Science Department	53
Social Studies Department	58
Theatre Arts & Publication Courses	64
World Language Department	66
Special Support Programs/Courses	70
Polaris Career Center	74

STRONGSVILLE CITY SCHOOLS

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INTRODUCTION

This program of studies provides the information and assistance you and your parents may need as you plan your secondary course of study. Please review this document carefully. If you do not understand any part of this planning guide, or if you need additional help, please see your counselor.

The school makes every effort to schedule you for all appropriate courses, but it is much easier to accomplish this if you and your parents request the proper courses during course selection. **It is not always possible to make schedule changes after the registration process is completed and such changes will be made only for educationally sound reasons and if class size permits.**

It is the student's responsibility to see that requirements for graduation are met. The high school staff will make every effort to keep up-to-date records and to keep students and parents informed about the status of progress toward completing the necessary coursework for graduation requirements. **However, it is the student's responsibility to be acquainted with the necessary requirements to meet his/her personal goals.** If ever you are unsure about which courses to take, please speak with your counselor.

PLANNING YOUR PROGRAM OF STUDIES

1. Some courses listed in this Planning Guide will not be offered each year. Class size and staffing considerations are criteria which must be looked at during the scheduling process.
2. The number of sections of a course is determined during initial registration. Staffing and materials are made available based on these numbers. **Students should make appropriate choices during registration, as seats may not be available next year should students wish to reconsider their course selections.**
3. Due to the number of required credits, it is recommended that any student who has failed a course consider retaking the course during summer school. This will enable them to stay on track for graduation, particularly if the failed course was in English, Math, Social Studies or Science.
4. It is important that you select courses to fit your career plans. We suggest that you:
 - Review all requirements for graduation;
 - Read the information given about each department;
 - Study the subject sequence charts that suggest course patterns that lead to specific career goals; and
 - Use your [Course Planner form](#) and complete the quadrants for your four-year program, and the graduation requirements.

GRADUATION REQUIREMENTS

To earn a diploma in Ohio, students must do all three of the following:

1. **Complete Courses to Earn Credits** - Students must earn a minimum of 22 credits from the required courses. In addition, students will take required state end-of-course tests. State law requires end-of-course tests be administered to all students at the completion of the associated course. The required end-of-course tests include Algebra I, Geometry, English Language Arts II, Biology, American Government, and American History.

English	4.0 credits
Social Studies (World History, Non-Western Studies, U.S. History, U.S. Government, Economics)	3.0 credits
Science (Physical and Biological)	3.0 credits
Mathematics (Algebra, Geometry & Algebra II or its equivalent)	4.0 credits
Speech Communication	0.5 credits
Financial Literacy	0.5 credits
Health	0.5 credit
Physical Education	0.5 credit
Fine Arts, Business, Career Tech and/or World Language	1.0 credit
Electives	5.0 credits
TOTAL	22 credits

An elective is any course chosen beyond those specifically listed under the graduation requirements.

*Mathematics units must include one unit of Algebra II or the equivalent of Algebra II. State law allows some students to be exempt from taking Algebra II, including some students following a career-technical pathway. Please speak with your counselor or administrator if you need more information about this requirement.

2. **Demonstrate Competency** - Students will demonstrate competency in the foundational areas of English language arts and mathematics by earning a passing score (684) on Ohio's high school Algebra I and English II tests. Students who do not pass the test will be offered additional support and must retake the test at least once. Competency can also be shown through alternative demonstrations, which include College Credit Plus, career-focused activities, or military enlistment.
3. **Demonstrate College/Career Readiness** - Students will demonstrate readiness for their post-high school paths by earning **two** Graduation Seals. Students must earn at least one [state defined seal](#). A second seal may be one that is [locally defined](#).

OHIO HIGH SCHOOL HONORS DIPLOMA CRITERIA

Students **must meet 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.

Subject	Academic Honors Diploma	Career Tech Honors Diploma	STEM Honors Diploma	Arts Honors Diploma (Includes dance, drama theatre , music, and visual art)	Social Science & Civic Engagement Honors Diploma
English	4 units	4 units	4 units	4 units	4 units
Math	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, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content	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 4	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, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content
Science	4 units, including two units of advanced science 2	4 units, including two units of advanced science 2	5 units, including two units of advanced science 2	3 units, including one unit of advanced science 2	3 units, including one unit of advanced science 2
Social Studies	4 units	4 units	3 units	3 units	5 units
World Languages	3 units of one world language, or no less than 2 units of each of two world languages studied	2 units of one world language studied Class of 2020 NA	3 units of one world language, or no less than 2 units of each of two world languages studied	3 units of one world language, or no less than 2 units of each of two world languages studied	3 units of one world language, or no less than 2 units of each of two world languages studied
Fine Arts	1 unit	N/A	1 unit	4 units	1 unit
Electives	N/A	Class of 2020 4 Units of Career-Technical minimum. 3	2 units with a focus in STEM courses	2 units with a focus in fine arts course work	3 units with a focus in social sciences and/or civics
GPA	3.5 on a 4.0 scale, unweighted	3.5 on a 4.0 scale, unweighted	3.5 on a 4.0 scale, unweighted	3.5 on a 4.0 scale, unweighted	3.5 on a 4.0 scale, unweighted
ACT/SAT/ WorkKeys 1	27 ACT/1280 SAT	27 ACT/1280 SAT/WorkKeys (6 Reading for Information & 6 Applied Mathematics) 7	27 ACT/1280 SAT 8	27 ACT/1280 SAT 8	27 ACT/1280 SAT 8
Field Experience	N/A	Complete a field experience and document the experience in a portfolio specific to the student's area of focus 5	Complete a field experience and document the experience in a portfolio specific to the student's area of focus 5	Complete a field experience and document the experience in a portfolio specific to the student's area of focus 5	Complete a field experience and document the experience in a portfolio specific to the student's area of focus 5
Portfolio	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 6	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 6	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 6	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 6
Industry Credential	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

Notes:

1. 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.
2. Advanced 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.)
3. Program must lead to an industry recognized credential, apprenticeship, or be part of an articulated career pathway which can lead to postsecondary credit.
4. The fifth mathematics and science credit for the STEM honors diploma may be fulfilled with a single course.
5. Field Experience refers to experiential learning in either an internship or apprenticeship. Students will document their experiences by describing their understanding in a portfolio.
6. 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.
7. Students must score a minimum of a 6 on the Applied Mathematics WorkKeys Assessment and a minimum of 6 on the Reading for Information WorkKeys Assessment in order to meet the WorkKeys score requirement. The WorkKeys option applies only to the Career Tech Honors Diploma.
8. These scores are based on the 2016 ACT and SAT assessments. The guidance department asks that students request super scoring, in writing, by **January 15th**.

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.

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

½ unit physical education	½ unit in health
½ unit in U.S. History	½ unit in U.S. Government
½ unit in world history and civilizations	4 units in English

OHIO HONORS DIPLOMA FREQUENTLY ASKED QUESTIONS

Can a student replace the Honors Diploma requirement of chemistry and physics with another rigorous science course? For example, if a student takes AP Biology, could that course replace the physics requirement for science?

Yes. Students must complete four units of science, including two units of advanced science. See #2 on previous page.

How is the grade point average calculated?

The student must achieve a grade point average (GPA) of 3.5 based on a 4.0 scale. If a district's policy includes the use of weighted grades in calculating a student's grade point average, (e.g., awarding five points for an "A" in an honors course), then the district must convert the weighted grade to the GPA equivalent on a 4.0 scale to determine if the GPA criterion for the Diploma with Honors has been met.

Do you round up to determine the GPA?

No. The GPA must be a minimum of 3.50 to qualify for the Honors Diploma.

What is meant by "up to the last grading period of the senior year?"

Students can meet grade point average (GPA) criteria by having a total GPA of at least 3.50 at midyear of their senior year, in accordance with district policy regarding graduation from high school.

Do courses taken in the College Credit Plus program count toward the Honors Diploma?

Yes. The Honors Diploma rules specifically allow for College Credit Plus options to count toward the Honors Diploma.

Can a student excused from the consequences of not earning the 18 points required for the end of the year test through an Individualized Education Plan (IEP) earn an Honors Diploma?

Yes. An exempted student may earn an Honors Diploma provided he or she meets all IEP requirements and the specified number of criteria for an Honors Diploma.

Do advanced courses taken in middle or junior high school count toward meeting Honors Diploma criteria?

Every high school may permit students below the ninth grade to take advanced work for credit. The high school will count this advanced work toward the requirements for a diploma only if the coursework is designated by the local board of education as meeting high school curriculum requirements and has been taught by an individual who possesses a valid high school teaching certificate or license.

Can a district require students to apply for an Honors Diploma?

No. Students cannot be required to apply for the Honors Diploma. Districts must award the Honors Diploma to any student who has met the established criteria.

May a student earn a regular diploma and an Honors Diploma?

No. Students may earn only one diploma. A student eligible to receive an Honors Diploma may not receive a regular diploma.

Does a student have to fulfill all criteria to earn an Honors Diploma?

No. Ohio Revised Code stipulates that students be required to fulfill all but one criterion. The number of criteria from the original Diploma with Honors has been changed for the new Diploma with Honors. Students must fulfill seven of eight criteria for either diploma.

Do the ACT and SAT test score requirements include the writing sections?

No. Ohio Administrative Code dictates that the ACT or SAT scores need to be composed of sections that do not include the writing.

Can the ACT/SAT composite be composed from scores from different test administrations (super scoring)?

Yes. If a student takes the ACT/SAT more than once, the highest scores from each of the test administrations may be combined to create a single composite score. The guidance department asks that students request super scoring, in writing, by January 15th.

SUGGESTED FOUR-YEAR ACADEMIC PLAN

A digital worksheet students can use to plan their courses can be found here: [Online Graduation Planner for Class of 2024 and Beyond](#)

Grade 9

English	1 credit
Math	1 credit
Science	1 credit
Social Studies	1 credit
Physical Education	.25 credit
Health	.5 credit
Electives	1 credit

Grade 10

English	1 credit
Math	1 credit
Science	1 credit
Social Studies	1 credit
Economics	.5 credit
Financial Literacy	.5 credit
Physical Education	.25 credit
Electives	1 credit

Grade 11

English	1 credit
Math	1 credit
Science	1 credit
Speech	.5 credit
Government	.5 credit
Electives	1.5 - 2 credits

Grade 12

English	1 credit
Math	1 credit
Science	Elective
Social Studies	Elective
Electives	1 - 3 credits

Note: Career-Technical programming through [Polaris Career Center](#) can be found in the appendices at the end of this publication.

GRADE PLACEMENT

Students must be enrolled in **six classes** per semester. Seniors & Juniors in good academic standing may take five classes with advanced administrator approval.

	Minimum Credits	Grade Level Placement
Grade Level Placement	5.5 credits	10th Grade
	11 credits	11th Grade
	17 credits*	12th Grade

**students may be placed in a 12th Grade homeroom with fewer than 17 credits if a graduation plan/credit recovery plan is in place and signed by the counselor and grade-level administrator.*

These guidelines should be viewed as minimums. Usually a student will have earned more credits than are needed for grade promotion.

COLLEGE ENTRANCE RECOMMENDATIONS/THE OHIO CORE

Refer to the Ohio Department of Higher Education [website](#) for information about applying to college in Ohio.

ATHLETICS & ELIGIBILITY

Each student assumes responsibility, each semester, for assuring he/she has registered for sufficient credits to maintain their athletic eligibility. To be eligible to participate in the Strongsville athletic program, all student-athletes must meet the following criteria:

- ☐ Be currently enrolled and must have been enrolled in school the immediately preceding grading period;
- ☐ During the preceding grading period the student must have received passing grades in a minimum of **five (5) one-credit courses or the equivalent**, each of which counts toward graduation. **Note: Physical Education, Weight**

Training and other courses that are only .25 credits per semester DO NOT COUNT toward athletic eligibility. 8-week CCP courses DO NOT COUNT toward athletic eligibility. A student enrolled in the first grading period after advancement from the eighth grade must have passed a minimum of five subjects carried the immediately preceding grading period in which the student was enrolled;

- ☐ Students that pass five one-credit classes or the equivalent, yet fail to achieve a minimum GPA of 2.0, will be required to fulfill an athletic academic contract.
- ☐ CCP and Strongsville Academy Students will need to prove satisfactory progress at the end of the first quarter and third quarter by providing grade reports to the athletic department.
- ☐ Students registering for CCP classes should note that 8-week courses **do NOT** count toward athletic eligibility.
- ☐ Once a student turns 20 years of age, the student will no longer be eligible for interscholastic competition.

Student-athletes are strongly encouraged to register and enroll for six, one-credit classes in order to maintain their academic eligibility. The preceding nine-week grading period will determine eligibility (i.e. the quarter grade received determines eligibility for the following quarter). Semester grades, final exam grades and summer school credit **DO NOT** impact academic eligibility. **Before dropping a class, students are strongly encouraged to meet with their counselor and/or the Director of Athletics and Activities to understand the impact the schedule change may have on athletic eligibility.**

The eligibility of a student continues until the start of the fifth school day of the next grading period, at which time the grades from the immediately preceding grading period become effective. For this purpose, "school day" includes faculty in-service days, calamity days, and regular school attendance days, but not holidays or school breaks.

For additional eligibility information including codes of conduct, participation fees, pre-participation forms and other resources, please refer to the [Strongsville High School Athletic Website](#). At any time a student-athlete or their parent has a question about eligibility, please consult the Director of Athletics and Activities.

NCAA ELIGIBILITY-STUDENT ATHLETE

As NCAA eligibility requirements are subject to change, it is important that student athletes intending to play college athletics (especially seniors and their parents) download the updated version of the *Guide for College-Bound Student Athlete* from the NCAA Eligibility Center [GUIDE FOR THE COLLEGE-BOUND STUDENT-ATHLETE](#). Based upon this information, it may be necessary to initiate immediate schedule changes in order to satisfactorily meet or exceed the requirements of coursework, grade point average, and standardized test scores. **Pertinent information related to 7th and 8th grade students: courses taken in the 8th grade cannot satisfy core-course requirements.**

NCAA Athletic Eligibility Checklist

Before an athlete can play, they must be eligible. Please review the following. Unchecked boxes will likely mean athlete is NOT eligible:

- ☐ Athlete is officially enrolled in an OHSA member high school or participating in accordance with state law.
- ☐ Athletes are enrolled in at least five one credit courses or the equivalent, each of which counts toward graduation.
- ☐ Athletes received passing grades in at least five one credit courses or the equivalent, each of which count toward graduation, during the last grading period.
- ☐ Both parents live in Ohio (or the parent with custody, due to divorce or having never been married, lives in Ohio).
- ☐ Athletes have not changed schools without a corresponding move by parents or legal guardians or by qualifying for one of the exceptions to the OHSA transfer regulation.
- ☐ If athletes changed schools (transferred), they have followed up with the new school to ensure that all proper forms (if applicable) have been submitted to the OHSA Office.
- ☐ Athletes have not been enrolled in high school for more than eight semesters.
- ☐ Athletes have had a physical examination within the past year and it is on file at the school.
- ☐ Athletes and parents attended a preseason meeting at the school which the OHSA requires to review key eligibility issues, healthy lifestyles, and sporting behavior.

- ☐ The school also reviewed with parents and athletes its concussion management protocol, reviewed and signed the Ohio Department of Health's "Concussion Information Sheet" prior to participation and reviewed a short presentation on concussions available at no cost at www.nfhslearn.com.
- ☐ Athletes and parents have signed the OHSA Authorization Form and the OHSA Eligibility and Authorization Statement, and they are on file at my school.

If a student's grades for the quarter preceding his/her sport are less than a 2.0:

- ☐ The student will be notified by his/her coach that his/her parents must contact the athletic department.
- ☐ After being contacted by the parent, the athletic department will establish an eligibility contract
- ☐ A portion of every contract will include weekly progress reports which must be completed by the student and returned weekly to the Director of Athletics to maintain eligibility.
- ☐ Other stipulations may be mutually agreed upon as a portion of the student's contract to maintain eligibility.

For questions, see the Director of Athletics.

NCAA APPROVED COURSES

As of March 2023

ENGLISH

AP English Language and Comp.
AP English Literature and Comp.
Speech & Communications
Science Fiction & Fantasy
Advanced Speech and Debate
Villains in Literature
World Mythology

English 10/World Lit
English 10 Honors/World Lit Honors
College Comp I & II
Creative Writing
English 9
English 9 Honors

Mystery and Detective Fiction
Print Journalism & Media
English 11/American Lit
Literary Drama
English 12/Blended
Fundamentals of Speech Com

SOCIAL STUDIES

AP European History
AP Comparative Government & Politics
AP Human Geography
AP Macroeconomics
AP Microeconomics
AP Psychology
AP United States Government & Politics

AP United States History
Contemporary World Issues
Criminal Justice & Civil Law
Economics
General Psychology
Modern World History
Anthropology

Non-Western Studies
Psychology
Sociology
United States History
United States History Honors
United States Government & Civics

MATHEMATICS

AP Calculus AB
AP Calculus BC
AP Computer Science A
AP Computer Science Principles
AP Statistics
Algebra I
Algebra I Honors

Algebra I, Parts I and II
Algebra II
Algebra II & Trigonometry
Algebra II & Trig. Honors
Geometry
Geometry Honors
Financial Algebra

Linear Algebra
Multivariable Calculus
Modeling & Quantitative Reasoning
Pre-Calculus
Pre-Calculus Honors
Probability and Statistics
Mathematical Modeling

SCIENCE

AP Biology
AP Chemistry
AP Environmental Science
AP Physics Mechanics
Environment
AP Physics I (Algebra-Based)
Anatomy & Physiology

Astronomy
Biology
Biology Honors
Botany

Chemistry
Chemistry Honors

CPE Science
Forensic Science and Criminalistics
Forensic Science Investigation
Physical Geology & the

Physics
Zoology

WORLD LANGUAGE

AP French Language & Culture

French III

Spanish I

AP German Language & Culture
AP Spanish Language & Culture
French I
French II

French III Honors
German I
German II
German III Honors

Spanish II
Spanish III
Spanish III Honors

For additional information, please visit the [NCAA Eligibility Center](#).

CLASS RANK AND GRADING

All courses will be graded using the following scales. Honors/AP/CCP classes use the weighted scale and all others use the unweighted scale:

UNWEIGHTED

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

WEIGHTED

A = 5 points
B = 4 points
C = 3 points
D = 1 point
F = 0 points

Class rank and GPA are based on the weighted semester grades in all subjects. SHS transcripts use weighted grades. Students should understand that some universities calculate all applicants GPAs using unweighted grades. National Honor Society candidacy is determined using weighted grades. Honors diplomas are determined by using unweighted grades.

COURSE SELECTION

Students will make course selections after obtaining information from counselors, having discussions with teachers and consulting with parents. Students going against a teacher recommendation will need a **waiver** form signed by a parent or guardian.

SCHEDULE CHANGES

As the master schedule and staffing needs for the next school year are based upon the course selections made by students during the spring, it is critical that these choices be made with great care. Furthermore, change requests subsequent to the original schedule request may not be possible. Students and parents **MUST** give careful thought to course selections for the following year. ***All schedule changes are contingent upon the availability of space in the requested class and the judgment of the professional staff.***

DROPPING OR CHANGING A COURSE

Course drops and adds will be permitted only within the following prescribed time periods and guidelines:

- The first three (3) school days of the first semester for full-year courses and semester-long courses offered in semester one.
- The first three (3) school days of the beginning of the second semester for semester-long courses in semester two.
- Dropping a class must not reduce the student's total schedule to fewer than 5 courses not including Physical Education or Support classes, must be accompanied by a parent signature, and must have the approval of the student's counselor.
- **After the first three days of the course term, schedule changes will be made only with administrative approval.**

Requests to change teachers or lunch periods will not be allowed. Some courses may not have enough students enrolled for them to be offered. If this occurs, students will be contacted individually to offer alternate options. **Students should always consider the effect of dropping a class on their eligibility under OHSA (see Athletic Eligibility).**

CREDIT RECOVERY / REPEATING A COURSE DUE TO FAILURE

Students who have failed a course (semester or year-long) are advised to see their guidance counselor immediately to make arrangements for credit recovery, summer school, virtual learning classes, or registration for the following year.

EARLY GRADUATION

Any student desiring to finish high school in less than four years must complete the following: (1) schedule a meeting to discuss this with a parent and counselor, (2) request an Application for Early Graduation from their counselor and (3) submit the Application for Early Graduation for approval by the guidance counselor and principal. This should be completed by the first month of school in the year the student wishes to graduate.

COLLEGE CREDIT PLUS

Ohio's College Credit Plus allows qualified students in grades 7-12 to earn college and high school credits at the same time by taking college courses from community colleges or universities. Taking a college course from a public college or university through College Credit Plus is free. That means there is no cost for tuition, books or fees. The student will pay for other costs associated with taking a CCP class, such as goggles, aprons, lab supplies, clickers, etc.). If a student chooses to attend a private college or university, there may be costs. To learn more about College Credit Plus, please visit the website at Ohio Higher Education [College Credit Plus web page](#).

Steps to participate include:

1. Talk with your school counselor. Discuss your interest in taking college courses and how it fits in with your overall academic plan and career goals.
2. Prior to **February 15**, your district will provide information about the College Credit Plus program to all students in grades 7-12. An informational session will be held and all colleges and universities within a 30-mile radius will be invited to attend before **February 15**. Notify your school counselor if you intend to participate in College Credit Plus next year by April 1. The College Credit Plus meeting will be on **February 1, 2023 @ 6:00 pm**. It will be held virtually. A link to the meeting will be posted a week prior in the Principal's Newsletter and on the SHS website.
3. You and your family should contact colleges for information, application forms, and criteria for acceptance into College Credit Plus. You must go through the procedures established by the colleges/universities to apply to College Credit Plus. You may have to take a college placement test to make sure you are college-ready.

Students intending to take Multivariable Calculus, Linear Algebra, College Composition I, II or General Psychology on Strongsville's campus must complete all requirements of the College Credit Plus program.

If you are a student in grades 7-12 you can apply for College Credit Plus admission to a public or participating private college. The college will admit you based on your college-readiness in one or more subject areas. Your school counselor can help you understand your options, deadlines, and how to proceed. **You may not participate in the College Credit Plus program beyond your anticipated high school graduation date. If you fail a class or withdraw after 14 days, you will have to pay for the tuition of the course as well as the book fees incurred.**

Historically, Strongsville High School has partnered with the following institutions of higher learning: Cleveland State University, Cuyahoga Community College, Hiram College, Lake Erie College, Lakeland Community College, Lorain Community College, Kent State University, The University of Akron, Tiffin University, and Youngstown State University. See Appendix A for a sample College Credit Plus Career Pathway.

CREDIT FLEXIBILITY

Students wishing to earn credit through alternate pathways must complete a [Credit Flexibility Application](#). Credit Flexibility, as defined by the Ohio Department of Education, is designed to increase curricular options available to students, increase the depth of study available for a particular subject, and tailor the learning time or conditions needed to complete a high school diploma. Credit Flexibility allows students to earn credit by demonstrating academic and skill level performance through a variety of educational options. Students may pursue alternative coursework or create a plan to demonstrate subject area competency.

Approved credit awarded through these guidelines will be posted on a student's transcript and counted as required graduation credit in the related subject area or as an elective. A student must complete the Credit Flexibility Application and obtain approval PRIOR to beginning the coursework. Credit Flexibility applications pertaining to physical education should include a specific outline about how and when time will be spent. At least 60 hours must be spent participating in the chosen physical activity. For more information, see the [P.E. Credit Flexibility Frequently Asked Questions](#).

PHYSICAL EDUCATION WAIVER

P.E. Waiver is an alternate way to complete one's physical education requirements. With a P.E. Waiver, students receive zero credit and no grade; students are waived from taking two P.E. classes. A student may waive physical education classes by completing **two full seasons** of SHS athletics, cheerleading, dance team, STEP team, or marching band. In addition, students completing two full years of Show Choir may also use this as a P.E. waiver. Should a student become injured or not complete the season for **ANY** reason, he/she must find an alternate way to satisfy his/her P.E. requirement. **A student interested in a P.E. Waiver must complete two Physical Education Waiver Applications which will be completed as part of their Final Forms for the athletic office.**

SENIOR PROJECT

Senior Project offers qualified students the opportunity to investigate a potential career, pursue a special interest or talent, serve a community, engage an academic interest, or provide a once-in-a-lifetime experience. In order to be approved for a Senior Project, a senior must design an individual program, find a sponsor in the community who is able to supervise the program at the site of the project, and engage a Strongsville faculty member to volunteer as their project advisor. Senior Projects will positively impact community and school relations through one-on-one interaction between Strongsville High School Seniors, business and community members. Participation in this capstone learning experience will provide students with valuable insights into real life work experiences while creating a lasting and positive impression of his or her final weeks at SHS. The senior project is an opportunity for qualified seniors to challenge themselves outside the traditional curriculum. Each project should be a culminating experience that supports the transition to life beyond the secondary classroom and encourages self-discovery and responsibility.

ADVANCED PLACEMENT AND HONORS COURSES

Students and parents should be very sensitive to the demanding nature of both AP and honors courses. Reading expectations for these classes are extensive. **In most cases, summer reading from an approved list is required.** Students will be asked to be involved in college level activities, particularly in the areas of writing and test taking. Honors and Advanced Placement courses place a high degree of emphasis on the student's own self-motivation, study skills, and the ability to self-direct his or her own learning.

Strongsville High School's Advanced Placement (AP) program is an opportunity for students to pursue college-level studies while still in high school. Through AP, students may earn credit, advanced placement, or both, for college. Students who take AP courses learn a subject in depth, develop analytical reasoning skills, and form disciplined study habits that can contribute to continued success at the college level. Students who choose to enroll in one or more AP courses need to consider the information listed below before making final course selections:

- Most AP courses have recommended prerequisites. Students should have successfully met the prerequisites for the AP course. Prerequisites are listed in the individual course descriptions.
- AP courses are college level courses. The expectations are at a college level. The work in the classroom is rigorous. The preparation time outside of class such as homework, outside readings, and research may be extensive.
- **All students are required to take the AP exam at the end of the year.** Taking the AP exam enables students to compare their knowledge and understanding of a college-level subject with the high academic standards established by college faculty. **AP fees will be added to student accounts in January.**
- Because of their rigor, AP courses are assigned a weighted grade.

KEY DATES

- First weeks of class: Teachers will provide a “join” code for their class. Students create accounts in the system and use the join code to connect to their AP class and begin using the classroom resources. Students will register on the MyAP site and use the AP join code to join a specific course/section.
- The AP coordinator submits the exam order by the following deadlines:
 - October: Priority exam ordering deadline
 - November: Regular exam ordering deadline.
 - March: Deadline for late exam orders or exam cancellations.

IMPORTANT STEPS

1. “JOIN” YOUR AP CLASS

At the start of the school year, AP teachers or the AP coordinator set up class sections in myap.collegeboard.org and invite you to join. By joining a class, you gain access to the free resources and can provide information needed to register for AP Exams.

Joining a class is quick and easy. Your teacher or AP coordinator will let you know when to sign in. For each AP class you’re taking, you’ll complete this process using the unique join code for each class:

- Your teacher will give you the “join code” for the class. You’ll get a unique join code for each AP class you’re taking.
- You’ll visit myap.collegeboard.org, and sign in with your College Board student account login. If you don’t have a College Board student account, you’ll need to create one using the “Sign up” link on the page.
- You’ll enter the join code your teacher or AP coordinator gave you. After you confirm your enrollment, you’re all set!
- The first time you enroll in a class, you’ll complete registration fields.

2. MAKE AP EXAM DECISIONS IN THE FALL

All students are required to take the AP exam in their chosen content area(s).

AP Courses Offered at Strongsville High School

Seminar
Research
Art History
Art & Design/Drawing
Computer Science Principles
Computer Science A
English Language & Composition
English Literature & Composition
Statistics
Calculus (AB)
Calculus (BC)
Biology
Chemistry
Environmental Science

Physics I (Algebra-Based)
Physics (Mechanics)
Human Geography
United States Government & Politics
Comparative Government & Politics
European History
Microeconomics
Macroeconomics
United States History
Psychology
French Language & Culture
German Language & Culture
Spanish Language & Culture

CURRICULAR OFFERINGS

AP CAPSTONE PROGRAM

CODE	COURSE TITLE	GRADE	LENGTH OF COURSE	CREDIT
751000	AP Seminar	10-12	Full year	1.00
750000	AP Research	11-12	Full year	1.00

AP CAPSTONE DIPLOMA

AP Capstone Diploma is an innovative program from the College board which equips students with the independent research, collaborative teamwork, and communication skills that are increasingly valued by colleges and universities. AP Capstone is built on the foundation of two courses -- AP Seminar and AP Research -- which are designed to complement and enhance the in-depth study experienced in other AP courses.

Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing will receive the AP Capstone Diploma. Students who earn scores of 3 or higher on AP Seminar and AP Research but not on four additional exams will receive the AP Seminar/Research Certificate. AP Seminar may also be taken as a stand-alone course.

AP CAPSTONE COURSE DESCRIPTIONS

AP SEMINAR

Full year

Credit: 1.00

Prerequisites: Successful completion of at least one honors or AP course. Teacher recommendation.

Fee/Materials: A fee will be added to cover the cost of the AP Exam.

AP Seminar is a foundational course that engages students in cross-curricular conversations where they can explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational literacy, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. They will synthesize information from various sources, develop their own perspectives in written form, and design and deliver oral and visual presentations, both individually and as a team. This course aims to equip students with the power to analyze and evaluate information with accuracy and precision so that they can craft and communicate evidence-based arguments.

Note: All students enrolled in this course must take the AP Exam.

AP RESEARCH

Full year

Credit: 1.00

Prerequisites: Successful completion of AP Seminar. Teacher recommendation.

Fee/Materials: A fee will be added to cover the cost of the AP Exam.

AP Research allows students to deeply explore an academic topic, problem or issue of individual interest. Through this exploration, students design, plan, and conduct an investigation to address a research question. Students will further develop the skills acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing and synthesizing information. Students will reflect on their skill development, document their processes, and curate artifacts of their scholarly work through a process and reflection portfolio.

Note: All students enrolled in this course must take the AP Exam.

ART DEPARTMENT

CODE	COURSE TITLE	GRADE	LENGTH OF COURSE	CREDIT
817000	Foundations of Studio Art	9-12	Full Year	1.00
803000	Advanced Placement Art History	11-12	Full Year	1.00
816000	Advanced Placement Art & Design/Drawing	10-12	Full Year	1.00
000806	Art Exploration	10-12	1 semester	0.50
000819	Ceramics I	9-12	1 semester	0.50
000820	Ceramics II	10-12	1 semester	0.50
000808	Design & Beginning Printmaking	9-12	1 semester	0.50
000822	Drawing and Design	9-12	1 semester	0.50
000821	Painting I	9-12	1 semester	0.50
000807	Painting II	10-12	1 semester	0.50
000803	Photography I	9-12	1 semester	0.50
000805	Photography II	10-12	1 semester	0.50
000804	Three Dimensional Art & Sculpture	10-12	1 semester	0.50

Note: All art courses will help satisfy the fine arts requirement for graduation.

Recommended Course Sequencing for Visual Arts

	Grade 9	Grade 10	Grade 11	Grade 12
High School Fine Arts (Recommended for any student wanting to earn a fine arts credit)	Found. of Studio Art or Semester-long Art courses	(same as previous column)	(same as previous column)	(same as previous column)
Artistic Interest Track (Recommended for college entrance and students interested in careers that could relate to the Arts)	Found. of Studio Art and/or Painting I Photo I Ceramics I Drawing & Design Design/Printmaking	Found. of Studio Art and/or Painting II Photo II Ceramics II Drawing & Design Design/Beg. Printmaking Art Exploration	AP Art History AP Art & Design/Drawing	AP Art History AP Art and Design/Drawing or any semester-long course
Fine Arts/ Portfolio Prep Track (Recommended for students who want to pursue an arts career and work toward the development of a portfolio for college)	Found. of Studio Art and/or Painting I Photo I Ceramics I Drawing & Design Design/Printmaking	Found. of Studio Art and/or Painting II Photo II Ceramics II Drawing & Design Design/Beg. Printmaking Art Exploration	AP Art & Design/Drawing	AP Art History or any level II semester-long course not previously taken

ART COURSE DESCRIPTIONS

FOUNDATIONS OF STUDIO ART

Full year

Credit: 1.00

Prerequisites: None

Fee/Materials: A lab fee will be charged; a sketchbook is required.

This course is an introductory class which reinforces basic concepts and skills in design, drawing, painting, and sculpture for a comprehensive experience in the visual arts, serving as excellent preparation for the AP Art & Design/Drawing. A wide variety of mediums are explored for the development of individual artistic techniques and preferences. The elements and

principles of design are used as a format in creative problem solving for original outcomes. This course focuses on the artistic process from concept to creation and may reflect on techniques and historical references in class projects and critiques. Students will be required to finish all class projects and sketchbook assignments.

ADVANCED PLACEMENT ART HISTORY

Full year

Credit: 1.00

Prerequisites: Grades 11 & 12 or teacher recommendation

Fee/Materials: A lab workbook fee is required for this course; a fee will be added to the course to cover the cost of the AP Exam.

The AP Art History course is equivalent to a two semester introductory college course that explores topics such as the nature of art, art making, and responses to art. By investigating works of art characterized by diverse artistic traditions from prehistory to the present, this course fosters in-depth, holistic understandings of the history of art from a global perspective. Students become active participants in the global art world, engaging with its forms and content, as they experience, discuss, read, research and write about works of art, artists, art making, responses to art and interpretations of art.

Note: All students enrolled in this course must take the AP Exam. Students who have been successful in humanities courses such as literature or history, or in studio art courses are encouraged to enroll since those experiences will likely support and enrich the context of the AP Art History course.

ADVANCED PLACEMENT ART & DESIGN/DRAWING

Full year

Credit: 1.00

Prerequisites: Successful completion with an A or B grade average of Foundations of Studio Art or 2 to 3 semester-long art courses.

Fee/Materials: A lab fee will be charged; a fee will be added to cover the cost of the AP Exam.

AP Art is the most challenging class offered by the SHS Art Department, allowing serious-minded, academically prepared students to pursue college-level studies in art. This course is equivalent to a first-year college art class for students who have an exceptional desire to pursue higher levels of personal development in the visual arts. The concepts and skills acquired in prerequisite art courses will be used to create more complex work for development of original student portfolios. All students are expected to challenge themselves to develop mastery in their ideas, compositional skills, and technical abilities in drawing, two-dimensional design or three-dimensional design. Success on the optional AP Studio Art portfolio examination can enable students to earn fine art or general humanities college credits and placement in college programs. Required classwork will be evaluated based upon the College Board criteria for purposes of awarding high school credit.

Note: All students enrolled in this course must take the AP Exam.

ART EXPLORATION

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: A lab fee will be charged.

Art Exploration is a class that is inclusive for all art abilities. Students will be able to assist classmates with special needs to learn new skills in art, socialization and communication. This class is ideal for those students who would like to go into the education field, art therapy, or even just to work on basic art techniques. Students will learn skills in a variety of two and three-dimensional media. Students will see how art affects their daily life, community and abroad. Some of the media explored may include drawing, painting, two-dimensional and three-dimensional collages and texture designs. Students will learn to listen, follow directions, make decisions and learn how to manipulate art. Students will recognize individual differences and accomplishments of other students enrolled in the class. Students will be required to purchase a variety of art materials.

CERAMICS I

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: A lab fee will be charged; a sketchbook is required.

Students will be introduced to basic methods of ceramic pottery construction which includes coil, pinch, slab and pottery wheel techniques. Students will explore beginning sculptural techniques. A variety of ceramic finishing applications will be taught. Students will pre-plan ceramic designs and draw weekly in a sketchbook. Art history may accompany lessons to assist students in understanding the cultural and historical significance art plays in society. Students will be required to finish all class projects and weekly sketchbook assignments.

CERAMICS II

1 semester

Credit: .50

Prerequisites: Ceramics I

Fee/Materials: A lab fee will be charged; a sketchbook is required.

Ceramics II is designed to give students a more in depth experience with clay. Students will reinforce skills in hand building and finishing techniques learned in Ceramics I. Students will continue experimentation with the pottery wheel to develop an understanding of how to produce a variety of ceramic forms. Application in sculpture will also be emphasized including balance, texture, movement, and rhythm. Students will plan ceramic designs and draw weekly in a sketchbook. Art history may accompany lessons to assist students in understanding the cultural and historical significance art plays in society.

DESIGN & BEGINNING PRINTMAKING

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: A lab fee will be charged; a sketchbook is required.

Basic design principles will be introduced in exploring beginning printmaking methods. Some of the simple types of printmaking that students will have a chance to experience will be stamping, monotypes, linocuts, found object collagraphs and stencils. The printing process easily allows for the making of multiple copies of exciting original designs which are suitable for such uses as stationary and logos. Students will also complete planning sketches for projects.

DRAWING AND DESIGN

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: A lab fee will be charged; a sketchbook is required.

In the Drawing and Design course, students will be introduced to various design areas of study such as cartooning, interior, environmental, product, fashion and advertisement design. In addition, this course will teach techniques and concepts in drawing. Students will learn the skill of realistic drawing, including contour line, 3-D perspective, gesture and shading. These drawing techniques will be applied in a variety of different subject matter. Students will be introduced to techniques to incorporate illustrations into art work suitable for commercial use. Students will be required to complete design and drawing sketches.

PAINTING I

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: A lab fee will be charged; a sketchbook is required.

Students will be taught how to work successfully with different types of opaque and transparent paints. Skills and techniques in the disciplines of tempera, watercolor, gouache and oil pastel painting will be taught. Students will understand and incorporate color theory principles into a wide range of subject matter, from designs to landscapes. Art history may accompany lessons to assist students in understanding the cultural and historical significance art plays in society. Students will be required to finish all class assignments as well as complete basic watercolor sketch experiments.

PAINTING II

1 semester

Credit: .50

Prerequisites: Painting I

Fee/Materials: A lab fee will be charged; a sketchbook is required.

The techniques and concepts learned in Painting I will be applied for further exploration of various types of paint with additional attention given to acrylic, collage, finger and watercolor painting methods. Also continued will be the experimentation of color theory principles for the creation of finished painting compositions. More opportunities for individualized application of these techniques will be welcomed. This course offers help in art portfolio development as well as personal artistic enrichment. Art history may accompany lessons to assist students in understanding the cultural and historical significance art plays in society. Students will be required to finish all class assignments as well as complete watercolor experimental sketch assignments.

PHOTOGRAPHY I

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: A lab fee will be charged; students will be required to provide a digital camera or a smartphone camera that meets the needs of this course.

This introductory course will educate students about the fundamentals of photography. This project-based course will give students the opportunity to explore fine art photography through a hands-on approach. The goal of the course is to enable students to have creative control of their camera and the production of their art work. Students will learn how a camera works, how to set up compositions and lighting to take photographs, how to manipulate photographs with editing software and how to creatively solve art making prompts and questions. At times, this course will take students outside of the traditional classroom during photo shoots to offer a variety of subject matter. Students will be expected to participate in discussions, critiques and class demonstrations.

PHOTOGRAPHY II

1 semester

Credit: .50

Prerequisites: Photography I

Fee/Materials: A lab fee will be charged; students will be required to provide a digital camera or a smartphone camera that meets the needs of this course.

This intermediate to advanced course will build on the fundamentals taught in Photography I. This course will allow you to expand your photographic competency and aesthetic sensibility while exploring Adobe Photoshop techniques to edit and enhance your work and build a greater understanding of the medium of photography. The goal of this course is to develop a cohesive body of work with the final outcome being a series of project based photographs. This course will allow students to take creative control in a variety of photo shoot settings and in the editing/production process. This course at times will take the students out of the classroom during photo shoots to offer a variety of subject matter. Students will be required to participate in classroom discussions, critiques and class demonstrations as needed.

THREE-DIMENSIONAL ART & SCULPTURE

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: A lab fee will be charged; a sketchbook is required.

This course is designed to introduce students to the elements of art and principles of design as they relate to the creation of three dimensional forms. The course will cover a wide variety of sculptural mediums. It will include, but is not limited to, sculpting with wire, polymer clay, paper clay, fabric, altered found objects, fiber, needle felting, and jewelry making.

BUSINESS & MARKETING DEPARTMENT

CODE	COURSE TITLE	GRADE	LENGTH OF COURSE	CREDIT
000770	Business Foundations	9-12	1 semester	0.50
000767	Business Communications	10-12	1 semester	0.50
000777	Exploring Retail & Entrepreneurial Skills	10-12	1 semester	0.50
000771	Financial Accounting	10-12	1 semester	0.50
000774	International Business	10-12	1 semester	0.50
000752	Introduction to Tourism and Adventure Planning	11-12	1 semester	0.50
000754	Investing	11-12	1 semester	0.50
000772	Legal Environment of Business	10-12	1 semester	0.50
732000	Marketing Principles*	11	Full year	1.00
735000	Digital Marketing and Management Honors*	12	Full year	1.00
000789	Strategic Entrepreneurship Honors*	12	Full year	1.00
000775	Professional & Technical Sales*	12	Full year	1.00

**Note: These courses are only open to those who are admitted to the Marketing Pathways program.*

BUSINESS COURSE DESCRIPTIONS

BUSINESS FOUNDATIONS

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: None

Students will obtain knowledge and skills in fundamental business activities. They will acquire knowledge of business processes, business economics, and business relationships. Students will use technology to synthesize and share business information. Employability skills, leadership, business communications and personal finances will be addressed. The legal environment of businesses will also be explored.

BUSINESS COMMUNICATIONS

1 semester

Credit: .50

Prerequisites: Grades 10-12

Fee/Materials: None

Business English & Communications is designed to improve the student's command of the English language in various writing and speaking situations in the world of work. Topics of this class may include advanced grammar and word usage; writing business communications such as email, reports, letters and memorandums; communication psychology; technical writing; group and workplace dynamics and action research.

EXPLORING RETAIL & ENTREPRENEURIAL SKILLS

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: None

Are you interested in learning the skills necessary to operate a retail establishment? Do you want to create school spirit wear for our school store *The Derby* and learn about merchandising? This course will provide a realistic and practical learning experience through a hands-on learning laboratory that will reinforce classroom instruction, 21st Century Skills, and Retail/Entrepreneurial Concepts. Students in this course will be able to assist classmates with special needs to learn new skills in business, socialization and communication. This class is ideal for those students who would like to go into the education field, are interested in entrepreneurship, or would like to explore retail skills.

FINANCIAL ACCOUNTING

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: A course fee may be charged for consumable materials.

Accounting is considered the “basic” language of business. Students will track, record, summarize and report a business’s financial transactions. They will develop financial documents, project future income and expenses, and evaluate the accuracy of a business’s financial information. Students will also apply tools, strategies and systems to evaluate a company’s financial performance and monitor the use of financial resources. Technology, employability skills, leadership and communications will be incorporated in classroom activities.

INTERNATIONAL BUSINESS

1 semester

Credit: .50

Prerequisites: Business Foundations

Fee/Materials: None

Students will evaluate global business strategies and market-entry methods for conducting business internationally. They will use technology to determine the impact of government, economics, geography, history, ethics and digital communication tools on global trade. Management of sourcing and procurement, quality, distribution and supply chain in a global environment will be emphasized. Students will identify financing options for international operations. They will also analyze the competitiveness of U.S. companies in the international marketplace.

INTRODUCTION TO TOURISM & ADVENTURE PLANNING

1 semester

Credit: .50

Prerequisites: Juniors and Seniors only

Fee/Materials: None

Students will apply knowledge of travel destinations, tourist attractions and events of interest to plan and coordinate travel and tourism activities for customers. They will analyze cultural, historical and environmental factors impacting travel and tourism; examine challenges, opportunities and trends associated with the industry; and develop strategies for promoting travel and tourism. Social media marketing, brand positioning, marketing research and employability skills will also be addressed. There will be a large focus on local travel, parks, and adventures. Students will work with community partners, and make informal and formal presentations.

INVESTING

1 semester

Credit: .50

Prerequisites: Grades 11 and 12 only

Fee/Materials: None

Want your money to work for you? Financial Planning / Investing is a course that focuses on investment management, retirement planning, taxation, real estate, as well as other savings and investment vehicles. Students will analyze banking products / services, determine insurable losses, and use financial ratios to evaluate company’s performance. This course will be for any student that wants to learn a basic understanding of stock trading, crypto-currency or would like to learn more about real estate.

LEGAL ENVIRONMENT OF BUSINESS

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: None

Students will examine all aspects of business law including the judicial system, differences between types of laws and origins of laws, administrative and employment laws and laws impacting individuals as well as businesses. Students will also research real estate and debtor and creditor laws and regulations. Compliance and contract law will be emphasized.

MARKETING COURSE DESCRIPTIONS

Through an articulated agreement with Cuyahoga Community College, students who satisfactorily complete criteria for the marketing career-tech pathway may earn college credit. **Students will receive college credit if they complete specified criteria in the pathway of courses listed below.** The classes and credit they receive may be subject to change. Currently, students can earn college credit for completing the Professional and Technical Sales course and the Strategic Entrepreneurship course their senior year. In the Strategic Entrepreneurship course students earn a CTAG credit that will automatically transfer to any university in Ohio. Additionally, Strongsville City Schools has an articulation agreement with Kent State University that guarantees and streamlines the process for students who enroll at KSU to claim their credit.

The marketing pathway is a two-year program for students (grades 11-12) who have a career interest in marketing and management. The student completing this program is prepared to continue his/her education at the college level in marketing/business or to begin climbing the career ladder with continuing employment after graduation. The program is structured for students planning to own their own business or hold management positions in established companies. The marketing program provides the student with the opportunity to learn and practice basic marketing principles and skills. The students will study business functions such as sales, promotion, marketing, and entrepreneurship. Marketing students are required to become a member of DECA, an association of marketing students.

*Students who complete the four marketing courses and satisfy the requirements of the marketing program will be exempt from fulfilling the required Speech and Communications credit.

MARKETING PRINCIPLES Full year Credit: 1.00

Prerequisites: Juniors only

Fee/Materials: A course fee is required.

Students enrolled in Marketing Principles will attend class one period daily. The remainder of the day will consist of a regular academic schedule. Admission into this program will be based upon an application process. Students may be required to complete an interview with the marketing teacher. This is the first course in the marketing career pathway. It introduces students to the specializations offered in marketing. Students will obtain fundamental knowledge and skills in marketing communications, marketing management, marketing research, merchandising and professional selling. Students will acquire knowledge of marketing strategies, market identification techniques, employability skills, business ethics and law, and international business. Technology, leadership and communications will be incorporated into classroom activities.

DIGITAL MARKETING AND MANAGEMENT (HONORS) Full year Credit: 1.00

Prerequisites: Marketing Principles; seniors only. Teacher recommendation required.

Fee/Materials: A course fee is required.

Students will apply tools, strategies and processes to communicate digitally with targeted customers. They will create, implement, and critique online advertising, email marketing, websites, social media, mobile marketing, search-engine optimization, video or images and podcasts/webcasts. Students will apply project management techniques to guide and control digital communications efforts. They will also create and repurpose content for use in digital environments. Technology, employability skills, leadership and communications will be incorporated in classroom activities.

PROFESSIONAL AND TECHNICAL SALES Full year Credit: 1.00

Prerequisites: Marketing Principles; taken concurrently with Digital Marketing and Management; seniors only.

Fee/Materials: None

Students will demonstrate sales processes and techniques used in a business-to-business environment. They will develop, grow and maintain positive business relationships. Students will monitor trends in the business environment to determine the impact on their sales, customers and competitors. Students will negotiate and adjust prices and sales terms. Students will manage sales activities and territories.

Note: This is a work-based class that requires a job.

STRATEGIC ENTREPRENEURSHIP (HONORS) Full year Credit: 1.00

Prerequisites: Marketing Principles; taken concurrently with Digital Marketing and Management; seniors only.

Fee/Materials: None

Students will use innovation skills to generate ideas for new products and services, evaluate the feasibility of ideas, and develop a strategy for commercialization. They will use technology to select target markets, profile target customers, define the venture's missions, and create business plans. Students will take initial steps to establish a business. Students will calculate and forecast costs, break-even, and sales. Establishing a brand, setting prices, promoting products, and managing customer relationships will be emphasized.

Note: This is a work-based class that requires a job.

COMMUNICATION & FINANCIAL LITERACY COURSES

CODE	COURSE TITLE	GRADE	LENGTH OF COURSE	CREDIT
000163	Speech and Communication for the 21st Century	11-12	1 semester	0.50
	Fundamentals of Speech Communication (College Credit Plus)	11-12	1 semester	1.00
000229	Financial Literacy	10	1 semester	0.50

***Speech and Communication for the 21st Century is a graduation requirement for the Class of 2024 and beyond.
Financial Literacy is a graduation requirement for all students.*

COURSE DESCRIPTIONS

SPEECH AND COMMUNICATION FOR THE 21ST CENTURY

1 semester

Credit: .50

Prerequisites: Grades 11 and 12 only

Fee/Materials: None

This course will examine the process of communication and the anatomy of speaking and listening. Students will enhance their speech delivery and formal, informative public speaking skills that are learned from earlier courses. This course will explore all aspects of communication, including intrapersonal, interpersonal, nonverbal, group leadership and organizational. Professional communications will be a focus of the course, which will include interviewing, conducting meetings and other workplace topics. Speech and Communication for the 21st Century is a graduation requirement for the Class of 2024 and beyond.

FUNDAMENTALS OF SPEECH COMMUNICATION (College Credit Plus - COMM 1010)

1 semester

Credit: 1.00

Prerequisites: Test placement. This course will be taken as a College Credit Plus option through our partnership with Cuyahoga Community College; **students must apply to Cuyahoga Community College and get accepted to the CCP Program.**

Fee/Materials: None

Effective speech communication. Application of principles of speech content and delivery to a variety of practical speaking and listening.

FINANCIAL LITERACY

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: None

Financial literacy is defined as the ability to read, analyze, manage and communicate about personal financial conditions that affects one's material well-being. This course includes the ability to discern financial choices, discuss money and financial issues without (or despite) discomfort, plan for the future and respond competently to life events that affect everyday financial decisions.

COMPUTER AND TECHNOLOGY CLASSES

CODE	COURSE TITLE	GRADE	LENGTH OF COURSE	CREDIT
000787	Introduction to Business & Computer Technology	9-12	1 semester	0.50
000763	Digital Communication & Design **	9-12	1 semester	0.50
000483	Exploring Computer Science	9-12	1 semester	0.50
000553	MakerSpace I: Introduction to Makerspace**	9-12	1 semester	0.50
000563	Makerspace II: Advanced Makerspace **	9-12	1 semester	0.50
000559	Technology Innovation Capstone	11-12	1 semester	0.50
000764	Introduction to Robotics	9-12	1 semester	0.50
482000	Advanced Placement Computer Science Principles	10-12	Full Year	1.00
483000	Advanced Placement Computer Science A	11-12	Full Year	1.00

*** This course will partially fulfill the fine arts requirement for graduation.*

COMPUTER TECHNOLOGY COURSE DESCRIPTIONS

INTRODUCTION TO BUSINESS & COMPUTER TECHNOLOGY

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: None

In this fast paced and dynamic course, students will master the skills necessary to create, format, edit, revise and print professional documents such as letters, memorandums, reports, outlines, tables, and manuscripts. Commonly used applications are used separately and together to make a variety of documents and presentations for use in school, home or the working world. The practical and meaningful exercises that are completed will provide experience for students to be competent in the real world. Upon completion, students will be able to identify, select and apply appropriate technology tools to specific situations. Students may be exposed to the following software: Word, Excel, PowerPoint, Access and Google Apps among others.

DIGITAL COMMUNICATION & DESIGN

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: None

This class will introduce students to the principles, processes and applications of graphic design. Students will plan and design effective publications and communications using digital media. Digital imaging will be used to manipulate and enhance photographs and other images. As students work on a variety of real-life projects, they will build and maintain an electronic portfolio that will demonstrate progress made during the semester. Students will be required to use software such as Adobe Photoshop, Illustrator, InDesign and Dreamweaver. Students will utilize areas of the Makerspace throughout this entertaining course.

EXPLORING COMPUTER SCIENCE

1 semester

Credit: .50

Prerequisites: Completed Algebra I, Parts 1 & 2 or currently enrolled in Algebra I.

Fee/Materials: None

This course is designed to offer an introduction to computer science. Students will learn the basics of computer programming along with the basics of computer science. The material emphasizes computational thinking and helps develop the ability to solve complex problems. This course covers the basic building blocks of programming along with other central elements of computer science. It gives a foundation in the tools used in computer science and prepares students for further study in computer science, including AP Computer Science Principles and AP Computer Science A (Java) courses. The course allows students to work independently in text-based Python. The course also includes a career focus, where at the end of units, students meet (via videos) individuals from different industries who work in coding (medical, music, etc.).

MAKE IT, TAKE IT: INTRODUCTION TO THE MAKERSPACE 1 semester

Credit: .50

Prerequisites: None**Fee/Materials:** A course fee may be charged.

The Introduction to Makerspace class guides students through the Design Process using a wide range of Makerspace equipment and materials. Makerspace I employs a variety of "Hi-Tech" equipment and "Low Tech" projects which are individually designed and created by each student. Some "Hi-Tech" equipment may include a CNC Router, 3D Printer, Digital Cutter, Laser Engraver, and Robotics as well as a variety of student selected "Low Tech" projects. During the course students will develop an electronic portfolio/website, using a wide range of technology skills, highlighting their projects and reflections on the design process.

MAKERSPACE II: ADVANCED MAKERSPACE

1 semester

Credit: 0.50

Prerequisites: Make it; Take It: Introduction to the Makerspace**Fee/Materials:** A course fee may be charged.

Building on the skills and concepts acquired in Makerspace I students will further their understanding of the Design Process creating advanced projects using Makerspace equipment and supplies. In addition to creating original designs using a variety of programs students will be "badged" on each piece of Makerspace equipment indicating they can independently operate the CNC Router, 3D Printer, Digital Cutter, Laser Engraver, and Heat Press, and or Sewing and Embroidery Machines. Students will enhance their previously created Makerspace portfolio adding their advanced projects and reflections. The semester will culminate with a Maker Faire where student projects will be featured.

TECHNOLOGY INNOVATION CAPSTONE

1 semester

Credit: .50

Prerequisites: Grades 11-12 and at least two previous Industrial Technology courses or Make It, Take It: Intro to the MakerSpace**Fee/Materials:** A lab fee is required; students will pay for additional materials used on projects.

Technology Innovation Capstone is a course intended for students to explore, research, design, create, problem solve, collaborate, engineer and produce projects of their choice. Students will have the opportunity to work on their choice of projects without the pressure of time constraints. Students will develop real-world projects based on their interests, research solutions, connect to outside professionals via social media, collaborate with peers and experts and develop prototypes or products. Students who take this course will be given opportunities to explore a wide range of tools, materials and processes to create projects that they can take home and utilize in everyday life. Additionally, students will make use of the MakerSpace in this course.

INTRODUCTION TO ROBOTICS

1 semester

Credit: .50

Prerequisites: None**Fee/Materials:** A course fee may be charged.

The robotics class creates the excitement of a competitive atmosphere among classmates to inspire and engage students. Students will go through a design process to learn how to build a mobile robot. During this process they will learn key STEM principles, sensors, and robotics concepts. The curriculum is created to ensure that students with varying learning styles and levels can accomplish the lesson goals.

ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES

Full year

Credit: 1.00

Prerequisites: Completion of Algebra I**Fee/Materials:** A course fee may be charged. A fee will be added to cover the cost of the AP exam.

AP Computer Science Principles introduces students to the essential ideas of computer science with a focus on how computing can impact the world. Along with the fundamentals of computing, students will learn to analyze data, information and knowledge represented for computational use; create technology that has a practical impact; and gain a broader understanding of how computer science impacts people and society. The major areas of study in this course are organized around seven big ideas – creativity, abstraction, data and information, algorithms, programming, the Internet,

and global impacts – which are essential to studying computer science. This course follows the College Board’s course of study. Students who score well on the AP exam may receive credit for computer science at the college or university level.
Note: All students enrolled in this course must take the AP Exam.

ADVANCED PLACEMENT COMPUTER SCIENCE A

Full year

Credit: 1.00

Prerequisites: Geometry, Algebra II & Trigonometry, and Precalculus (may be taken concurrently). Teacher recommendation required.

Fee/Materials: A course fee may be charged. A fee will be added to cover the cost of the AP exam.

This is an Advanced Placement course in computer science consisting of a full academic year of programming in Java and topics related to computer science. This course follows the College Board course of study that prepares students for the AP Computer Science examination. Students will be writing programs to solve problems using Java. Topics include: control structures, classes and objects, arrays and array lists, recursion, sorting and searching and the AP College Board case study. Students who are considering majoring in engineering are highly encouraged to take this course.

Note: All students enrolled in this course must take the AP Exam.

ENGLISH LANGUAGE ARTS DEPARTMENT

CODE	COURSE TITLE	GRADE	LENGTH OF COURSE	CREDIT
117000	English 9	9	Full Year	1.00
119000	English 9 Honors	9	Full Year	1.00
124000	English 10	10	Full Year	1.00
126000	English 10 Honors	10	Full Year	1.00
132000	English 11	11	Full Year	1.00
148000	Advanced Placement English Language & Composition	11	Full Year	1.00
143000	English 12/British Literature Blended	12	Full Year	1.00
144000	Advanced Placement English Literature & Composition	12	Full Year	1.00
000159	Creative Writing	11-12	1 semester	0.50
000157	Broadcast Journalism & Media Communication	11-12	1 semester	0.50
000160	Literary Drama	11-12	1 semester	0.50
000113	Literature and Film	11-12	1 semester	0.50
000138	Music and Literature	11-12	1 semester	0.50
000161	Mystery and Detective Fiction	11-12	1 semester	0.50
000121	Science Fiction and Fantasy	11-12	1 semester	0.50
000151	Advanced Speech and Debate	11-12	1 semester	0.50
000137	Villains in Literature	11-12	1 semester	0.50
000162	World Mythology	11-12	1 semester	0.50
000101	College Composition I (College Credit Plus)	test placement	1 semester	1.00
000102	College Composition II (College Credit Plus)	test placement	1 semester	1.00

[Course descriptions for Theatre Arts and Publications Courses](#) and [Speech Communications](#) can be found in separate sections.

IMPORTANT NOTES:

- Supplemental resources used in conjunction with the above courses may include a variety of non-print materials including commercially available motion pictures. Parents desiring the titles of specific selections are encouraged to contact the department chairperson in advance of student registration.
- The purchase of additional student-owned materials is required for many English courses.
- Each student at the high school must complete FOUR (4) credits of English to graduate: English 9, English 10, English 11, and two ½ units of the student's choice.
- English 9 Honors, English 10 Honors, and Advanced Placement courses each require the completion of a summer reading assignment. Specific assignments will be available from English teachers or the Guidance Office in May.
- Summer reading assignments for honors and Advanced Placement courses must be completed by students when adding the course due to transfer or schedule change. This work must be completed within 30 days from being assigned to the course.
- English courses are to be completed in sequential order.
- Elective courses are open to students who have completed English 9 and 10. Students are encouraged to take electives beyond the 4 credits required for graduation.

ENGLISH LANGUAGE ARTS COURSE DESCRIPTIONS

ENGLISH 9 Full year Credit: 1.00

Prerequisites: None

Fee/Materials: None

English 9 provides a diverse selection of world literature which gives students the opportunity to study a wide variety of life experiences. The genres to be covered are short stories, essays, poetry, novels and plays from a variety of American, British, Chinese and other major cultural authors. These genres represent world literature and assist the students in developing an understanding of other societies and cultures. Students will build on the language arts skills of vocabulary acquisition, reading, writing, research, visual literacy and oral communication. Students will also engage with numerous readings of their choice to build a culture of life-long reading.

ENGLISH 9 HONORS Full year Credit: 1.00

Prerequisites: Teacher recommendation – average grade of A in regular level or B in honors course the preceding year. Writing samples may be required.

Fee/Materials: A fee is charged for novels and/or consumable materials.

In addition to the topics listed in the English 9 description, English 9 Honors also focuses on the development of critical level thinking, including an emphasis on analysis, synthesis and evaluation skills. There is a required summer reading assignment.

ENGLISH 10 Full year Credit: 1.00

Prerequisites: None

Fee/Materials: None

English 10 presents world literature which provides an opportunity for the student to engage a wide variety of human experiences. Through a variety of genres – short stories, poetry, essays, plays and novels – students acquire multiple perspectives with regard to traditions, ideas, customs and social actions to help them understand and appreciate one another's differences and similarities. Perspectives will be developed through the study of major geo-cultural groups (North American, South American, French, British, etc.). Students will continue to build upon English language arts skills with an emphasis on vocabulary acquisition, reading, writing, research, visual literacy and oral communication.

ENGLISH 10 HONORS Full year Credit: 1.00

Prerequisites: Teacher recommendation – average grade of A in regular level or B in honors course the preceding year. Writing samples may be required.

Fee/Materials: None

In addition to the topics listed in the English 10 description, English 10 Honors also focuses on the development of critical level thinking, including an emphasis on analysis, synthesis and evaluation skills. There is a required summer reading assignment.

ENGLISH 11 Full year Credit: 1.00

Prerequisites: None

Fee/Materials: None

English 11 is designed to give the student a comprehensive view of the development of American literature through representative writers of each of the five major periods: Colonial, Revolutionary, Romantic, Realistic and Modern. Through an emphasis on vocabulary acquisition, reading, writing, research, visual literacy and oral communication, the student will see how the literature reflects American history and how the literature has influenced history.

ADVANCED PLACEMENT ENGLISH LANGUAGE & COMPOSITION Full year Credit: 1.00

Prerequisites: Teacher recommendation; completion of summer reading and writing assignment; average grade of A in regular level or B in Honors English the preceding year. Writing samples may be required.

Fee/Materials: A fee is charged for novels and/or consumable materials. A fee will be added to cover the cost of the AP exam.

This course offers preparation for the AP English Language and Composition exam. The AP English Language and Composition course is a college-aligned curriculum designed to help motivated students become skilled readers of expository, analytical and argumentative prose. Students will develop fundamental skills in research, analysis and informed argument. American literature will be emphasized.

Note: All students enrolled in this course must take the AP Exam.

ENGLISH 12/BRITISH LITERATURE - BLENDED Full year Credit: 1.00

Prerequisites: A "C" average or better in English 11.

Fee/Materials: None

Students enrolled in this course will complete the study of a variety of special topics including but not limited to: the development of character archetypes and their use within literature and film, the history and development of legend stories, the impact of greed on the human race, and the use of literature as social commentary throughout history. While studying these special topics, students will enhance the reading and writing skills needed to be successful in either a 21st century college or career environment.

Blended learning instruction is delivered in a non-traditional schedule and requires independent learning by students, using web-based tools. The instructor is always available during the class period even if the blended learning class is not scheduled to meet.

ADVANCED PLACEMENT ENGLISH LITERATURE & COMPOSITION Full year Credit: 1.00

Prerequisites: Teacher recommendation; completion of summer reading and writing assignment; average grade of A in regular level or B in Honors English the preceding year. Writing samples may be required.

Fee/Materials: A fee will be added to cover the cost of the AP exam.

This course offers preparation for the AP English Literature and Composition exam. The goal of the course is to teach students to read and write about English literature at a college level. Students study poetry, prose and drama from different literary time periods. Students will engage in the practice of analytical writing about literature, learn how texts are structured, and develop the ability to analyze college-level texts.

Note: All students enrolled in this course must take the AP Exam.

ENGLISH ELECTIVES

NOTE: Electives are open to all students who have completed English 9 and English 10 and may be used toward partially fulfilling the graduation requirements of 4 English credits.

CREATIVE WRITING 1 semester Credit: .50

Prerequisites: Grades 11 and 12 only.

Fee/Materials: A fee may be charged for consumable materials.

This course is designed to provide students with the opportunity to think and write creatively. Creative writing will be used as a tool for self-expression and intellectual exploration. Students will identify the successful elements of a creative piece of writing and focus on the craft of writing, including dialogue, plot, description, and character. Topics may include non-fiction, poetry, short story, script, music, drama and narrative writing. Students will work with their peers to revise their writing and may be required to present/perform what they have written.

BROADCAST JOURNALISM & MEDIA COMMUNICATION 1 semester Credit: .50

Prerequisites: None

Fee/Materials: None

Students who take Broadcast Media Communications produce projects using the Adobe Creative Cloud suite and learner programs like Adobe Premiere and more. If you love media and also want to foster your ability to plan and produce multimedia work, this is a great course for you. This course will focus on learning video and audio broadcast journalism

through creating broadcast news, opinionated videos, sound projects, podcasts, and more. Students will develop an understanding and appreciation for the role of the media in today's society through discussion of the history, purpose and influence. Students will explore the relationship between the media and society, and how each is influenced by the other.

LITERARY DRAMA

1 semester

Credit: .50

Prerequisites: Grades 11 and 12 only.

Fee/Materials: None

Students will read and study the written texts of plays ranging from the Greek, Roman, French Baroque, Elizabethan, 19th, and 20th Century. Genres will include a range of comedy and tragedy. Students will examine the actions and motives of characters, but also draw parallels between modern and historical "real-life" figures in order to reach a better understanding of themselves and the people around them.

LITERATURE AND FILM

1 semester

Credit: .50

Prerequisites: Grade 11 and 12 only.

Fee/Materials: None

We have all watched movies but have you considered how they are made, why they are made, what they are saying about our culture, and how they connect to the literary works or real events which inspired them? Literature and Film is a course which introduces students to basic filmmaking techniques, teaches how to analyze what we see and hear, and allows one to consider the bigger picture through analysis activities, movie reviews, and discussion. Students will read and analyze novels, short stories, and nonfiction pieces and then view the films which they inspired. A few of the genres/topics explored are the history and social commentary of horror movies and literature, the responsibility of artists to create works on real events and people, and what qualities are necessary to create an award-winning or best-selling work. This fun and interactive course will challenge your analytical and creative abilities. You will never watch movies the same way again.

MUSIC AND LITERATURE

1 semester

Credit: .50

Prerequisites: Grades 11 and 12 only.

Fee/Materials: None

Music and Literature offers students the opportunity to not only analyze the songs of their favorite musicians, but research how these talents have impacted culture. Music and Literature students will explore the context surrounding different genres of music, research the creative process of musicians, and explain why particular artists are deserving of their accolades. Students should come to this class looking forward to: daily music exposure, opportunities to share their favorite artists with the class, and the challenge of explaining how music reflects the human narrative.

MYSTERY AND DETECTIVE FICTION

1 semester

Credit: .50

Prerequisites: Grade 11 and 12 only.

Fee/Materials: None

Calling all amateur detectives and forensics fans! If you are devoted to watching shows like Law and Order and Criminal Minds, this course is for you. Mystery and Detective Fiction unfolds with a background in traditional detective works providing students with the clues they need to investigate classic and contemporary works, such as Sherlock Holmes stories and films, Ian Fleming's James Bond series, and Agatha Christie's thrillers. This study of literature is enriched by a cross-over into forensics study and its basis in literature. This course will focus on narrative techniques used by writers to create characters, plot, and suspense in a work of fiction. Join us for the investigation as we read and write together.

SCIENCE FICTION AND FANTASY

1 semester

Credit: .50

Prerequisites: Grade 11 and 12 only.

Fee/Materials: None

This is the class where young minds quest against the darkness and explore strange new worlds across all quadrants of the galaxy. If you are ready to seek out new life and new civilizations...to boldly read literature you have not read before...then consider Science Fiction and Fantasy. This elective explores the classic beginnings of science fiction through a study of the

stories from the Golden Era of Science Fiction and contemporary takes on fiction, before crossing the threshold into the magical realm of epic fantasy literature. Through reading, analysis, and creative writing, students will gain an understanding of the influential power of these two connected genres as they discuss themes related to the environment, war, social issues, and technology through the cautionary tales of science fiction and the world building of fantasy. So, join the learning journey! Do or do not...there is no try!

ADVANCED SPEECH AND DEBATE

1 semester

Credit: .50

Prerequisites: Grade 11 and 12 only; Speech and Communication for the 21st Century.

Fee/Materials: None

Students will work collaboratively on problem solving, decision making, conflict management, group dynamics and fostering positive relationships. Students will be exposed to impromptu speaking, oral interpretation of literature, argumentation and debate. Debate topics include: arguments, constructing arguments, defending positions, choosing evidence, documenting sources, studying logical reasoning, recognizing fallacies of reasoning, cross-examining opponents, delivering rebuttals.

VILLAINS IN LITERATURE

1 semester

Credit: .50

Prerequisites: Grade 11 and 12 only.

Fee/Materials: None

It's true. We love to hate or despise certain characters. For one reason or another, they either make us sick, repulse us, or frighten us to death. They're called villains. *Villains in Literature (ViL)* is a semester-long English elective designed to examine the role of villains throughout various literary genres. The overwhelming majority of readers typically focus on heroes. However, this course will take a unique approach to close readings of some of the most famous literary villains. Students will learn how and why villains aid the development of universal themes and central meanings to some of the most critically-acclaimed literature of all time. Students will analyze why villains become so hated as well as why cultures have always had a "fascination with the abomination." In other words, why do people find the villain so compelling and memorable? The course will uncover characteristics of the villain and how those villains have changed over time as well as their relevance to a society's culture, both past and present.

WORLD MYTHOLOGY

1 semester

Credit: .50

Prerequisites: Grade 11 and 12 only.

Fee/Materials: None

This course will focus on the legacy, nature, and social impact of mythology. Students will conduct an in-depth study of the heroes, heroines, and the pantheon of Greek, Roman, and Norse cultures. Students will also look at creation stories, nature myths, and pantheons of various cultures from around the world. Through reading, writing and analysis, students will use various learning strategies and platforms to make connections to the stories and cultures within each origin of mythology.

COLLEGE COMPOSITION I

1 semester

Credit: 1.00

(College Credit Plus - ENG 1010)

Prerequisites: Test placement. This course will be taken as a College Credit Plus option through our partnership with Cuyahoga Community College; **students must apply to Cuyahoga Community College and get accepted to the CCP Program.**

Fee/Materials: None

Students study and practice in academic writing; reading and interpretation of selected texts. Requires critical/analytical thinking, writing and speaking. Course may be thematically organized. Students can earn three semester hours of college credit.

COLLEGE COMPOSITION II

1 semester

Credit: 1.00

(College Credit Plus - ENG 1020)

Prerequisites: Test placement or English 1010. This course will be taken as a College Credit Plus option through our partnership with Cuyahoga Community College; **students must apply to Cuyahoga Community College and get accepted to the CCP Program.**

Fee/Materials: None

Students study and practice persuasive and argumentative writing with emphasis on analysis and research; reading and interpretation of selected texts. Requires critical/analytical thinking, writing and speaking. Course may be thematically organized. Students can earn three semester hours of college credit.

FAMILY AND CONSUMER SCIENCES DEPARTMENT

CODE	COURSE TITLE	GRADE	LENGTH OF COURSE	CREDIT
000531	Child Growth and Development *	9-12	1 semester	0.50
000527	College and Career Readiness *	9-11	1 semester	0.50
000532	Principles of Food *	9-12	1 semester	0.50
000524	Food and Culinary Fundamentals *	10-12	1 semester	0.50
000520	Global Foods *	10-12	1 semester	0.50
000525	Human Growth and Development *	9-12	1 semester	0.50
000514	Independent Living & Career Skills	10-12	1 seemster	0.50
000517	Fashion and Interior Design **	9-12	1 semester	0.50
000811	Advanced Interior Design **	10-12	1 semester	0.50
000812	Advanced Fashion **	10-12	1 semester	0.50
000522	Nutrition and Wellness *	9-12	1 semester	0.50

* This course will partially fulfill the career tech option for graduation.

** This course will partially fulfill the fine arts or career tech option for graduation.

FAMILY AND CONSUMER SCIENCE COURSE DESCRIPTIONS

CHILD GROWTH AND DEVELOPMENT

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: None

In this course, students will study the principles of child growth, development and behavior. An emphasis will be placed on the cognitive development of a child and sensory and motor skills. Additional topics will include childhood diseases, immunizations, theories of development, learning styles and evaluating childcare services.

COLLEGE AND CAREER READINESS

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: None

In this course, students will develop effective learning strategies and skills to provide a strong foundation for successful lifelong learning. Throughout the course, students will research careers and occupations, review postsecondary admissions qualifications, and develop interviewing skills. Additional topics will include principles and techniques of professionalism, networking, conflict-resolution, negotiation, and leadership.

PRINCIPLES OF FOOD

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: A lab fee is charged.

In this course, students will gain knowledge in food selection criteria and apply preparation methods to promote a healthy lifestyle. Students will apply cooking methods, ingredient selection and nutritional information in the context of selected food dishes. Throughout the course, basic food safety and sanitation techniques will be emphasized. Note: this course is a prerequisite for all other food courses.

FOOD AND CULINARY FUNDAMENTALS

1 semester

Credit: .50

Prerequisites: Principles of Food or teacher recommendation.

Fee/Materials: A lab fee is charged.

In this course, students will apply fundamental culinary skills and techniques, such as knife handling skills and the recognition, selection and proper use of tools and equipment. An emphasis will be placed on recipe selection, the management of time, ingredients and equipment. Students will apply standard recipe conversions using proper scaling

and measurement techniques.

GLOBAL FOODS

1 semester

Credit: .50

Prerequisites: Principles of Food or teacher recommendation.

Fee/Materials: A lab fee is charged.

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

HUMAN GROWTH AND DEVELOPMENT

1 semester

Credit: .50

Prerequisites: Child Growth and Development

Fee/Materials: None

In this course, students will analyze human growth and development throughout the lifespan. An emphasis will be placed on physical, cognitive, social and emotional growth and development. Additional topics will include human characteristics and traits, genetic defects, parenting styles and responsibilities and cultural differences within a family unit and community.

INDEPENDENT LIVING AND CAREER SKILLS

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: None

In this course students will gain the skills needed for preparing for adult life including what is needed to be successful in their career. Topics will include Independent Living, Workplace Skills (soft skills), Conflict Resolution, Communication, Self Advocacy, and Goal Setting. This course is an inclusive class open to all students. Students with special needs will work alongside their typical peers to learn skills necessary for independent adulthood. Students who are interested in careers in education, social work, and other human development fields would benefit from the content and experiences gained through this course.

FASHION AND INTERIOR DESIGN

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: A lab fee is charged.

In this course, students will explore a broad range of topics relating to the various aspects of and career opportunities in the field of textiles and design. The emphasis will be given to textiles project development and developing strategies to maintain the home. Additional topics will include project collaboration, design techniques, and environmental sustainability.

ADVANCED INTERIOR DESIGN

1 semester

Credit: .50

Prerequisites: Fashion and Interior Design

Fee/Materials: A lab fee is charged.

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

ADVANCED FASHION

1 semester

Credit: .50

Prerequisites: Fashion and Interior Design

Fee/Materials: None

In this course, students will study the visual appearance of fabric and fashion design. Students will identify, analyze and apply production processes and techniques to textiles. Additional topics will include the maintenance and alterations of textiles products, including home interior accessories and garments.

NUTRITION AND WELLNESS

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: A lab fee is charged.

In this course, students will use principles of nutrition and wellness to ensure a healthy lifestyle. Students will learn problem solving skills that will assist them in many aspects of their lives including family relationships, meal preparation and planning, staying physically and emotionally well, managing stress, enhancing sleep routines, effective communication, and self esteem building.

HEALTH AND PHYSICAL EDUCATION DEPARTMENT

CODE	COURSE TITLE	GRADE	LENGTH OF COURSE	CREDIT
000911	Health	9	1 semester	0.50
924000	Pre-Medical Health Honors	12	Full Year	1.00
000905	Adapted Physical Education	9-12	Full Year	0.50
000916	Foundations of Physical Activity	9	1 semester	0.25
000931	Competitive Team Games	10-12	1 semester	0.25
000920	Fitness for Life	10-12	1 semester	0.25
000921	Recreational Activities	10-12	1 semester	0.25
000935	Speed, Strength and Wellness - A	9-12	1 semester	0.50
000936	Speed, Strength and Wellness - B	9-12	1 semester	0.50
000919	Sports Management	11-12	1 semester	0.50

Important Notes:

- Each student at SHS is required to complete 2 Semester courses of Physical Education, unless exempted. Each semester course is worth .25 credits. They do NOT meet the requirements for athletic eligibility.
- The Speed, Strength and Wellness (A or B) does not meet the Physical Education requirements for graduation.

PHYSICAL EDUCATION MEDICAL EXCUSES

A student with a short-term illness or injury may be excused from participating in physical education class for up to three days with a note from a parent/guardian. An excuse beyond three days will require a doctor's note that must contain the reason and duration of the illness or injury. A student cannot be excused from physical education class without a note from a parent/guardian or doctor. The student will make up the excused days from physical education classes with written work assigned by the teacher. A student who is medically excused from physical education class may not participate in co-curricular activities during the time of the excuse. A student who is medically excused from physical education class for more than 40% (consecutive days) of the quarter or semester will be withdrawn from the class (without penalty) and rescheduled in a physical education class during a subsequent semester. Students and/or parents should meet with the physical education teacher and guidance counselor at the earliest possible time to make these arrangements.

HEALTH COURSE DESCRIPTIONS

HEALTH 1 semester Credit: .50

Prerequisites: None

Fee/Materials: None

Note: Required for graduation.

This course approaches health from three major areas: physical, emotional, and social. Areas of instruction include nutrition, mental health, family and social health, the life cycle, STIs/AIDS, personal health and fitness, substances of abuse, safety and emergency care (CPR/AED). In addition, dating violence warning signs and prevention and characteristics of healthy relationships will be explored.

PRE-MEDICAL HEALTH HONORS Full year Credit: 1.00

Prerequisites: Completed freshman health requirement; seniors only

Fee/Materials: A lab fee may be charged.

Pre-Medical Health Honors is an advanced class in human anatomy and physiology. It is designed for seniors interested in a health or medical career. The anatomy and physiology portion of the class will cover the language of anatomy, cells and tissues, and the structure and function of the body's systems.

Note: This course will not meet the health requirement for graduation.

PHYSICAL EDUCATION COURSE DESCRIPTIONS

The following courses meet the Physical Education requirements for graduation.

FOUNDATIONS OF PHYSICAL ACTIVITY

1 semester

Credit: .25

Prerequisites: None.**Fee/Materials:** None

This course provides practice and methods for participating in various team and individual games. Students will be exposed to the skills, tactics, officiating procedures and overall participation requirements for various team and individual games. In addition the components of physical fitness will be applied to all activities.

Note: This course does not meet the requirements for athletic eligibility.

COMPETITIVE TEAM GAMES

1 semester

Credit: .25

Prerequisites: Foundations of Physical Activity**Fee/Materials:** None

Students will participate in a variety of team sports including but not limited to volleyball, badminton, table tennis, basketball, gatorball, softball, football, soccer, tennis and handball. This course is typically a more competitive environment than the required physical education class, which is enhanced by the student's development of teamwork, sportsmanship, and effort.

Note: This course does not meet the requirements for athletic eligibility.

FITNESS FOR LIFE

1 semester

Credit: .25

Prerequisites: Foundations of Physical Activity**Fee/Materials:** None

This course provides practice and methods for participating in physical fitness activities that can be performed over a lifetime. Students will be exposed to various activities providing the necessary components for leading a healthy and active lifestyle. Instruction and assessment of fitness-based activities appropriate for lifelong health and fitness will be provided. This course will include activities such as aerobic fitness, strength and resistance training, walking, jogging and yoga.

Note: This course does not meet the requirements for athletic eligibility.

RECREATIONAL ACTIVITIES

1 semester

Credit: .25

Prerequisites: Foundations of Physical Activity**Fee/Materials:** None

Students will participate in a variety of non-competitive units offered through team, individual, and/or a lifetime fitness format. Basic to intermediate skills will be applied while learning the strategy of the activity. Activities may include badminton, table tennis, golf, walking, ultimate Frisbee, bowling, bocce ball, corn hole, and horseshoes.

Note: This course does not meet the requirements for athletic eligibility.

ADAPTED PHYSICAL EDUCATION

Full year

Credit: .50

Prerequisites: Administrative permission**Fee/Materials:** None

Adapted physical education provisions may be considered based upon clear medical evidence of a permanent physical disability or condition, which might preclude participation in the traditional form of physical education. As the need for such classes is small they are only scheduled according to predetermined needs.

HPE ELECTIVES**SPEED, STRENGTH AND WELLNESS - A**

1 semester

Credit: .50

SPEED, STRENGTH AND WELLNESS - B

1 semester (2nd time enrolled)

per semester

Prerequisites: None**Fee/Materials:** None

This course provides skills of weight training, training programming for personal fitness and athletic performance. In addition, topics related to wellness ie; sport psychology and mental health, nutrition, leadership skills and relationship building will be taught. This course may be repeated for credit. This course may be taken 1st semester, 2nd semester or both semesters.

Note: This course does NOT meet the physical education or health requirements for graduation.

SPORTS MANAGEMENT

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: None

This course will serve as an introduction to sport management. Topics will include planning, marketing, financing, leading and organizing sport, fitness and recreational organizations, events and facilities. Sport law, ethics and psychology are also considered. Coursework will include authentic experiences with the athletic department for various sporting events. Students will be required to attend at least 1 home game to obtain game footage, conduct interviews, post game updates, etc. Attending further games is also encouraged.

INDUSTRIAL TECHNOLOGY EDUCATION

CODE	COURSE TITLE	GRADE	LENGTH OF COURSE	CREDIT
000557	Architectural Design *	9-12	1 semester	0.50
000554	Computer Aided Drafting & Design *	9-12	1 semester	0.50
000556	Advanced Computer Aided Drafting & Design *	10-12	1 semester	0.50
000569	Home Maintenance and Repair	9-12	1 semester	0.50
000560	Metals Technology	9-12	1 semester	0.50
000562	Advanced Metals Technology	10-12	1 semester	0.50
000558	Survey of Industrial Technology	9-12	1 semester	0.50
000559	Technology Innovation Capstone (see Computer and Technology pages)	11-12	1 semester	0.50
000567	Video Technology *	9-12	1 semester	0.50
000551	Woods Technology	9-12	1 semester	0.50
000552	Advanced Woods Technology	10-12	1 semester	0.50

*These courses will partially fulfill the fine arts requirement for graduation.

Note: A fee is charged for some of the consumable materials used in all technology courses

INDUSTRIAL TECHNOLOGY EDUCATION COURSE DESCRIPTIONS

ARCHITECTURAL DESIGN

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: A lab fee is charged; students will pay for additional materials used on projects.

Architectural design is designed to introduce students to residential architectural terminology, construction, and design. Students use computer-aided design software to create plans and construct architectural details. Students will complete projects and drawings covering floor plans, foundations, door and window schedule, roof plans, and detail wall sections. Students will also research building materials related to their particular design. Students will utilize areas of the Makerspace in this course.

Note: This course will help fulfill the fine arts requirements for graduation.

COMPUTER AIDED DRAFTING & DESIGN

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: A lab fee is charged; students will pay for additional materials used on projects.

Computer Aided Drafting and Design is recommended for anyone interested in pursuing a career in a technical or engineering field. Students will use the SolidWorks program, which is a 3D modeling program that is used throughout the engineering industry. Using design processes, students learn basic and advanced design principles and the basics of the SolidWorks program. This software will allow students to visualize, design, build and test projects in class. Students will utilize areas of the Makerspace in this course.

Note: This course will help fulfill the fine arts requirements for graduation.

ADVANCED COMPUTER AIDED DRAFTING & DESIGN

1 semester

Credit: .50

Prerequisites: Computer Aided Drafting & Design

Fee/Materials: A lab fee is charged; students will pay for additional materials used on projects.

Advanced Computer Aided Drafting and Design is a SolidWorks based class. This software will allow students to visualize, design and fabricate finished products. It will cover assembly drawing as well as more technically challenging drawing such as nuts, bolts and tolerances. Students will have an opportunity for hands-on design and project testing in class. Students will utilize areas of the Makerspace in this course.

Note: This course will help fulfill the fine arts requirements for graduation.

HOME MAINTENANCE AND REPAIR

1 semester

Credit: .50

Prerequisites: None**Fee/Materials:** A lab fee is charged; students will pay for additional materials used on projects.

Home Maintenance and Repair is intended to introduce students to the construction industry related to residential house construction and general maintenance. Students will be engaged in short term remodeling projects such as wall framing, drywall finishing, electrical wiring and painting. This course is project-based using hands-on activities to provide students with the opportunity to construct projects using hand tools, power tools, materials and processes in the woods lab. Students will utilize areas of the Makerspace in this course.

METALS TECHNOLOGY

1 semester

Credit: .50

Prerequisites: None**Fee/Materials:** Approved safety glasses; a lab fee is charged; students will pay for additional materials used on projects.

The Metals Technology course is intended to familiarize students with tools, shop safety, machinery, materials and processes used in the welding and manufacturing industry. This course is project-based with various hands-on activities in the metals lab. Students will construct two or more projects made out of steel or sheet metal and be able to apply finishes to them. Students will have the opportunity to utilize areas of the Makerspace in this course.

ADVANCED METALS TECHNOLOGY

1 semester

Credit: .50

Prerequisites: Metals Technology**Fee/Materials:** Approved safety glasses; a lab fee is charged; students will pay for additional materials used on projects.

Advanced Metals Technology is intended for students to become completely familiar with tools, machinery, materials and processes used in the welding and manufacturing industry. Students will be introduced to design characteristics of steel product manufacturing. This course is project-based using hands-on activities in the metals lab. Students will construct a product made of steel or sheet metal using advanced welding skills. Students will have the opportunity to utilize areas of the Makerspace in this course.

SURVEY OF INDUSTRIAL TECHNOLOGY

1 semester

Credit: .50

Prerequisites: None**Fee/Materials:** Approved safety glasses; a lab fee is required and students will pay for additional materials.

Survey of Industrial Technology is designed to introduce students to hand tools, power tools, materials and basic processes used in various manufacturing and construction settings, with an emphasis on shop safety. This course is project-based with many hands-on activities. It will benefit students ranging from those with vocational interests to engineering-bound individuals. Students will construct two or more projects. Additionally students will learn computer programming skills to operate equipment such as the CNC router, CNC milling machine, and/or Epilog Laser Engraver in order to personalize products.

WOODS TECHNOLOGY

1 semester

Credit: .50

Prerequisites: None**Fee/Materials:** A lab fee is required and students will pay for additional materials used on projects.

The Woods Technology course is intended to familiarize students with tools, shop safety, machinery, materials and processes used in the construction and manufacturing industry. This course is project-based with various hands-on activities in the woods lab. Students will construct two or more projects made out of wood and be able to apply finishes to them. Students will have the opportunity to utilize areas of the Makerspace in this course.

ADVANCED WOODS TECHNOLOGY

1 semester

Credit: .50

Prerequisites: Woods Technology

Fee/Materials: A lab fee is required and students will pay for additional materials used on projects.

Advanced Woods Technology is intended for students to become completely familiar with tools, machinery, materials and processes used in the construction and manufacturing industry. Students will be introduced to design characteristics of wood product manufacturing. This course is project-based, using hands-on activities in the woods lab. Students will construct a large product made of wood using advanced wood manufacturing skills. Students will have the opportunity to utilize areas of the Makerspace.

VIDEO TECHNOLOGY

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: A lab fee is charged; students will pay for additional materials used on projects.

Video Technology is designed to teach the basics of video production. Students will learn about storyboarding and the basic operation of video cameras. This course will teach students to upload and edit videos using the Present Pro program. Students will complete a series of assignments which will include various video techniques and visual elements. Students will have an opportunity to read and assist in producing the morning announcements and create commercial spots that will encourage and promote a positive school atmosphere.

Note: This course will help fulfill the fine arts requirements for graduation.

MATHEMATICS DEPARTMENT

CODE	COURSE TITLE	LENGTH OF COURSE	CREDIT
422000	Algebra I	Full year	1.00
424000	Algebra I Honors	Full year	1.00
423000	Algebra I, Part I	Full year	1.00
425000	Algebra I, Part II	Full year	1.00
426000	Geometry	Full year	1.00
428000	Geometry Honors	Full year	1.00
430000	Algebra II	Full year	1.00
432000	Algebra II and Trigonometry	Full year	1.00
434000	Algebra II and Trigonometry Honors	Full year	1.00
413000	Financial Algebra	Full year	1.00
415000	Mathematical Modeling	Full year	1.00
414000	Probability and Statistics	Full year	1.00
440000	Pre-Calculus	Full year	1.00
442000	Pre-Calculus Honors	Full year	1.00
485000	Advanced Placement Statistics	Full year	1.00
452000	Advanced Placement Calculus (AB)	Full year	1.00
454000	Advanced Placement Calculus (BC)	Full year	1.00
456000	Multivariable Calculus (College Credit Plus)	1 semester	1.00
457000	Linear Algebra (College Credit Plus)	1 semester	1.00

Note: Most courses require a graphing calculator. The preferred calculator of Strongsville High School Mathematics Department is the TI-84 plus. You are not required to purchase this model, but class work will use this or a comparable model.

RECOMMENDED COURSE SEQUENCING FOR MATH

Students can move across tracks with teacher permission. Specific requirements for each course are listed in course descriptions.

	Grade 9	Grade 10	Grade 11	Grade 12
Recommended for students not ready for Algebra I (teacher recommendation)	Algebra I, Part I (administrative approval)	Algebra I, Part II	Geometry	Math Modeling Prob & Stats Algebra II
Recommended for most students	Algebra I	Geometry	Algebra II-Trig (A/B/C in Geometry)	Precalculus (A/B in Trig) Financial Algebra Prob & Stats Math Modeling AP Stats (A/B in Trig)
			Math Modeling Algebra II (C/D in Geometry)	Financial Algebra Math Modeling Prob & Stats Algebra II
Recommended for students who are accelerated in mathematics who did not complete Algebra I prior to 9 th grade	Honors Algebra I (with teacher recommendation)	Honors Geometry (with teacher recommendation)	Honors Algebra II-Trig (with teacher recommendation)	Honors Precalculus Precalculus Prob & Stats AP Statistics Financial Algebra
Recommended for students who are accelerated in mathematics who completed Algebra I prior to 9 th grade	Honors Geometry (A/B in Algebra)	Honors Algebra II-Trig	Honors Precalculus	Prob & Stats AP Calculus BC AP Statistics Financial Algebra
	Geometry (C or lower in Algebra)	Algebra II-Trig	Precalculus Financial Algebra Prob & Stats	AP Calculus AB Prob & Stats AP Statistics Financial Algebra
	Honors Algebra II-Trig (Geometry was completed prior to 9 th grade)	Honors Precalculus	AP Calculus BC AP Statistics	Multivariable Calculus/ Linear Algebra AP Statistics

MATHEMATICS COURSE DESCRIPTIONS

ALGEBRA I Full year Credit: 1.00

Prerequisites: None

Fee/Materials: This course requires a scientific calculator, e.g. the TI-30X or a comparable calculator.

Algebra I is the first course in the college prep series. It includes a review of directed numbers, equations, inequalities, systems of linear equations, polynomials, fractions with variable expressions, graphing, rational and irrational numbers, use of the graphing calculator, and basic data analysis. The student should acquire an understanding of the basic structure of algebra as well as be able to apply algebraic concepts and skills to problems. Algebra I is a prerequisite for all other math courses.

HONORS ALGEBRA I Full year Credit: 1.00

Prerequisites: Teacher recommendation.

Fee/Materials: A TI-84 or comparable graphing calculator is required.

Algebra I Honors is an in-depth and accelerated treatment of the Algebra I curriculum and additional topics. This course is intended for students eager to be challenged by higher level thought and thorough analysis of topics, enjoy solving challenging problems, and have a strong work ethic. Topics will include integers, equations, inequalities, linear functions, systems of equations, quadratic functions, exponential functions, polynomials, graphing, and introductory data analysis.

Note: A student enrolled in Honors Algebra I will not be permitted to change to Algebra I at any time without administrative and teacher approval, including at the start of the second semester. Summer work may be required.

ALGEBRA I, PART I Full year Credit: 1.00

Prerequisites: Grade 9 only with administrative approval.

Fee/Materials: This course requires a scientific calculator, e.g. the TI-30X or a comparable calculator.

Algebra I, Part 1 is the first year in a two year sequence that can replace Algebra 1 with administrative approval. It includes studies of directed numbers, equations, inequalities, graphing, variation, rational and irrational numbers, and use of a graphing calculator. Through Algebra I, Parts 1 and 2, the student should acquire an understanding of the basic structure of algebra as well as be able to apply algebraic concepts and skills to problems. Algebra I is a prerequisite for all other math courses.

ALGEBRA I, PART II Full year Credit: 1.00

Prerequisites: Algebra I, Part 1

Fee/Materials: This course requires a scientific calculator, e.g. the TI-30X.

Algebra I, Part 2 is the second year in a two year sequence that can replace Algebra 1 with administrative approval. It includes studies of systems of linear equations, polynomials, fractions with variable expressions, basic data analysis, and use of the graphing calculator. Through Algebra I Parts 1 and 2, the student should acquire an understanding of the basic structure of algebra as well as be able to apply algebraic concepts and skills to problems. Algebra I is a prerequisite for all other math courses.

GEOMETRY Full year Credit: 1.00

Prerequisites: Algebra I or both Algebra I, Part I and Algebra I, Part II.

Fee/Materials: This course requires a scientific calculator, e.g. the TI-30X or a comparable calculator.

This course introduces formal mathematical proof and reasoning by exploring and applying definitions, properties, and theorems about geometric figures. Units of study will include: relationships of congruent and similar figures using coordinate and transformational approaches, right triangle trigonometry, measurement (including area and volume), and probability.

HONORS GEOMETRY Full year Credit: 1.00

Prerequisites: Algebra I. Teacher recommendation required.

Fee/Materials: A TI-84 or comparable graphing calculator is required.

This course introduces formal mathematical proof and reasoning by exploring and applying definitions, properties, and theorems about geometric figures. Units of study will include: relationships of congruent and similar figures using coordinate and transformational approaches, right triangle trigonometry, measurement (including area and volume), and probability. Additionally, there will be an integrated review of more challenging algebraic concepts. Problems and applications are more rigorous than in the standard Geometry course.

Note: Summer work required.

ALGEBRA II Full year Credit: 1.00

Prerequisites: Algebra I or both Algebra I, Part I and Algebra I, Part II and Geometry.

Fee/Materials: A TI-84 or comparable graphing calculator is required.

This course is a continuation of the study of Algebra. Further skill development is emphasized in the study of linear and quadratic equations, systems of equations, and exponential and logarithmic functions.

NOTE: This course is a minimum requirement for graduation and is devoted to a study of Algebra only. Trigonometry is not included. Students with a high interest and curiosity in math, or that plan to pursue a STEM major/career in college and beyond are encouraged to take Algebra II and Trigonometry instead of Algebra II.

ALGEBRA II AND TRIGONOMETRY Full year Credit: 1.00

Prerequisites: Algebra I and Geometry. Teacher recommendation required.

Fee/Materials: A TI-84 or comparable graphing calculator is required.

This course will include the study of graphing systems of linear equations, factoring, rational and irrational numbers, functions and function notation, quadratic equations and inequalities, exponential, logarithmic, trigonometric functions and their applications, and complex numbers. This course is intended for students with a high interest and curiosity in math, or that plan to pursue a STEM major/career in college and beyond.

HONORS ALGEBRA II AND TRIGONOMETRY Full year Credit: 1.00

Prerequisites: Algebra I and Geometry. Teacher recommendation required.

Fee/Materials: A TI-84 or comparable graphing calculator is required.

Honors Algebra II & Trigonometry is designed as an in-depth and accelerated treatment of the following topics: properties of real numbers, equations and inequalities, operations with polynomials and solving polynomial equations, operations with rational expressions, solving fractional equations, functions, and their graphs, analytic geometry, exponential and logarithmic functions, trigonometric functions, sequences and series, matrices and determinants, data analysis and some proofs. Problems and applications are more rigorous than in the standard Algebra II and Trigonometry course.

Note: Summer work required.

FINANCIAL ALGEBRA Full year Credit: 1.00

Prerequisites: Algebra I, Geometry and Algebra II or equivalent.

Fee/Materials: This course requires a scientific calculator, e.g. the TI-30X.

This course is designed to promote reasoning, problem-solving and modeling through thematic units focused on mathematical practices. Past math topics will be reinforced and extended in the areas of Number and Quantity, Algebra, Functions, Statistics and Probability, and Geometry. This course takes a student-centered approach to learning that will require students to communicate mathematically and be able demonstrate knowledge through non-traditional assessments such as projects and other small group activities.

MATHEMATICAL MODELING Full year Credit: 1.00

Prerequisites: Algebra I and Geometry

Fee/Materials: This course requires a scientific calculator, e.g. the TI-30X.

This project-based course is designed to promote reasoning, problem-solving and modeling through thematic units focused on mathematical practices. Past math topics will be reinforced and extended in the areas of Number and Quantity, Algebra, Functions, Statistics and Probability, and Geometry. This course takes a student-centered approach to learning that will require students to work in groups, communicate mathematically, and be able to demonstrate knowledge through non-traditional assessments such as projects and other small group activities.

Note: This course satisfies the Algebra II graduation requirement.

PRECALCULUS Full year Credit: 1.00

Prerequisites: Algebra II & Trigonometry or their honors equivalents. Teacher recommendation required.

Fee/Materials: A TI-84 or comparable graphing calculator is required.

This course provides the student with the necessary advanced algebra and trigonometry to be prepared for a college course in Calculus. Topics include polynomial, logarithmic, exponential, trigonometric functions, analytic geometry, sequences, series, and limits. This course is a prerequisite for AP Calculus AB.

HONORS PRECALCULUS Full year Credit: 1.00

Prerequisites: Honors Algebra II & Trigonometry. Teacher recommendation required.

Fee/Materials: A TI-84 or comparable graphing calculator is required.

Honors Precalculus is designed as an in-depth and accelerated course, with precalculus topics including polynomial and rational functions, exponential and logarithmic functions, trigonometric functions, analytic geometry, sequences and series, and partial fraction decomposition. Calculus topics include limits and continuity, Intermediate Value Theorem, Mean Value Theorem, derivative techniques, optimization problems, and related rates. This course is a prerequisite for AP Calculus BC. It will also help students prepare for their first college calculus course. A high level of rigor should be expected.

PROBABILITY AND STATISTICS Full year Credit: 1.00

Prerequisites: Algebra I and Geometry This course may also be taken concurrently with Precalculus.

Fee/Materials: A TI-84 or comparable graphing calculator is required.

This course will serve as an introduction to probability and statistics. Students will use graphing calculators and computer software to study topics typically found in an introductory college level course and for data analysis. The emphasis is on statistical thinking. The course seeks to present numerous examples of data from real-world problems suitable for study in high school. Statistical concepts include an intensive study of descriptive and inferential statistics, experimental design and probability, and practice using binomial, normal and geometric distributions. The mathematics in this course is accessible to a wide range of students. It is designed to give students an understanding of the main idea of probability and statistics, as well as other mathematical topics.

Note: This course satisfies the Algebra II graduation requirement.

ADVANCED PLACEMENT CALCULUS AB Full year Credit: 1.00

Prerequisites: Precalculus or Honors Precalculus. Teacher recommendation required.

Fee/Materials: A TI-84 or comparable graphing calculator is required. A fee will be added to cover the cost of the AP exam.

This is an Advanced Placement Course in mathematics consisting of a full academic year of work in calculus and related topics comparable to the first semester and selected parts of the second semester of a college calculus sequence. This course follows the College Board course of study that prepares students for the AP Calculus (AB) examination. Students who score well on the AP exam may receive college credit in Calculus. Topics covered in AB calculus include limits, differential calculus (including transcendental functions) and integral calculus (through various techniques and applications of integration).

Note: All students enrolled in this course must take the AP Exam.

ADVANCED PLACEMENT CALCULUS BC Full year Credit: 1.00

Prerequisites: Honors Precalculus. Teacher recommendation required.

Fee/Materials: A fee is required for this course. A graphing calculator is required. A fee will be added to cover the cost of the AP exam.

This is an Advanced Placement course in mathematics consisting of a full academic year of work in calculus and related topics that is comparable to the entire first and second semesters of a college calculus sequence. This course follows the College Board course of study that prepares students for the AP Calculus (BC) examination. Students who score well on the AP exam may receive college credit in Calculus. Topics covered in BC calculus include differential and integral calculus and their applications for functions of one variable, calculus of vector-valued functions, calculus of polar functions, and sequences, series, and convergence tests.

Note: All students enrolled in this course must take the AP Exam.

ADVANCED PLACEMENT STATISTICS

Full year

Credit: 1.00

Prerequisites: Algebra I, Geometry, Algebra II & Trigonometry or their honors equivalents. Teacher recommendation required. A strong mathematical background is essential for success in this course.

Fee/Materials: A fee is required for this course. A graphing calculator with statistics software is required. The TI-84 plus is recommended. A fee will be added to cover the cost of the AP exam.

This is an Advanced Placement course in mathematics consisting of a full academic year of work in statistics. This course is a response to the growing number of college majors requiring a background in statistics (especially health care and selected business fields). It is an in-depth study of basic statistics, elementary probability, hypothesis testing, experimental design, probability distributions, samplings and analysis of data. Students should expect an average of one hour of homework per day. Students who score well on the AP exam may receive college credit in statistics.

Note: All students enrolled in this course must take the AP Exam.

MULTIVARIABLE CALCULUS

1 semester

Credit: 1.00

(College Credit Plus - MTH 281)

Prerequisites: AP Calculus (BC); teacher recommendation required, this course will be taken as a College Credit Plus option through our partnership with Cleveland State University; **students must apply to Cleveland State University.**

This course is a continuation of material from previous calculus courses. Topics include vectors, the calculus of vector-valued functions and space curves, partial derivatives, gradient, multiple integrals, vector fields, divergence, curl, line integrals, Green's Theorem, surface integrals, the Divergence Theorem, and Stokes' Theorem. To ensure proper college credit, students should plan on obtaining an official transcript from Cleveland State University on their own.

LINEAR ALGEBRA

1 semester

Credit: 1.00

(College Credit Plus - MTH 288)

Prerequisites: **Prerequisites:** AP Calculus (BC); teacher recommendation required, this course will be taken as a College Credit Plus option through our partnership with Cleveland State University; **students must apply to Cleveland State University.**

Topics in this course include systems of linear equations, matrices, vector equations, span, linear independence, determinants, vector spaces and their subspaces, linear transformations, stochastic matrices, Markov Chains, eigenvalues, eigenvectors, diagonalization, orthogonal projections and approximation, and QR factorization. To ensure proper college credit, students should plan on obtaining an official transcript from Cleveland State University on their own.

MUSIC DEPARTMENT

CODE	COURSE TITLE	GRADE	LENGTH OF COURSE	CREDIT
828000	Concert Band	9-12	Full year	1.00
830000	Symphonic Band	9-12	Full year	1.00
832000	Wind Ensemble Honors	9-12	Full year	1.00
850000	Freshmen String Orchestra	9	Full year	1.00
848000	String Orchestra	10-12	Full year	1.00
834000	Symphony Orchestra Honors	9-12	Full year	1.00
836000	Concert Choir	9-12	Full year	1.00
852000	Treble Choir	9-12	Full year	1.00
840000	Show Choir	9-12	Full year	1.00
838000	Chorale (Cantorum) Honors	9-12	Full year	1.00
000801	Music Appreciation: From Bach to Rock	10-12	1 semester	0.50
000842	Music Theory	10-12	1 semester	0.50

MUSIC COURSE DESCRIPTIONS

CONCERT BAND

Full year

Credit: 1.00

Prerequisites: Students audition in the spring for placement into this band.

Fee/Materials: Students using a school owned instrument will be assessed an annual maintenance fee. Students will be assessed a marching band uniform maintenance fee for the marching season. For the concert band season, ladies will be required to purchase a concert dress and have it altered as necessary. Gentlemen will be issued a school-owned tuxedo in which they will be assessed an annual maintenance fee, and will be required to purchase a white tuxedo shirt and black dress shoes.

Concert Band is a full year course composed of wind and percussion instrumentalists, grades 9-12. The first ten weeks or so consists of marching band while the remainder of the year is a sit- down concert band setting with stage performances. This course is designed to develop rehearsal and performance skills. The first quarter consists of marching band while the remainder of the year is in a sit down concert setting. The course continues teaching basic music fundamentals and ensemble skills previously introduced. Mandatory rehearsals are held during the end of July. The schedule is available before the end of the previous school year. During the first 10 weeks, including play-off games, consists of marching band while the remainder of the year is a sit-down concert season. All band members are required to attend all functions of the band including performances, rehearsals, concerts, and contests.

SYMPHONIC BAND

Full year

Credit: 1.00

Prerequisites: Students audition in the spring for placement into this band.

Fee/Materials: Students using a school owned instrument will be assessed an annual maintenance fee. Students will be assessed a marching band uniform maintenance fee for the marching season. For the concert band season, ladies will be required to purchase a concert dress and have it altered as necessary. Gentlemen will be issued a school-owned tuxedo in which they will be assessed an annual maintenance fee, and will be required to purchase a white tuxedo shirt and black dress shoes.

Symphonic Band is a full year course composed of wind and percussion instrumentalists, grades 9-12. The first ten weeks or so consists of marching band while the remainder of the year is a sit- down concert band setting with stage performances. This course is designed to develop rehearsal and performance skills. The first quarter consists of marching band while the remainder of the year is in a sit down concert setting. The course continues teaching music fundamentals and ensemble skills previously introduced. Private lessons are greatly encouraged as is participation in solo/ensemble contests. Mandatory rehearsals are held during the end of July. The schedule is available before the end of the previous school year. During the first 10 weeks, including play-off games, consists of marching band while the remainder of the year is a sit-down concert season. All band members are required to attend all functions of the band including performances, rehearsals, concerts, and contests.

WIND ENSEMBLE HONORS

Full year

Credit: 1.00

Prerequisites: Students audition in the spring for placement into this band.

Fee/Materials: Students using a school owned instrument will be assessed an annual maintenance fee. Students will be assessed a marching band uniform maintenance fee for the marching season. For the concert band season, ladies will be required to purchase a concert dress and have it altered as necessary. Gentlemen will be issued a school-owned tuxedo in which they will be assessed an annual maintenance fee, and will be required to purchase a white tuxedo shirt and black dress shoes.

Wind Ensemble Honors is a full year course composed of advanced wind and percussion players. The first ten weeks or so consists of marching band while the remainder of the year is a sit-down concert band setting with stage performances. This course is designed to develop high level rehearsal and performance skills. The first quarter consists of marching band while the remainder of the year is in a sit down concert setting. The course teaches advanced music fundamentals and ensemble skills. Private lessons are recommended. Participation in solo/ensemble contests is required. Mandatory rehearsals are held during the end of July. During the first 10 weeks, including play-off games, consists of marching band while the remainder of the year is a sit-down concert season. All band members are required to attend all functions of the band including performances, rehearsals, concerts, and contests.

FRESHMEN STRING ORCHESTRA

Full year

Credit: 1.00

Prerequisites: Musical training on a bowed-stringed instrument (violin, viola, cello, upright bass,) and participation in Middle School String Orchestra. All students must be able to read music to enroll in this class and have acquired performance skills of a fifth year string player or be recommended by the director.

Fee/Materials: Students using a school owned instrument will be assessed a yearly maintenance fee. Ladies will be required to purchase a concert dress and have it altered as needed. Gentlemen will be issued a school-owned tuxedo in which they will be assessed an annual maintenance fee, and will be required to purchase a white tuxedo shirt and black dress shoes. Private lesson instruction on individual instruments are highly recommended.

The Freshman Orchestra is a string ensemble that continues the development of string players by teaching the technical and musical skills required of high school repertoire. Students will perform a variety of music in different musical styles and time periods. All members are required to attend all functions and events of the Freshmen Orchestra, including concerts, contests, and rehearsals.

STRING ORCHESTRA

Full year

Credit: 1.00

Prerequisites: Musical training on a bowed-stringed instrument (violin, viola, cello, upright bass) and participation in Freshmen String Orchestra. Students should have the skills of at least a sixth year player or be recommended by the director. Auditions may be required for transfer students.

Fee/Materials: Students using a school owned instrument will be assessed an annual maintenance fee. Ladies will be required to purchase a concert dress and have it altered if necessary. Gentlemen will be issued a school-owned tuxedo, green vest, and a bow tie for which they will be assessed an annual maintenance fee and will be required to purchase a white tuxedo shirt and black dress shoes. Private lesson instruction on individual instruments is highly recommended.

The String Orchestra is a full year course that meets daily. The ensemble provides students with the opportunity to play challenging string repertoire of various musical styles and time periods. All members are required to attend all functions and events of the String Orchestra, including concerts, contests, and rehearsals.

SYMPHONY ORCHESTRA HONORS

Full year

Credit: 1.00

Prerequisites: Musical training on a stringed, wind, brass or percussion instrument (violin, viola, cello, upright bass, flute, oboe, clarinet, bassoon, trumpet, French horn, trombone, tuba, percussion, harp), available for students in grades 9-12 via audition or director recommendation. Students are selected through an audition in the spring of the previous school year.

Fee/Materials: Students using a school owned instrument will be assessed a yearly maintenance fee. Ladies will be required to purchase a concert dress and have it altered if necessary. Gentlemen will be required to purchase a white tuxedo shirt and black dress shoes. Gentlemen will be issued a

school-owned tuxedo, green vest, and bow tie in which they will be assessed an annual maintenance fee. Private lesson instruction is highly recommended for all members.

The Symphony Orchestra is an advanced, select ensemble that is a full year course that meets daily. This ensemble provides serious musicians the opportunity to play challenging, professional and/or collegiate level repertoire of various musical styles and time periods.. Members are required to attend all functions and events of the Symphony Orchestra including performances, rehearsals, and contests. Participation at solo & ensemble contest is required.

CONCERT CHOIR Full year Credit: 1.00

Prerequisites: Students must be able to match pitch.

Fee/Materials: Students must purchase their performance attire according to the guidelines established by the director.

Concert choir is for any student in grades 9-12 who expresses a desire to sing and perform in a choral setting. Students will learn the proper vocal and ensemble techniques, theory, sight-singing and performance skills. Students are expected to attend all concerts, events, rehearsals and contests. There will be a uniform fee.

TREBLE CHOIR Full year Credit: 1.00

Prerequisites: Audition and recommendation of the director. Freshmen who wish to enroll in this course must audition and be recommended by the director.

Fee/Materials: Students must purchase their performance attire according to the guidelines established by the director.

Treble Choir is a highly selective choral group using a select number of voices. This ensemble is for the advanced choral student who enjoys rehearsing and performing challenging choral repertoire. Students are expected to attend all concerts, events, rehearsals and contests.

SHOW CHOIR Full year Credit: 1.00

Prerequisites: Audition and recommendation of the director.

Fee/Materials: Members of the Mustang Express must purchase costumes appropriate for that year. Students can expect costuming costs in the approximate range of \$500 to \$700 each year. This cost is the total responsibility of the student. ***Students who do not pay the cost of the costumes by August 1st of each year will be dropped from this class.***

Show Choir, also known as The Mustang Express, is a select group of highly talented, committed, and enthusiastic singers. They perform a variety of popular literature coupled with choreography. Along with daily in class rehearsals, they meet the week before school starts in August, as well as having extra-required choreography sessions on weekends. Fundraising opportunities for the purchase of costumes may be available. Students are expected to attend all concerts, events, rehearsals and contests. Per state law, students who successfully complete two years of this course can waive their PE requirements by filling out the online form on the high school guidance web page.

CHORALE (CANTORUM) HONORS Full year Credit: 1.00

Prerequisites: Audition and recommendation of the director.

Fee/Materials: Students purchase their own uniforms. Gentlemen will purchase tuxedos and ladies will purchase dresses.

Chorale/Cantorum Honors is a highly selective choral organization using a minimum number of voices. This ensemble is for the advanced choral student who enjoys rehearsing and performing challenging choral repertoire. Students are expected to attend all concerts, events, rehearsals and contests.

MUSIC APPRECIATION: FROM BACH TO ROCK 1 semester Credit: .50

Prerequisites: None

Fee/Materials: None

Music Appreciation is a one semester course which will give an overview of basic musical concepts. This course is designed for students to explore the foundations of music composition, musical genres, music history, and performance. Students will develop an understanding and appreciation of great composers, artists and their musical works.

MUSIC THEORY

1 semester

Credit: .50

Prerequisites: Students must be proficient at reading musical notation in at least one clef, understand how to read and perform rhythms, and know musical terminology. It is necessary for each student to have acquired basic performance skills on voice or an instrument.

Fee/Materials: None

This class is for musicians who would like to learn about basic theoretical concepts and how they relate to musical construction. Theoretical concepts include tonalities, scales, intervals, rhythm, chords and inversions, common chord progressions and harmonic analysis. This class is highly recommended for students who wish to pursue a major and/or minor in music in college and is intended for students who can proficiently read musical notation, rhythm, and understand music terminology.

PROJECT LEAD THE WAY - ENGINEERING AND BIOMEDICINE

Project Lead the Way (PLTW) is a rigorous and innovative STEM (science, technology, engineering and math) education curricular programs used in schools and is offered through a Polaris and Strongsville City School District partnership. The Project Lead the Way Engineering and Biomedical programs are a four year sequence of courses, when combined with high school mathematics and science, will introduce you to the scope, rigor and discipline of engineering and medicine and biomedical sciences.. Project Lead the Way (PLTW) is a four-year course of study integrated into students' core curriculum. The combination of traditional math and science courses along with PLTW courses prepare students for college majors and offers them the opportunity to earn college credit while still in high school. Each course will allow students to solve real-world problems through a series of hands-on exercises.

CODE	COURSE TITLE	GRADE	LENGTH OF COURSE	CREDIT
006125	Introduction to Engineering Design	9-10	Full year	1.00
006108	Principles of Engineering	10-12	Full year	1.00
006109	Digital Electronics	10-12	Full year	1.00
006110	Engineering Design and Development	11-12	Full year	1.00
006026	Principles of Biomedical Science	9-10	Full year	1.00
006027	Human Body Systems (offered in 2022-2023)	10-12	Full year	1.00
006028	Medical Interventions (offered in 2023-2024)	10-12	Full year	1.00
006029	Biomedical Innovations (offered in 2024-2025)	11-12	Full year	1.00

PLTW COURSE DESCRIPTIONS

INTRODUCTION TO ENGINEERING DESIGN (IED) Full year Credit: 1.00

Prerequisites: Grades 9 & 10 only. 11th graders with instructor's permission.

Fee/Materials: None

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3-D modeling software, and use an engineering notebook to document their work.

PRINCIPLES OF ENGINEERING (POE) Full year Credit: 1.00

Prerequisites: Grades 10 - 12 only. 9th graders with instructor's permission. Successful completion of Algebra I recommended.

Fee/Materials: None

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

DIGITAL ELECTRONICS (DE) Full year Credit: 1.00

Prerequisites: Grades 10 - 12 only. 9th graders with instructor's permission.

Fee/Materials: None

From smartphones to appliances, digital circuits are all around us. This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. Students study topics such as combinational and sequential logic and are exposed to circuit design tools used in industry, including logic gates, integrated circuits, and programmable logic devices.

ENGINEERING DESIGN AND DEVELOPMENT (EDD) Full year Credit: 1.00

Prerequisites: Successful completion of Introduction to Engineering Design. Grades 11 & 12 only. 10th graders with instructor's permission.

Fee/Materials: None

The knowledge and skills students acquire throughout PLTW Engineering come together in Engineering Design and Development as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing Engineering Design and Development ready to take on any post-secondary program or career.

PRINCIPLES OF BIOMEDICAL SCIENCE (PBS)

Full year

Credit: 1.00

Prerequisites: Grades 9 & 10 only. 11th graders with instructor's permission.

Fee/Materials: None

This introductory course to the PLTW Biomedical Science program serves to provide foundational knowledge and skills in fields such as biology, anatomy and physiology, genetics, microbiology, and epidemiology, as well as engage students in how they can apply this content to real-world situations, cases, and problems such as solving a medical mystery case, diagnosing and treating a patient, or responding to a medical outbreak.

HUMAN BODY SYSTEMS (HBS)

Full year

Credit: 1.00

Prerequisites: Principles of Biomedical Science. Grade 10 only. 9th and 11th graders with instructor's permission.

Fee/Materials: None

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

MEDICAL INTERVENTIONS (MI)

Full year

Credit: 1.00

Prerequisites: Completion of one PLTW biomed course with a C or better; grades 10 - 12 only. 9th graders with instructor's permission.

Fee/Materials: None

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

BIOMEDICAL INNOVATIONS (BI)

Full year

Credit: 1.00

Prerequisites: Completion of two PLTW biomed courses with a C or better; grades 11 & 12 only.

Fee/Materials: None

In the final course of the PLTW Biomedical Science sequence, students build on the knowledge and skills gained from previous courses to design innovative solutions for the most pressing health challenges of the 21st century. Students address topics ranging from public health and biomedical engineering to clinical medicine and physiology. They have the opportunity to work on an independent design project with a mentor or advisor from a university, medical facility, or research institution.

PLTW Honors Credit Option

The PLTW honors course option is designed to provide students with an enhanced and enriched learning experience. The PLTW honors course curriculum is extended beyond the core student learning outcomes. Honors credit places additional emphasis on independent study, critical thinking, and student research. Students enrolled in the honors credit option will be required to complete additional activities outlined in each course. See your instructor for specific honors criteria and requirements.

SCIENCE DEPARTMENT

CODE	COURSE TITLE	GRADE	LENGTH OF COURSE	CREDIT
354000	Chemical/Physical/Earth (CPE) Science	9-10	Full year	1.00
319000	Biology	10	Full year	1.00
321000	Biology Honors	9-10	Full year	1.00
332000	Chemistry	10-12	Full year	1.00
336000	Chemistry Honors	10-12	Full year	1.00
323000	Physical Geology & the Environment (PGE)	11-12	Full year	1.00
342000	Physics	11-12	Full year	1.00
000326	Anatomy & Physiology	11-12	1 semester	0.50
000353	Astronomy	11-12	1 semester	0.50
000313	Botany	11-12	1 semester	0.50
000356	Forensic Science & Criminalistics	11-12	1 semester	0.50
000357	Forensic Science Investigations	11-12	1 semester	0.50
000314	Zoology	11-12	1 semester	0.50
356000	Advanced Placement Biology	11-12	Full year	1.00
339000	Advanced Placement Chemistry	11-12	Full year	1.00
316000	Advanced Placement Environmental Science	11-12	Full year	1.00
345000	Advanced Placement Physics I (Algebra-Based)	10-12	Full year	1.00
344000	Advanced Placement Physics (Mechanics)	11-12	Full year	1.00

RECOMMENDED COURSE SEQUENCING FOR SCIENCE

	Grade 9	Grade 10	Grade 11	Grade 12
Recommended for most students	CPE Science	Biology	Anatomy/Physiology Astronomy Botany Zoology Chemistry Phys. Geology Forensic Science	Anatomy/Physiology Astronomy Botany/Zoology Chemistry Phys. Geology Forensic Science Physics AP Environmental AP Physics (Algebra-Based)
Recommended for students with a strong interest in science, math, medicine or engineering	Biology Honors	Chemistry Honors AP Physics I (Algebra-Based)	AP Physics (Algebra-Based) AP Chemistry AP Environmental Sci. Anatomy/Physiology Astronomy Physics AP Physics (Mechanics)	AP Biology AP Chemistry AP Environmental Sci. AP Physics (Algebra-Based) AP Physics (Mechanics) Anatomy/Physiology Astronomy Physics

SCIENCE COURSE DESCRIPTIONS

CHEMICAL/PHYSICAL/EARTH (CPE) SCIENCE

Full year

Credit: 1.00

Prerequisites: None

Fee/Materials: A lab fee will be charged.

CPE Science is a hands-on course designed to provide students experience in introductory chemistry, physics and earth science concepts. This course is designed to provide a solid foundation for students taking later courses in these subjects. Students will study a variety of topics including motion, forces, energy, work, power, waves, light, electricity, matter, the periodic table, chemical bonding, nuclear chemistry and a variety of astronomy topics. This will be done through traditional classroom activities as well as inquiry investigations, labs and independent projects.

BIOLOGY

Full year

Credit: 1.00

Prerequisites: CPE Science

Fee/Materials: A lab fee will be charged.

Biology is a state required course that covers genetics, evolution, ecology, and cells. These topics will be reinforced with laboratory experiences and projects. The course has been designed to include modern biology concepts such as genetic engineering and biotechnology.

BIOLOGY HONORS

Full year

Credit: 1.00

Prerequisites: Algebra I; 10th graders must have completed CPE Science; teacher recommendation

Fee/Materials: A lab fee will be charged.

Biology Honors covers genetics, evolution, ecology, and cells but with greater detail and rigor than Biology I. These topics will be reinforced with laboratory experiences and projects. The course has been designed to include modern biology concepts such as genetic engineering and biotechnology. There may be additional independent research projects assigned.

Note: Upon completion of this course, students are expected to take Chemistry or Chemistry Honors. Students must therefore be aware of the prerequisites and corequisites for those chemistry courses. Students who do not meet those requirements would take CPE following Biology Honors.

CHEMISTRY

Full year

Credit: 1.00

Prerequisites: Passed both semesters of Algebra I; either CPE Science and Biology or Biology Honors; teacher recommendation required

Co-requisite: Algebra II

Fee/Materials: A lab fee will be charged.

Chemistry will help set the foundational framework for success in college chemistry. Learn to navigate the chemical world through the study of matter, chemical reactions, stoichiometry, the periodic table, atomic theory and chemical formula writing. In addition, students will explore chemistry through a variety of methods including an investigative lab for each major concept.

CHEMISTRY HONORS

Full year

Credit: 1.00

Prerequisites: Biology Honors or CPE Science & Biology; teacher recommendation required; a "C" average or higher in Algebra I is highly recommended.

Co-requisite: Algebra II-Trig. or higher

Fee/Materials: A lab fee will be charged.

Chemistry Honors is a rigorous and challenging college preparatory course. If you have a strong interest in science, a desire to learn about the materials that make up the universe and the changes they undergo, and want to perform precise laboratory investigations using a variety of chemical substances, equipment, and laboratory techniques, then this course is for you. Topics covered include scientific measurements, matter and energy, atomic structure and theory, the periodic

table, chemical formulas and equations, chemical reactions, stoichiometry, chemical bonding, gas laws, solutions, acid-base chemistry, and chemistry equilibrium. Students will learn how chemists predict and obtain products in a chemical reaction, which is the core of what chemistry is all about. They will learn and apply various mathematical and chemical formulas and rules to problem-solving and how to obtain and interpret information from a variety of charts, tables, and graphs.

PHYSICAL GEOLOGY & THE ENVIRONMENT

Full year

Credit: 1.00

Prerequisites: Two years of high school science

Fee/Materials: A lab fee will be charged.

Physical Geology and the Environment will explore the processes that have formed and continue to shape the earth as well as the relationship between the earth's resources and the demands placed on it by the human population. Topics will include climate change, air pollution, water quality, formation and identification of rocks and minerals; plate tectonics, earth history, oceanography, glaciers and earth resources.

PHYSICS

Full year

Credit: 1.00

Prerequisites: Two years of high school science, Geometry; teacher recommendation required

Co-requisite: Algebra II-Trig

Fee/Materials: A lab fee will be charged. Students need a scientific calculator.

This course investigates the primary topics of physics including motion, forces, energy, electricity, waves and sound. Special emphasis is placed on theoretical applications of physics and on mathematical problem-solving. Laboratory investigations and independent student projects will parallel course material.

ANATOMY & PHYSIOLOGY

1 semester

Credit: .500

Prerequisites: CPE Science and Biology or Biology Honors, and Chemistry

Fee/Materials: A lab fee will be charged.

Students interested in becoming a doctor, nurse, physical therapist, physician assistant, or occupational therapist will find this course to be beneficial in their future college courses. Throughout the semester, students will experience a hands-on approach to studying how the body functions. Topics covered will include the organization of the body, the skeletal system, the muscular system, the cardiovascular system, the nervous system, and the reproductive system. Lab studies, which correspond to classroom theory, may be used to reinforce these themes by hands-on experience. Dissection of a fetal pig is mandatory.

ASTRONOMY

1 semester

Credit: .50

Prerequisites: CPE Science and Biology or Biology Honors and Chemistry

Co-requisite: Algebra II or higher

Fee/Materials: A lab fee will be charged. Students need their own calculator.

Astronomy is designed to be a broad introduction to the universe. Topics covered include celestial motions, historical perspective, spectroscopy, solar system, stellar evolution, astrobiology and cosmology. We will utilize the planetarium to learn how to identify major constellations, discuss current events, apply mathematical formulas and participate in select citizen science research programs.

BOTANY

1 semester

Credit: .50

Prerequisites: CPE Science and Biology or Biology Honors and Chemistry

Fee/Materials: A lab fee will be charged.

This is a course designed to study the plants around us and their contributions to our existence. We will go outside to identify many of the plants that we share in our community, how these plants are related to one another, and how they work to survive. They are very different from animals, but yet they share many of the same environmental issues that must be solved for survival. We will grow plants, analyze their growth needs, and use them to decorate our school and homes.

Come join us as we study the magnificent life of plants around us. Topics of study will include plant anatomy and physiology, plant genetics, plant reproduction and basic horticultural practices.

Note: This course will only be offered during the 1st semester.

FORENSIC SCIENCE & CRIMINALISTICS

1 semester

Credit: .50

Prerequisites: CPE Science and Biology or Biology Honors and Chemistry

Fee/Materials: A lab fee will be charged.

Forensic Science & Criminalistics is a hands-on, laboratory and project-based course that studies how forensic scientists use science to help solve crimes. Topics that may be covered include crime scene processing, criminal law, forensic anthropology (the study of bones), serology (blood and blood spatter), document and handwriting analysis, and the study of trace evidence (hair and fibers). This course requires independent research for case studies to be done throughout the semester; this is done solely outside of class time.

Note: This course will only be offered during the 1st semester. Students may take this as a stand-alone course or in conjunction with Forensic Science Investigations.

FORENSIC SCIENCE INVESTIGATIONS

1 semester

Credit: .50

Prerequisites: CPE Science and Biology or Biology Honors and Chemistry

Fee/Materials: A lab fee will be charged.

Forensic Science Investigations is a hands-on, laboratory and project-based course that studies how forensic scientists use science to help solve crimes. Topics that may be covered include fingerprinting, toxicology (drugs and poisons), manners and mechanisms of death, decomposition, entomology (insects), ballistics, casts and impressions, and forensic DNA Analysis. This course requires independent research for case studies to be done throughout the semester; this is done solely outside of class time.

Note: This course will be offered during the 2nd semester. Students may take this as a stand-alone course or in conjunction with Forensic Science & Criminalistics.

ZOOLOGY

1 semester

Credit: .50

Prerequisites: CPE Science and Biology or Biology Honors and Chemistry

Fee/Materials: A lab fee will be charged.

A course designed to study all things related to animals. We will explore the anatomy, physiology, and ecology of organisms from the simple animal-like protozoans to the complex animals called mammals. This course will be a hands-on exploration of animals, so expect everything from dissections to live animals to be in this class. How does the environment affect the physiology of the organism? How does the organism population evolve to adapt to the issues presented to them by the environment? What does the variety of animal life look like? If animals are your thing, then this course is for you.

ADVANCED PLACEMENT BIOLOGY

Full year

Credit: 1.00

Prerequisites: Chemistry; teacher recommendation required

Fee/Materials: A lab fee will be charged. A fee will be added to cover the cost of the AP exam.

This course is a hands-on, laboratory-based, first-year college equivalent biology course. This course will explore biology through the themes of evolution, energy, information storage/response to the environment, and systems comparisons. Students will use biotech instrumentation and traditional lab equipment to investigate DNA sequencing and manipulation, bioinformatics, PCR assays, electrophoresis and cloning techniques. Both preserved and live organisms will be utilized. This course follows the AP Biology curriculum.

Note: All students enrolled in this course must take the AP Exam.

ADVANCED PLACEMENT CHEMISTRY

Full year

Credit: 1.00

Prerequisites: Algebra II-Trig and Chemistry with a "C" or above; teacher recommendation

Co-requisite: Pre-calculus or beyond

Fee/Materials: A lab fee will be charged. A fee will be added to cover the cost of the AP exam.

This course is an exciting, rigorous, first-year college equivalent course. It is both mathematically and concept-based. Studies include structure and bonding of atoms, stoichiometry, thermochemistry, solutions, kinetics, chemical equilibrium, thermodynamics, chemical reactions, and electrochemistry. Lab work involves both quantitative and qualitative investigations into material covered in the classroom. This course is recommended for students who plan to pursue chemistry, medicine, pharmacy, chemical engineering, and other areas of science which require a thorough knowledge of basic inorganic chemistry. This course follows the AP Chemistry curriculum and requires students to be proactive, curious, independent thinkers to have strong math skills.

Note: All students enrolled in this course must take the AP Exam.

ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE Full year Credit: 1.00

Prerequisites: Two years of high school laboratory science (such as Biology, Chemistry or Physical Geology); teacher recommendation required

Fee/Materials: A lab fee will be charged. A fee will be added to cover the cost of the AP exam.

Advanced Placement Environmental Science is a year-long interdisciplinary study in which students seek to understand the interrelationships of the natural world through analysis of both natural and anthropogenic environmental issues and to evaluate the risks associated with those issues. Using modeling, field work, lab exercises, case studies and current event analysis, students will explore man's impact on the Earth and will understand that human survival is dependent upon maintaining sustainability in human interactions with natural systems. Topics include water & air pollution, climate change, agriculture & land use, energy resources & consumption, biodiversity, and human population growth.

Note: All students enrolled in this course must take the AP Exam.

ADVANCED PLACEMENT PHYSICS I (ALGEBRA-BASED) Full year Credit: 1.00

Prerequisites: Algebra II-Trig, scientific calculator, a lab fee will be charged; teacher recommendation required

Co-requisite: Precalculus or higher

Fee/Materials: A lab fee will be charged. A fee will be added to cover the cost of the AP exam.

AP Physics I is an algebra-based, introductory college-level physics course. This class is recommended for students who are considering a major in a science related field or medicine and require a physics course that is not calculus based. This class is aligned with the College Board's AP Physics curriculum and will investigate the topics of motion, forces, energy momentum and rotation. Special emphasis is placed on theoretical applications, mathematical problem-solving and manipulation of equations. Laboratory investigations and independent projects will parallel course material. All students enrolled in this course must take the AP Exam. A fee will be added to the course to cover the cost.

Note: All students enrolled in this course must take the AP Exam.

ADVANCED PLACEMENT PHYSICS (MECHANICS) Full year Credit: 1.00

Prerequisites: Honors Algebra II-Trig; teacher recommendation required; a graphing calculator; a lab fee will be charged.

Co-requisite: Pre-calculus Honors or higher; Students currently enrolled in Pre-Calculus Honors will be required to complete a summer calculus assignment to determine if students will meet the calculus-readiness needed for this course.

Fee/Materials: A lab fee will be charged. A fee will be added to cover the cost of the AP exam.

This course is recommended for students who plan to pursue further education in science, engineering, medicine and computer science. This rigorous course follows the AP Physics (Mechanics) curriculum and investigates how the world works through investigations of motion, dynamics (force and energy), gravitation, rotation and oscillations. There is a focus on the derivation of mathematical relationships, analysis of physical concepts, and advanced problem solving (involving the applications of calculus). There is also a lab component to this course, which involves both in-class investigations as well as independent student projects. Projects are STEM based and vary in nature, but many involve the design and construction of physical structures or devices. Students will be expected to collaborate frequently with peers.

Note: All students enrolled in this course must take the AP Exam.

SOCIAL STUDIES DEPARTMENT

CODE	COURSE TITLE	GRADE	LENGTH OF COURSE	CREDIT
208000	United States History	9	Full year	1.00
204000	United States History Honors	9	Full year	1.00
000236	Modern World History	10	1 semester	0.50
000237	Non-Western Studies	10	1 semester	0.50
210000	Advanced Placement Human Geography	10	Full year	1.00
000221	Economics	10	1 semester	0.50
213000	United States Government and Civics	11	1 semester	0.50
248000	Advanced Placement United States Government & Politics	11	Full year	1.00
000213	Advanced Placement Comparative Government & Politics	11-12	1 semester	0.50
200000	Advanced Placement European History	11-12	Full year	1.00
000222	Advanced Placement Microeconomics	11-12	1 semester	1.00
000223	Advanced Placement Macroeconomics	11-12	1 semester	1.00
218000	Advanced Placement United States History	11-12	Full year	1.00
000234	Anthropology	11-12	1 semester	0.50
000227	Criminal Justice and Civil Law	11-12	1 semester	0.50
000226	Contemporary World Issues	11-12	1 semester	0.50
000231	Psychology	11-12	1 semester	0.50
000230	General Psychology (College Credit Plus)	11-12	1 semester	1.00
000233	Advanced Placement Psychology	11-12	Full year	1.00
000225	Sociology	11-12	1 semester	0.50

GRADUATION REQUIREMENTS

U.S. History	1 credit
U.S. Government/Civics	.5 credit
Non-Western Studies	.5 credit
Modern World History	.5 credit
Economics	.5 credit
TOTAL CREDITS:	3.0 credits

RECOMMENDED SEQUENCING

This sequence should be followed. Deviation from this sequencing will be considered under special circumstances and must be made in consultation with the guidance counselor and Social Studies Department Chair. **All classes in bold lettering are required for either regular or honors sequencing.** All classes not in bold are electives.

	Grade 9	Grade 10	Grade 11	Grade 12
Regular	U.S. History	Non-Western Studies World History Economics	U.S. Government/Civics Contemporary Issues Psychology/Sociology Anthropology Criminal Justice/Civil Law	Contemporary Issues Psychology/ Sociology Anthropology Criminal Justice/Civil Law
Honors /AP	Honors U.S. History	AP Human Geography	AP U.S. Government/Politics AP Micro/ Macroeconomics AP European History AP U.S. History	AP Micro/ Macroeconomics AP Psychology General Psychology AP Comparative. Gov. European History AP U.S. History

SOCIAL STUDIES COURSE DESCRIPTIONS

UNITED STATES HISTORY	Full year	Credit: 1.00
UNITED STATES HISTORY HONORS	Full year	Credit: 1.00

Prerequisites: None; Honors requires a teacher recommendation.

Fee/Materials: 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. Specific activities and content may vary with course level.

Note: There will be a summer reading/writing assignment for the honors level of this course.

MODERN WORLD HISTORY	1 semester	Credit: .50
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Prerequisites: None

Fee/Materials: None

This course will examine world events, focusing on those in Europe, from approximately 1600 to the present. The course will explore the impact of the democratic and industrial revolutions, the forces that led to world domination by Europe, the wars that changed empires, and the effects of global interdependence. The concepts of historical thinking (historiography) will be emphasized as students will be required to locate and analyze primary and secondary sources from multiple perspectives to draw conclusions. Specific activities and content may vary with course level.

NON-WESTERN STUDIES	1 semester	Credit: .50
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Prerequisites: None

Fee/Materials: None

This course will examine the history, politics, economics, geography, and culture of the non-western areas of the world, including Asia, Africa, Latin America and the Middle East. Students will explore the impact of the democratic revolutions in Africa, Asia, Latin America, the Middle East; the ideas that led to independence movements; and the effects of global interdependence.

ADVANCED PLACEMENT HUMAN GEOGRAPHY	Full year	Credit: 1.00
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Prerequisites: Requires a teacher recommendation.

Fee/Materials: A fee will be added to the course to cover the cost of the AP exam.

Advanced Placement Human Geography is about the interconnections between people and places. The course concerns itself with maps, cultural patterns and processes, political organization of space, agriculture and rural land use, industrialization and economic development, and cities and urban land use. The world is becoming a smaller place and this course seeks to explore those interconnections of people from different cultures and ethnicities and how they contribute to the ever changing cultural landscape of our planet.

Note: There will be a summer reading/writing assignment for this course. All students enrolled in this course must take the AP Exam.

ECONOMICS	1 semester	Credit: .50
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Prerequisites: None

Fee/Materials: 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. The student will learn how the worlds of business, government, and consumers really function. A comparison with other nations will also be made. This survey course will acquaint the student with the basic

concepts of scarcity, opportunity cost, inflation, recession, deficit, taxation, fiscal and monetary policy, the Federal Reserve, supply and demand principles, comparative economic systems, and international economics.

UNITED STATES GOVERNMENT & CIVICS

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: None

U.S. Government & Civics is a survey course dealing with how government and politics work in the United States. Students will explore political institutions (including the branches of government) and the processes through which decisions are made for our nation. In addition, the civics component of this course explains the information that students need to become effective citizens in our nation and in the global community. Through discussions, readings, projects, presentations and lectures, students will learn about the structure of our government at the federal, state, and local levels.

ADVANCED PLACEMENT UNITED STATES GOVERNMENT & POLITICS

Full year

Credit: 1.00

Prerequisites: Requires a teacher recommendation; a course fee may be charged.

Fee/Materials: A fee will be added to the course to cover the cost of the AP exam.

The Advanced Placement course in United States Government & Politics will study the structure of our government at the national, state and local levels. In addition, this course involves the study of general concepts used to make-up our political reality. It is important that students are able to apply concepts that will enable them to understand the dynamics of political systems. To accomplish this goal, students will be given the opportunity to gain information about the United States, its government, and the global community in which they live and to apply that knowledge in a variety of formats including writing exercises, class debates, and simulations. A college textbook provides the basis of this course. Students will also be expected to read and research sources outside of class. This course will be a valuable tool for any student that wishes to be prepared for success at the college/university level.

Note: There will be a summer reading/writing assignment for this course. All students enrolled in this course must take the AP Exam.

ADVANCED PLACEMENT MICROECONOMICS

1 semester

Credit: .50

Prerequisites: Requires a teacher recommendation.

Fee/Materials: A fee will be added to the course to cover the cost of the AP exam.

The purpose of AP Microeconomics is to give students a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the larger economic system. It places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and the role of government in promoting greater efficiency and equity in the economy. This course will be a valuable tool for any student that wishes to be prepared for success at the college/university level. Although the course is offered during the first semester, the exam for Microeconomics is not administered until the spring.

Note: There will be a summer reading/writing assignment for this course. All students enrolled in this course must take the AP Exam.

ADVANCED PLACEMENT MACROECONOMICS

1 semester

Credit: .50

Prerequisites: Requires a teacher recommendation

Fee/Materials: A fee will be added to the course to cover the cost of the AP exam.

The purpose of AP Macroeconomics is to give students a thorough understanding of the principles of economics that apply to an economic system as a whole. This course places emphasis on the study of national income and price determination and also develops the student's familiarity with economic performance measures, economic growth and international economics. This course will be a valuable tool for any student that wishes to be prepared for success at the college/university level. The exam for this course is offered in the spring.

Note: All students enrolled in this course must take the AP Exam.

ADVANCED PLACEMENT COMPARATIVE GOVERNMENT & POLITICS 1 semester

Credit: .50

Prerequisites: Requires a teacher recommendation.

Fee/Materials: A fee will be added to the course to cover the cost of the AP exam.

AP Comparative Government and Politics introduces students to the diversity of political life outside the United States. The course uses a comparative approach to examine the political structures, policies, and the political, economic and social challenges among six selected countries: Great Britain, Mexico, Russia, Iran, China and Nigeria. Additionally, students examine how different governments solve similar problems by comparing the effectiveness of different approaches to various global issues. A college textbook provides the basis of this course. Students will also be expected to read and research sources outside of class. This course will be a valuable tool for any student that wishes to be prepared for success at the college/university level. At the conclusion of this course, students will take the Advanced Placement examination in Comparative Government & Politics, which is given in the spring.

Note: All students enrolled in this course must take the AP Exam.

ADVANCED PLACEMENT EUROPEAN HISTORY

Full year

Credit: 1.00

Prerequisites: Due to the emphasis on writing, students must get their Social Studies teacher's recommendation. It is suggested that the student consults their English teacher if they have any concerns related to their ability to write analytically.

Fee/Materials: A fee will be added to the course to cover the cost of the AP exam.

The Advanced Placement course in European History focuses on the history of Europe since 1450 and introduces the students to cultural, political, economic, and social developments that played a fundamental role in shaping the world in which we live. The goals of AP European History are to develop an understanding of some of the major themes in modern European history, an ability to analyze historical evidence, and an ability to analyze and express historical understanding in writing. Some art history is also included within the context of studying European history. This course will be a valuable tool for any student that wishes to be prepared for success at the college/university level. A college textbook provides the basis of this course. A major component of the course is based on writing analytical essays, as well as preparing students to take the Advanced Placement exam in European History, which is offered in the spring.

Note: There will be a summer reading/writing assignment for this course. All students enrolled in this course must take the AP Exam.

ADVANCED PLACEMENT UNITED STATES HISTORY

Full year

Credit: 1.00

Prerequisites: Due to the emphasis on writing, students must get their Social Studies teacher's recommendation. It is suggested that the student consults their English teacher if they have any concerns related to their ability to write analytically.

Fee/Materials: A fee will be added to the course to cover the cost of the AP exam.

The Advanced Placement course in United States History is a class that examines the United States from the Pre-Colonial time period until present day, focusing on each major historical time period. AP U.S. History requires the student to look in depth at cause-effect relationships, honing map and chart reading skills, comparing and contrasting social, political, and economic changes over time, and examining the significance of events. Historiography – the application and analysis of primary source documents and historical research – will be included in this class. This course will be a valuable tool for any student that wishes to be prepared for success at the college/university level. A college textbook provides the basis of this course. A major component of the course is based on writing analytical essays, as well as preparing students to take the AP exam in United States History, which is offered in the spring.

Note: There will be a summer reading/writing assignment for this course. All students enrolled in this course must take the AP Exam.

ANTHROPOLOGY

1 semester

Credit: .50

Prerequisites: Juniors and Seniors only.

Fee/Materials: None

Anthropology is an introduction to the discipline of anthropology as a whole. It presents students with a theoretical grounding in the four major subfields: biological/physical anthropology, archeology, cultural anthropology, and linguistics. Students will be challenged with some of the countless links between the systems of biology and culture.

CONTEMPORARY WORLD ISSUES

1 semester

Credit: .50

Prerequisites: Juniors and Seniors only.**Fee/Materials:** None

After exploring various tools of foreign policy that countries use when attempting to deal with each other, we will use those tools to negotiate an end to a simulated civil war in class. We will do research into the future of your intended career in the face of trends like offshoring and outsourcing. In our national security unit we learn some of the ways that our government keeps us safe in the face of terrorism and debate the concerns raised over these government surveillance programs. You will look into a current news story and analyze a variety of news sources for how fairly they cover that story. In our final project, you will research and present a solution to possibly the most pressing long-term challenge we humans face in the next century: how to meet the energy and nutritional needs of a growing population.

CRIMINAL JUSTICE AND CIVIL LAW

1 semester

Credit: .50

Prerequisites: Juniors and Seniors only.**Fee/Materials:** None

The goal of this semester course is to improve students' understanding of the fundamental principles of the criminal justice system and the values underlying the legal system in the United States. The course is designed to provide a practical explanation of the basic areas of law, including business law, criminal law, consumer law, family law, torts, civil liberties and international law. Upon completion of the course, students will have an improved understanding of the roles that law, lawyers, law enforcement officers, and the justice system play in our democracy.

PSYCHOLOGY

1 semester

Credit: .50

Prerequisites: Juniors and Seniors only.**Fee/Materials:** None

This class will serve as an introductory course to the study of psychology. It is intended to acquaint the student with the nature of self, the scientific method, psychobiology and neurology, the psychology of behavior, altered states of consciousness, learning theories, memory, cognitive processing, human development, stress management, and psychopathologies.

ADVANCED PLACEMENT PSYCHOLOGY

Full year

Credit: 1.00

Prerequisites: Juniors and Seniors only.**Fee/Materials:** A fee will be added to the course to cover the cost of the AP exam.

The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological principles and theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas.

Note: All students enrolled in this course must take the AP Exam.

**GENERAL PSYCHOLOGY
(College Credit Plus - PSY 1010)**

1 semester

Credit: 1.00

Prerequisites: Eligibility for ENG 1010; this course will be taken as a College Credit Plus option through our partnership with Cuyahoga Community College; **students must apply to Cuyahoga Community College and get accepted into the CCP Program.**

Fee/Materials: None

Survey course which examines the complex individual, the many factors believed to drive the individual, and the resulting behavior. Application of the scientific method as a tool in the discovery of individual functioning.

Prerequisites: Juniors and Seniors only.

Fee/Materials: None

This class will serve as an introductory course to the study of sociology. Students will be introduced to the organization of society and the development of culture. This course will involve an analysis of educational, familial, political, economic, religious, and other institutions, as well as contemporary social problems. Some of the topics covered in this course from a sociological perspective will include crime, violence, sports, class and status, and social research. Students will be asked to apply the knowledge they learn to real life situations. Student work expectations will include outside readings and various individual and group projects.

THEATRE ARTS & PUBLICATION COURSES

CODE	COURSE TITLE	GRADE	LENGTH OF COURSE	CREDIT
000924	Beginning Drama & Theatre	9-12	1 semester	0.50
000925	Intermediate Drama & Theatre	10-12	1 semester	0.50
000926	Advanced Drama & Theatre	10-12	1 semester	0.50
000927	Advanced Theatre Seminar	11-12	1 semester	0.50
000160	Literary Drama (See English Department pages)	11-12	1 semester	0.50
771000	Yearbook	9-12	Full year	1.00

Note: All theatre arts courses will help satisfy the fine arts requirement for graduation.

All courses in this section count as elective credits and can not be used to fulfill the 4 credits of English needed for graduation.

THEATRE ARTS & PUBLICATION COURSE DESCRIPTIONS

BEGINNING DRAMA & THEATRE

1 semester

Credit: .50

Prerequisites: None

Fee/Materials: None

Students will be introduced to basic acting techniques and theatre appreciation while also discovering techniques to overcome stage-fright and develop self-confidence. Students will learn basic principles in stage movement, voice, diction, concentration, improvisation, pantomime, audition/interview skills, character and play analysis, theatre vocabulary, elements of technical theatre, and scene writing.

INTERMEDIATE DRAMA & THEATRE

1 semester

Credit: .50

Prerequisites: Beginning Drama & Theatre

Fee/Materials: None

Students will build upon the skills learned in Beginning Drama. Additional principles will include theatre history from various time periods, ensemble building, applying technical knowledge and skills, examination of Shakespeare, and evaluation of mounting a full production.

ADVANCED DRAMA & THEATRE

1 semester

Credit: .50

Prerequisites: Intermediate Drama & Theatre

Fee/Materials: None

Students will build upon the skills learned in Beginning Drama and Intermediate Drama. Additional principles will include developing and sustaining multidimensional characters of varying types through performance (monologs, scene work, auditions), writing a play or screenplay, dramatic criticism, and exploring arts advocacy in the community.

ADVANCED THEATRE SEMINAR

1 semester

Credit: .50

Prerequisites: Advanced Drama & Theatre

Fee/Materials: None

Students will incorporate all of the skills learned in previous classes to prepare the student for a career in the arts. Additional principles will include creating a portfolio, analyzing and executing various styles of acting, researching a particular playwright's body of work, and producing a full production of an original or published play.

YEARBOOK

Full year

Credit: 1.00

Prerequisites: Teacher recommendation or approved student application

Fee/Materials: None

Students in this course will learn and use the principles of journalism, as well as photography and graphic design skills, to help produce the *Strohigan*, the high school yearbook. Students in the course will learn skills in interviewing, writing, photography, graphic design, and marketing. Students who are interested in serving on the editorial staff of the *Strohigan* must be enrolled in this course.

WORLD LANGUAGE DEPARTMENT

CODE	COURSE TITLE	GRADE	LENGTH OF COURSE	CREDIT
260000	French I	9-12	Full year	1.00
262000	French II	10-12	Full year	1.00
264000	French III	11-12	Full year	1.00
265000	French III Honors	11-12	Full year	1.00
268000	Adv. Placement French Language & Culture	12	Full year	1.00
280000	German I	9-12	Full year	1.00
282000	German II	10-12	Full year	1.00
285000	German III Honors	11-12	Full year	1.00
288000	Adv. Placement German Language & Culture	12	Full year	1.00
270000	Spanish I	9-12	Full year	1.00
272000	Spanish II	10-12	Full year	1.00
274000	Spanish III	11-12	Full year	1.00
275000	Spanish III Honors	11-12	Full year	1.00
278000	Adv. Placement Spanish Language & Culture	12	Full year	1.00

RECOMMENDED COURSE SEQUENCING

	Grade 9	Grade 10	Grade 11	Grade 12
Recommended for most students	World Language Level I	World Language Level II	World Language Level III	
Recommended for students not wishing honors or a differing language	World Language Level I	World Language Level II	Alternative World Language Level I	Alternative World Language Level II
Recommended for AP Students	World Language Level I	World Language Level II	Honors World Language Level III	AP World Language

INTRODUCTORY STATEMENT REGARDING WORLD LANGUAGE PREREQUISITES

The prerequisite for all world language courses is the successful completion of the preceding year with a recommended grade of C in regular courses and a B in Honors Courses. Also, a supplemental workbook, reader and/or magazine may be required.

SUMMER WORK FOR WORLD LANGUAGE HONORS AND ADVANCED PLACEMENT COURSES

Students electing to take World Language Honors and Advanced Placement courses will be required to complete select activities during the summer stressing reading, writing and listening skills. Samples of these activities may include writing and sending postcards, writing a journal and reading select excerpts from magazines, newspapers, short stories or novels. Specific details will be provided to the student in May in his/her current World Language class. Copies will be available in the Guidance Department and on the World Language website.

WORLD LANGUAGE COURSE DESCRIPTIONS

FRENCH I

Full year

Credit: 1.00

Prerequisites: See introductory statement.

Fee/Materials: A course fee may be charged.

This first year course will provide the student with an introduction to listening, speaking, reading and writing skills in French. Topics of study include food and beverages, personal possessions, family, time, leisure activities, daily routine, home and school life and getting around town. Students are introduced to basic expressions of needs and desires using present, past and immediate future. Culture includes an introduction to the Francophone world as seen in representative cities. Class is frequently conducted in French; students are encouraged to actively participate, as oral evaluations are a part of the

student's grade.

FRENCH II

Full year

Credit: 1.00

Prerequisites: French I; see introductory statement. Requires a teacher recommendation.

Fee/Materials: A course fee may be charged.

This course is designed to complement the basic first-year course. All language skills--listening, speaking, reading and writing--will be developed. Topics of study include meal etiquette, health and fitness, travel, business and technology, and city and country life. Students will be exposed to the principles of past tense narration and other grammatical structures to support communicative skills. Culture continues to reflect the Francophone world. Several multi-media materials and online resources will be implemented. Class is primarily conducted in French; oral and written evaluations are a part of the student's grade.

FRENCH III

Full year

Credit: 1.00

Prerequisites: French II; see introductory statement. Requires a teacher recommendation.

Fee/Materials: A course fee may be charged.

This course begins to perfect all language skills with the goal of achieving consumer competence in cultural sensitivity for the Francophone world. Increased sophistication in the expression of personal needs and desires are reflected in structural concepts. Topics of study include travel, everyday life and leisure activities, social problems, health and wellness, and regional French customs. Culture examines recent trends in the French-speaking world. Class is primarily conducted in French. Oral and written evaluations are a part of the student's grade, and written skills are developed through compositions and extended assignments.

FRENCH III HONORS

Full year

Credit: 1.00

Prerequisites: French II; see introductory statement. Summer assignment. Requires a teacher recommendation.

Fee/Materials: A course fee may be charged.

French III Honors has the same sequential core material as French III. The pace is accelerated and more emphasis is placed on all four language skills. Supplementary reading material is added to the course, along with additional compositions and writing activities. Speaking, reading, writing and listening skills will continue to be refined. They will learn about all aspects of the French language and culture with greater scope and depth. Several multi-media materials and online resources will be implemented. These activities are intended to continue to acquaint students with the format of the AP French language exam and to acquire grammar, vocabulary, and communication skills that will lead to proficiency and further refine the students' understanding of the structure of French. Students will be required to purchase a workbook. It is recommended that students have earned a "B" or higher in French II.

ADVANCED PLACEMENT FRENCH LANGUAGE & CULTURE

Full year

Credit: 1.00

Prerequisites: French III Honors; teacher recommendation; summer assignment; see introductory statement.

Fee/Materials: A course fee may be charged. A fee will be added to cover the cost of the AP exam.

This course offers preparation for the AP French Language Examination. This course follows the College Board course of study and to that effect, students who score well on the AP French exam may receive college credit in French. Students will practice advanced listening, reading, speaking, and grammar skills in order to develop their communicative abilities for success on the university level. Class is conducted in French.

Note: All students enrolled in this course must take the AP Exam.

GERMAN I

Full year

Credit: 1.00

Prerequisites: See introductory statement.

Fee/Materials: A course fee may be charged.

This first year course will provide the student with an introduction to listening, speaking, reading and writing skills in German as well as to German Culture. German sounds, structures, numbers, basic vocabulary and grammar will be included to

develop a German "ear". The student will read, see German video tapes, write short German dialogues and speak in simple German sentences. Oral evaluation is part of the student's grade.

GERMAN II

Full year

Credit: 1.00

Prerequisites: German I; see introductory statement. Requires a teacher recommendation.

Fee/Materials: A course fee may be charged.

German II serves as a grammatical unifier. As the reading, writing, speaking and listening skills are developed, the focus of the course is on grammar, syntax and vocabulary. Tests will be written and oral. Students may write short descriptive paragraphs, and read stories and articles from the text and other sources. Several multi-media materials and online resources will be implemented. Oral evaluation is part of the student's grade.

GERMAN III HONORS

Full year

Credit: 1.00

Prerequisites: German II; see introductory statement. Summer assignment. Requires a teacher recommendation.

Fee/Materials: A course fee may be charged.

German III Honors has an accelerated pace and more emphasis is placed on all four language skills. Supplementary reading material is added to the course, along with compositions and writing activities. Speaking, reading, writing, and listening skills will continue to be refined. They will learn about all aspects of the German language and culture with greater scope and depth. Several multi-media materials and online resources will be implemented. These activities are intended to continue to acquaint the student with the format of the AP German language exam and to acquire grammar, vocabulary, and communication skills that will lead to proficiency and further refine the students' understanding of the structure of German. Students will be required to purchase a workbook. It is recommended that students have earned a "B" or higher in German II.

ADVANCED PLACEMENT GERMAN LANGUAGE & CULTURE

Full year

Credit: 1.00

Prerequisites: German III Honors; teacher recommendation; summer assignment; see introductory statement.

Fee/Materials: A course fee may be charged. A fee will be added to cover the cost of the AP exam.

This course offers preparation for the AP German Language Examination. This course follows the College Board course of study and to that effect, students who score well on the AP German exam may receive college credit in German. Students will practice advanced listening, reading, speaking and grammar skills in order to develop their communicative abilities for success on the university level. Class is conducted in German.

Note: All students enrolled in this course must take the AP Exam.

SPANISH I

Full year

Credit: 1.00

Prerequisites: See introductory statement.

Fee/Materials: A course fee may be charged.

This first year course will provide the student with an introduction to listening, speaking, reading, and writing skills in Spanish. Topics of study include greetings, food, family, time and personal expressions, typical week activities, free time activities, and asking for help. Culture includes an overview of Spain and the Hispanic world. Active participation in class is stressed since oral evaluation is a part of the student's grade. Students will also be assessed on the development of their writing skills in Spanish. The class is frequently conducted in Spanish.

SPANISH II

Full year

Credit: 1.00

Prerequisites: Spanish I; see introductory statement. Requires a teacher recommendation.

Fee/Materials: A course fee may be charged.

This course is designed for the student who has successfully completed a first year course in Spanish. All language skills (listening, speaking, reading and writing) will be developed. Topics of study include descriptions of people and places, making plans, asking for and giving information, ordering in a restaurant, talking about past events, daily routine, technology, holidays, travel plans, health and physical fitness. Culture includes an overview of Spain and the Hispanic world.

Several multi-media materials and online resources will be implemented. Class is conducted primarily in Spanish; oral and written evaluations are a part of the student's grade.

SPANISH III

Full year

Credit: 1.00

Prerequisites: Spanish II; see introductory statement. Requires a teacher recommendation.

Fee/Materials: A course fee may be charged.

This course is designed for the student of Spanish who wishes to begin perfecting all language skills (listening, reading, writing and speaking.) Topics of study include travel, celebrations, cuisine, and health and wellness. Grammatical and structural concepts will be reviewed and refined while the subjunctive and conditional moods will be introduced. Students will read a variety of texts about the Spanish speaking world and will be required to initiate independent thought through both written and oral expression. Culture emphasizes the Hispanic world. Oral evaluation and essay writing are a part of the student's grade. Class is conducted primarily in Spanish.

SPANISH III HONORS

Full year

Credit: 1.00

Prerequisites: Spanish II; see introductory statement. Summer assignment. Requires a teacher recommendation.

Fee/Materials: A course fee may be charged.

Spanish III Honors has the same sequential core material as Spanish III. The pace is accelerated and more emphasis is placed on all four language skills. Supplementary reading material is added to the course, along with additional compositions and writing activities. Speaking, reading, writing and listening skills will continue to be refined. They will learn about all aspects of the Spanish language and culture with greater scope and depth. Several multi-media materials and online resources will be implemented. These activities are intended to continue to acquaint students with the format of the AP Spanish language exam and to acquire grammar, vocabulary, and communication skills that will lead to proficiency and further refine the students' understanding of the structure of Spanish. Students will be required to purchase a workbook. It is recommended that students have earned a "B" or higher in Spanish II.

ADVANCED PLACEMENT SPANISH LANGUAGE & CULTURE

Full year

Credit: 1.00

Prerequisites: Spanish III Honors; teacher recommendation; summer assignment; see introductory statement.

Fee/Materials: A course fee may be charged. A fee will be added to cover the cost of the AP exam.

This course offers preparation for the AP Spanish Language Examination. This course follows the College Board course of study and to that effect, students who score well on the AP Spanish exam may receive college credit in Spanish. Students will practice advanced listening, reading, speaking, and grammar skills in order to develop their communicative abilities for success on the university level. Class is conducted in Spanish.

Note: All students enrolled in this course must take the AP Exam.

SPECIAL SUPPORT PROGRAMS/COURSES

ACADEMIC AND SOCIAL ADVANCEMENT PROGRAM (ASAP)

Credit varies

Prerequisites: Administrative permission

Fee/Materials: None

ASAP is a comprehensive alternative program addressing the academic, social, behavioral and vocational needs in a small classroom environment within the high school. It serves students in grades nine through twelve who have been identified with a wide range of special education needs including behavioral, social and emotional needs. Academic instruction will be delivered by both direct instruction and through an online platform.

CAREER EXPLORATION PROGRAM (CEP)

Full year (Two periods daily)

Credit: 2.00

Work-Based Learning Experience

Prerequisites: Approved coursework junior year, seniors only, administrator and/or teacher recommendation is required.

Fee/Materials: None

CEP is a senior program designed to advance college/career-bound students' academic, intellectual, technical, and personal skills through an authentic learning experience in which they have real world connections between school and work. Students will study specific careers and career paths as related to their personal interests and future goals. Students will develop soft skills that are important to employers prior to being placed in a work environment. Students practice communication, problem solving, and teamwork all related to being on the job.

Students are able to take this course after completing the prerequisite coursework for the CEP program in junior year, in which they had to apply and be accepted and proceed with teacher recommendation. Students will be expected to complete a log of work hours relating to their work based learning experiences as well as frequent goal setting and reflection.

HIGH SCHOOL SUCCESS I

Full year

Credit: 1.00

HIGH SCHOOL SUCCESS II

Full year

Credit: 1.00

Prerequisites: Placement is by administrative recommendation

Fee/Materials: None

This is an Academic Intervention Program designed to assist students in achieving academic success. Students earn elective graduation credits while getting the individualized assistance they need. Formal lessons on study skills, test taking skills, dealing with change, problem solving, communication skills and critical thinking.

CONSUMER/BUSINESS MATH

Full year

Credit: 1.00

Prerequisites: Administrative permission; seniors only

Fee/Materials: None

This course is designed to provide students with a comprehensive study of the mathematics used in business and consumer decision making. Calculator usage will be developed to enhance problem solving skills. Topics taught include applied mathematics for business and the workplace, banking skills, purchases, budgeting, measurement, and making wise consumer choices.

ENGLISH LANGUAGE (EL) INTENSIVE ENGLISH

Full year

Credit: 1.00

Prerequisites: Administrative permission; qualifying score on the OELPS/OELPA.

Fee/Materials: None

This course will focus on development of basic skills at the emerging level of English. Complexity of text will grow with reading fluency and comprehension. Students will increase reading comprehension through language/vocabulary development, background knowledge, and word recognition. Students will conduct grade appropriate research, and create written claims that are supported with reasoning and evidence.

EL FOR NEWCOMERS Full year Credit: 1.00

Prerequisites: Administrative permission; qualifying score on the OELPS/OELPA.

Fee/Materials: None

This course will focus on the basics of literacy (reading, writing, speaking, listening), as well as the foundational skills of the English language. Grammar, vocabulary, idioms, paragraph writing and reading intervention will be stressed.

EL SUPPORT Full year Credit: 0.00

Prerequisites: Administrative permission; qualifying score on the OELPS/OELPA

Fee/Materials: None

This course will be broken down into support for core courses outside of ELA (Math, Social Studies, Science) and ELA support for reading and writing, speaking and listening.

ACADEMIC INTERVENTION 1 semester Credit: 0.25

Prerequisites: Counselor or administrative approval

Fee/Materials: None

This course is specifically designed as an intervention for students who need instruction to build skills to stay on track to graduate with their class. This course is for elective credit and is graded pass/fail.

Note: This course does not meet the requirements for athletic eligibility.

INTERVENTION ENGLISH 1 semester Credit: .25

Prerequisites: Counselor or administrative approval

Fee/Materials: None

This course is specifically designed as an intervention for students who have taken and not yet reached the proficient standard on the Ohio end-of-course exam in English. The variety of standards-based instruction and assessment strategies used in this class are appropriate to assist students in preparation for the end-of-course exam. An online computer program may be used to supplement this class. This course will not count toward the English credits required for graduation.

Note: This course does not meet the requirements for athletic eligibility.

INTERVENTION MATHEMATICS 1 semester Credit: .25

Prerequisites: Counselor or administrative approval

Fee/Materials: None

This course is specifically designed as an intervention for students who have taken and not yet reached the proficient standard on the Ohio end-of-course exam in Algebra or Geometry. The variety of standards-based instruction and assessment strategies used in this class are appropriate to assist students in preparation for the end-of-course exam. An online computer program may be used to supplement this class. This course is for elective credit and cannot be used to satisfy graduation credits in mathematics.

Note: This course does not meet the requirements for athletic eligibility.

MULTISENSORY READING Full year Credit: 1.00

Prerequisites: Administrative permission

Fee/Materials: None

This course is designed on research based interventions to address students decoding and encoding skills through the use of multisensory materials and strategies including: phonemic awareness, decoding, word study, sight word recognition, spelling, fluency, vocabulary acquisition, oral expressive language development and reading comprehension. Students will be exposed to both decodable and grade level text in order to improve reading skills, understand word structures and make

connections with text. This course will be graded PASS/FAIL and is elective credit. This course cannot be used to satisfy the English graduation requirements.

Note: This course does not meet the requirements for athletic eligibility.

MUSIC EXPLORATION 1 semester Credit: .50

Prerequisites: Administrative permission

Fee/Materials: None

This course is designed for students with unique needs to learn to appreciate all forms of music, as well as learning to use music as a tool to release stress. Different genres of music and their therapeutic value will be explored.

POSITIVE SUPPORT Full year Credit: 1.00

Prerequisites: Administrative permission

Fee/Materials: None

Positive Support is a course that addresses the behavioral, academic and social needs of the current high school student. The goal of the class is to address needs in the area of behavior while helping students work with academic and real life situations more effectively. Students will work on managing emotions, conflict resolution, problem solving, and academic success skills.

PRACTICAL LANGUAGE ARTS SKILLS Full year Credit: 1.00

Prerequisites: Administrative permission; Seniors only

Fee/Materials: None

In this course, students will improve on their practical language arts skills through fiction and nonfiction literature, career based writing and communication skills. Topics of this course include literature reading, resume writing, emailing, interview skills, public speaking, and study skills for post high school environments.

STRONGSVILLE ACADEMY Full year Credit varies

Prerequisites: Administrative permission

Fee/Materials: None

Strongsville Academy is an online opportunity to earn a Strongsville City Schools diploma. Students enrolled in the academy are considered Strongsville students and are able to participate in extracurricular activities and social functions the same as students who are in the traditional setting. For more information on this program, contact an administrator or counselor.

TARGETED STANDARDS Full year Credit: .50

Prerequisites: Administrative permission

Fee/Materials: None

This course is specifically designed as an intervention for a student with academic, social, and organizational needs. Students in this course will be given instruction following the Ohio Learning Standards and reinforced with skill practice in their individual identified area of need. Topics in this course will include: grade level core curriculum, test preparation, study skills, organization skills, college and career readiness skills, self advocacy, and Individual Education Plan awareness. This course is PASS/FAIL.

Note: This course does not meet the requirements for athletic eligibility.

TRANSITION TO INDEPENDENCE Full year Credit: 1.00

Prerequisites: Administrative/program coordinator permission

Fee/Materials: None

Transition to Independence is a program for students in 9-12 grades. The students in this course will develop workplace readiness skills including social skills, vocational skills, communication skills, money skills, and soft skills. The students will participate in job training within the school community in The Derby School Spirit Shop.

POLARIS

CAREER CENTER



Polaris offers a wide range of exciting career-technical programs for students beginning in 11th grade, all featuring high-quality training in a state-of-the-art setting.

Many Polaris programs provide you access to industry certifications which open the door to employment. In addition, you can begin earning free or reduced cost college credit before you ever step foot on a college campus – saving you time and money!



After graduation, you can go directly into the job market or capitalize on those college credits by continuing your education at a two- or four-year college/university.

Visit www.polaris.edu for a complete description of all Polaris programs or contact the Polaris Enrollment Office at 440.891.7732.

General Information

Registration/Enrollment

Our application process has never been easier. You can register online **NOW** at www.polaris.edu/register. The application only takes a few minutes to complete.

Contact the Polaris Enrollment Office at 440.891.7732 with additional enrollment related questions.

Student Fees

There is no tuition cost to attend Polaris. However, all programs will require fees to cover the cost of tools, uniforms, workbooks, etc. Payment plans are available.

Transportation

Busing to and from Polaris is provided by your school district. A Polaris parking permit must be obtained if you plan to drive to school.



INSPIRING
OUR STUDENTS
TO ACHIEVE
CAREER SUCCESS

2023-2024 Polaris Career-Technical Programs

Aeronautics

Your career opportunities will soar as you explore the exciting field of aviation with a focus on aeronautical studies, aeronautical systems, engineering technology, air traffic control, aviation management, flight technology and drone operations.

Automotive Technology

Using the latest equipment, you will learn to maintain, diagnose and service automobiles with an emphasis on brake and electrical systems, engine performance systems, transmissions, suspensions, alignments, engine repair and automotive heating and cooling.

Baking & Pastry Arts

You will learn the art of producing quality bakery products with an emphasis on decorative pastry arts. From bread production to chocolates and candies, you will learn the ABCs of food and food preparation. These skills will be developed and refined in the class-managed bakery, *Indulge*.

Business Professional & Office Technology

Skilled office professionals are in demand. In this program, you will learn the latest office management skills and techniques and become proficient in Microsoft Office, computer operations, business communications, finance, and customer service.



Computer Networking Academy

The Computer Networking Academy will open the door to the high-wage, high-demand field of computer networking, cyber security, and information technology. This program will give you an opportunity to earn valuable industry certifications and college credits prior to graduating from high school.

Construction Trades

Construction Trades teaches you how to maintain, repair, construct and remodel buildings and homes in a real-world, practical setting. The program includes the fundamentals of blueprint reading, site preparation, carpentry, plumbing, wiring, roofing, and machining.

Cosmetology

Learn to care for hair, skin and nails and create style and beauty in a student-run salon & spa setting. Join the *Salon Allure* staff and prepare for an exciting future.

Criminal Justice

Gain exposure to the latest in law enforcement techniques using the latest equipment and instruction. During your two years at Polaris, you will be trained in the enforcement of the law and the protection of life and property in a real-world setting.

Culinary Arts & Restaurant Management

Explore basic culinary/cooking essentials and foodservice management skills in our state-of-the-art educational kitchen and production lab. You will apply your new talents in the class-managed restaurant, *Savour*, while learning customer relations, cost controls, basic accounting principles, marketing, purchasing, inventory, teambuilding skills and communications.

Dental Assisting

Learn to work chairside with the dentist in the care and treatment of patients. Along with basic dental laboratory procedures, you will learn dental terminology, the use of instruments and equipment, x-ray procedures, preparation of dental materials and dental office management skills.





Digital Art & Design

Enter a world where creativity and technology merge to form digital art and design. Practice commercial art and advertising design fundamentals include design basics, layout, graphic drawing and production techniques, web page design, computer animation and three-dimensional design.

Emergency Medical Technician/Fire Training

If you like helping people, this is the program for you! Learn to be an Emergency Medical Technician, Firefighter or 911 Dispatcher. You will also learn the foundation of health science and homeland security. This program is offered in partnership with Cuyahoga Community College's Public Safety Training Center. **Students must be 16 years old by August 1 to enroll in this program.**

Exercise Science & Rehab Therapy

While in this program, you will learn the basics of preventing, diagnosing, and treating injuries related to sports and/or exercise. Exercise Science & Rehab Therapy is designed to prepare students to transition to college and pursue a career in the athletic training, fitness, or health care fields.

Heating, Ventilating, Air Conditioning & Refrigeration

This cool profession is heating up! Join HVAC/R and learn to install, maintain, troubleshoot, and repair heating and cooling systems in both residential and commercial settings.

Medical Professions

Learn the basic clinical and administrative procedures necessary to work in a doctor's office, clinic, or hospital. Coursework includes instruction in anatomy & physiology medical ethics, medical terminology, office procedures, medical records, and laboratory skills.

Pre-Nursing

As a Pre-Nursing student, you will learn to monitor patients' conditions and assess their needs to provide the best possible care and support, observe and interpret patients' symptoms and communicate them to physicians; collaborate with physicians and nurses to devise individualized care plans for patients; perform routine procedures (blood pressure measurements, administering injections, etc.); and many other important responsibilities. ****Please note students must qualify for this program based on their transcript and other criteria.***

Pre-Veterinary Science

Learn to provide basic healthcare for animals including post-surgery care, emergency first aid, instrument maintenance, animal health histories and more.

Precision CNC Machining

Join this innovative, high-tech career and secure your future in a high-demand/high-wage profession. Feel the satisfaction of making your own components from concept to completion using state-of-the-art Computer Numerical Control (CNC) production technology and equipment.

Welding Technology

This program will teach you the fundamentals of welding - the most common method of permanently joining metal parts. You will receive training in gas, arc, fluxcore and MIG & TIG welding using cutting-edge technology.



Special Admissions Programs – Counselor recommended

Building Services, Deli & Food Production and High School Job Training Programs which include:
Employability Skills Lab
Community Work Experience
Retail Services

Applications are being accepted now at www.polaris.edu/register



For additional information, contact Cindy Crisler, Polaris Enrollment Coordinator, at 440.891.7732 or ccrisler@polaris.edu.

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APPENDIX A

College Credit Plus Sample Pathways

Fifteen (15) credit hour pathway:

- | | |
|---|-----------|
| <input type="checkbox"/> English - College Composition I | 3 credits |
| <input type="checkbox"/> Mathematics | 4 credits |
| <input type="checkbox"/> Humanities (Literature, Religion, Philosophy) | 4 credits |
| <input type="checkbox"/> Social Science (Psychology, Sociology, Anthropology) | 4 credits |

Thirty (30) hour pathway (includes 15 hour pathway above):

- | | |
|--|-----------|
| <input type="checkbox"/> English - College Composition II | 3 credits |
| <input type="checkbox"/> Science Lecture (Biology, Geology, Chemistry) | 3 credits |
| <input type="checkbox"/> Science Lab | 1 credit |
| <input type="checkbox"/> Mathematics | 4 credits |
| <input type="checkbox"/> Fine Arts (Art, Music, Drama) | 4 credits |

The Strongsville Board of Education is an equal opportunity employer and does not discriminate on the basis of sex, race, religion, age, disability, handicap or national origin in employment and in the educational programs and activities that it operates. Inquiries and grievances regarding compliance with the above acts and title may be directed to Strongsville City Schools, Human Resources, 18199 Cook Avenue, Strongsville, Ohio 44136; telephone number: (440) 572 -7000.