Switzerland of Ohio Local School District

High School Course Catalog

2026-2027 School Year

Board Approved 3/12/2026

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Introduction

This Course Description Guide will give you an idea of the courses offered at the high school level. A student should choose courses based upon his/her needs in the future. **While every attempt will be made to offer each course, not all courses are taught each year because of the lack of requests for some courses or due to the lack of a highly-qualified teacher.**

Although the selection of the proper courses is the student's responsibility, students should seek the advice of counselors, teachers, and parents.

The Switzerland of Ohio Local School District wants to help students make the best choice for them. Parents are requested to become involved in the selection of courses for their children.

Students are to schedule so they have no more than one study hall.

Parents are requested to call the school if they have any questions.

Graduation Requirements

OHIO'S GRADUATION REQUIREMENTS

CLASS OF 2023 AND BEYOND

Ohio's long-term graduation requirements take effect for the class of 2023. For students entering ninth grade on or after July 1, 2019, Ohio's new high school graduation requirements provide more flexibility to choose a graduation pathway that builds on a student's strengths and passions – one that ensures students are ready for their next steps after high school. Students in the classes of 2018 through 2022 may also use these requirements as a pathway to graduation.

As a part of this pathway to graduation, students must show that they have completed all three parts of these requirements.

1. Credit Requirements:

Students must earn a minimum total of 20 credits in specified subjects and take your required tests. Schools can locally require more than 20 credits. Schools are still required to administer all the high school end-of-course assessments. These are: English Language Arts II, Algebra I (or Integrated Math I), Geometry (or Integrated Math II), Biology, American History, and American Government.

2. Competency:

Students can demonstrate competency by earning a passing score on Ohio's high school Algebra I (or Integrated Math I) and English language arts II tests. Students who do not pass the test will be offered additional support and must retake the test at least once. If students have not met the competency score on these tests, there are four additional ways to show competency.

Option 1	Option 2	Option 3	Option 4	Option 5
Algebra I and ELA II	Career Readiness	College Credit Plus	Military Enlistment	ACT or SAT

Refer to the back of this page for a brief discription of each option.

Option 1. To demonstrate competency using Ohio's state tests, students must earn a score of 684 or above on both the Algebra I (or Integrated Math I) and English language arts II end-of-course exams.

Option 2. To demonstrate competency by Career Readiness, students must demonstrate two career-focused activities, at least one must be a foundational option.

- Foundational options: 1. Cumulative score of proficient on 3 or more WebXams. 2. Earn 12-points of industry credential. 3. Complete a registered pre-apprenticeship, an apprenticeship, or show evidence of acceptance into an approved apprenticeship. 4. State-issued license for a practice in a vocation.

- Supporting options: 1. Work-Based Learning. 2. Earn the workforce readiness score on the Workkeys. 3. Earn the OhioMeansJobs Readiness Seal

Option 3. To demonstrate competency through the College Credit Plus Program, students must earn credit in a non-remedial math or English course for the subject area not passed.

Option 4. To demonstrate competency through Military Enlistment, students must provide evidence of enlistment in a branch of the armed forces to demonstrate competency.

Option 5. To demonstrate competency using the ACT or SAT, students must obtain a remediation-free score in the math and/or English subject area on the ACT or SAT. To demonstrate competency in English, a student must be remediation-free in the subjects of English and reading on the ACT or SAT.

3. Readiness:

Students can meet the readiness requirement by earning two diploma seals. In alignment with their graduation plan, students should be choosing seals that align with their goals and interests. These seals give students the chance to demonstrate academic, technical and professional skills and knowledge that align to their passions, interests and their post-high school pathway.

Of the two seals students are required to earn, at least one of the two must be State-Defined. Ohio's 12 diploma seals are:

- OhioMeansJobs Readiness Seal (State-Defined)
- Industry-Recognized Credential Seal (State-Defined)
- College-Ready Seal (State-Defined)
- Military Enlistment Seal (State-Defined)
- Citizenship Seal (State-Defined)
- Science Seal (State-Defined)
- Honors Diploma Seal (State-Defined)
- Seal of Biliteracy (State-Defined)
- Technology Seal (State-Defined)
- Community Service Seal (Locally-Defined)
- Fine and Performing Arts Seal (Locally-Defined)
- Student Engagement Seal (Locally-Defined)

Want to learn more?

Contact your school counselor or visit education.ohio.gov/graduation

Complete Courses

General Course Requirments	Minimum Credits
English Language Arts	4 credits
Health	.5 credit
Mathematics	4 credits
Physical Education	.5 credit
Science	3 credits
Social Studies	3 credits
Electives (must include .5 credit in financial literacy)	5 credits
Fine Arts	1 credit

Mathematics	Students must earn four mathematics units, which must include one unit of Algebra 2 or the equivalent of Algebra 2.
Physical Education	School districts may adopt policies that would exempt students who participate in interscholastic athletics, marching band or cheerleading for two full seasons from the physical education requirement. Students satisfying the physical education waiver must take another course of study of .5 credit.
Science	Science units must include one unit of physical sciences, one unit of life sciences and one unit of advanced study in one or more of the following sciences: chemistry, physics or other physical science; advanced biology or other life science; astronomy, physical geology or other earth or space science.
Social Studies	Must include World History, American History, and American Government.

Course tracking worksheet

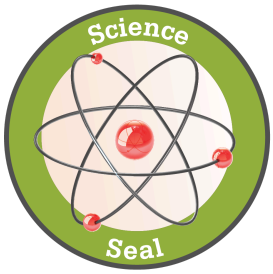
REQUIRED CREDITS (21)

Note: A student must receive instruction in economics and financial literacy (in high school) and complete at least two semesters of fine arts Fine arts may not be required for a student in a career-tech program unless it is a component of local course requirements.*

Subjects	Middle School	9th Grade	10th Grade	11th Grade	12th Grade	Credit Tracker		
						Min Req	Earned	Needed
English						4		
Mathematics						4		
Social Studies						3		
Science						3		
Health						0.5		
Physical Education						0.5		
Economics/Financial Literacy						0.5		
Fine Arts						1*		
Electives						5		
School-Specific Reqs								
Credit Totals								

Graduation Seals

State-Defined Diploma Seal	Requirements
Ohio Means Jobs Readiness Seal 	Meet the requirements and criteria established for the readiness seal, including demonstration of work-readiness and professional competencies.
Industry-Recognized Credential Seal 	Earn a 12-point approved industry-recognized credential or group of credentials totaling 12 points in a single career field.
College-Ready Seal 	Earn remediation-free scores on the ACT or SAT. Visit the Department's website to see current remediation-free scores.
Military Enlistment Seal 	Provide evidence that a student has enlisted in a branch of the U.S. Armed Forces; or Participate in an approved JROTC program.

Citizenship Seal 	A student can: 1. Earn a score of proficient or higher on both the American history and American government end-of-course exams; 2. Earn a score that is at least equivalent to proficient on appropriate Advanced Placement or International Baccalaureate exams; or 3. Earn a final course grade that is equivalent to a "B" or higher in appropriate classes taken through the College Credit Plus program. 4. Earn a final course grade that is equivalent to a "B" or higher in both an American History course and/or an American Government course offered by the student's high school. 5. Earn a score to be determined on the Social Studies Alternate Assessment for Students with the Most Significant Cognitive Disabilities.
Science Seal 	A student can: 1. Earn a score of proficient or higher on the biology end-of-course exam; 2. Earn a score that is at least equivalent to proficient on appropriate Advanced Placement or International Baccalaureate exams; or 3. Earn a final course grade that is equivalent to a "B" or higher in an appropriate class taken through the College Credit Plus program. 4. Earn a final course grade that is equivalent to a "B" or higher in an advanced science course. Advanced Sciences are indicated beside the course description below 5. Earn a score to be determined on the Science Alternate Assessment for Students with the Most Significant Cognitive Disabilities.
Honors Diploma Seal 	Earn one of six Honors Diplomas outlined below: 1. Academic Honors Diploma; 2. International Baccalaureate Honors Diploma; 3. Career-Tech Honors Diploma; 4. STEM Honors Diploma; 5. Arts Honors Diploma; 6. Social Science and Civic Engagement Honors Diploma.

State Seal of Biliteracy 	Meet the requirements and criteria, including proficiency requirements on assessments in a world language and English.
Technology Seal 	A student can: 1. Earn a score that is at least equivalent to proficient on an appropriate Advanced Placement or International Baccalaureate exam; 2. Earn a final course grade that is equivalent to a "B" or higher in an appropriate class taken through the College Credit Plus program; or 3. Complete a course offered through the district or school that meets guidelines developed by the Department. (A district or school is not required to offer a course that meets those guidelines.)

Local-Defined Seal	Requirements
Community Service Seal 	While in high school a student must meet one of the following: 1. Complete 20 hours of community service by the end of senior year 2. Participate in an organized club (i.e. 4-H, Girl Scouts, Boy Scouts, etc.) while in grades 7-12
Fine and Performing Arts Seal 	While in high school a student must meet one of the following: 1. Earn 2 or more credits in a Fine Art with a grade of a C or higher 2. Participate in a district or club/community drama production 3. Participate in dance, cheerleading, band, and/or vocal performances 4. Be identified as Gifted in Visual or Performing Arts

Student Engagement Seal	While in high school a student must meet one of the following: 1. Participate in at least 2 complete athletic seasons of any sport, club sport, band, etc. 2. Participate in any club or student government 3. Participate in a leadership event (HOBY, Regional Scholars, Boy/Girl State, iBelieve or similar approved event) 4. Participate in a Job Shadowing experience in High School 5. Be involved in/with Student Organizations (i.e. SkillsUSA, FFA, etc.)

Honor Roll

The honor roll for all schools of the Switzerland of Ohio Local School District shall be:

Principal's List

A student must receive all A's to be on the principal's list. A student may not be on the principal's list if he/she receives any A-'s.

First Honors

To qualify for First Honors, the student must have a cumulative grade point average of 3.5 on a 4.0 scale. A grade of B- may be included but must be offset by higher grades in other subjects in order to meet the 3.5 average. No student is permitted on the honor roll with a grade below a B-.

Second Honors

To qualify for Second Honors, the student must have a cumulative grade point average of 3.0 on a 4.0 scale. A grade of B- may be included but must be offset by higher grades in other subjects in order to meet the 3.0 average. No student is permitted on the honor roll with a grade below a B-.

SOLSD Grade Letter Value and Grading Scale

LETTER	Value	Range
A	4.00	3.84 - 4.00
A-	3.66	3.51 - 3.83

B+	3.33	3.18 - 3.50
B	3.00	2.84 - 3.17
B-	2.66	2.51 - 2.83
C+	2.33	2.18 - 2.50
C	2.00	1.84 - 2.17
C-	1.66	1.51 - 1.83
D+	1.33	1.18 - 1.50
D	1.00	.84 - 1.17
D-	.66	.51 - .83
F	.0	.0 - .50

Numerical Letter Grade Value	
A	94 - 100
A-	92 - 93
B+	89 - 91
B	85 - 88
B-	83 - 84
C+	80 - 82
C	76 - 79
C-	74 - 75
D+	71 - 73
D	67 - 70
D-	65 - 66
F	0 - 64

The final grade in a particular course may be computed by converting the letter grade to its decimal value (as illustrated on the second chart) in the following manner:

1st-9wks	2nd-9wks	Sem.Exam	3rd-9wks	4th-9wks	Final Exam
A-	B	A	C	B	A
3.66	3.00	4.00	2.00	3.00	4.00
X	X	X	X	X	X
2	2	1	2	2	1
7.32	6.00	4.00	4.00	6.00	4.00

Total = 31.32 or 3.13 B

Honors Diplomas

What is new for students in the class of 2026 and beyond?

For each honors diploma, the goal of the stakeholders was to better align the new honors diplomas to the new high school graduation requirements. As such, changes will be found to better align to key concepts of customization and ability for students to reflect their strengths.

Equal number of requirements for each honors diploma

Addition of state and local seals that align to specific honors diplomas

Additional requirements listed for courses beyond standard graduation requirements

Addition of “Student Strength Replacement” option for all honors diplomas

Addition of “Experiential Learning” option for all honors diplomas

Ohio students have the opportunity to choose to pursue one of six honors diplomas:

1. Academic Honors Diploma
2. International Baccalaureate Honors Diploma (not available in SOLSD)
3. Career Tech Honors Diploma
4. STEM Honors Diploma
5. Arts Honors Diploma*
6. Social Science and Civic Engagement Honors Diploma

**includes dance, drama/theatre, music and visual art.*

High school students can gain state recognition for exceeding Ohio’s graduation requirements through an Academic Honors Diploma. High-level coursework, college and career readiness tests and real-world experiences challenge students.

Students must meet **all but one** of the following criteria. Each of these criteria go beyond the standard requirements for a diploma for the classes of 2023 and beyond. Students must meet general graduation requirements and complete the requirements outlined below to qualify for honors diplomas. Students may replace one requirement of either 4, 5 or 6 with a “Student Strength Demonstration.”

Student Strength Demonstration Replacement

Students can use the Student Strength Demonstration to replace one of either the **ACT/SAT, GPA *or* World Language** requirement for any Honors Diploma. The Student Strength

Demonstration options are listed below. The same options exist for each of the six honors diplomas* but, where relevant, should reflect coursework or experiences relevant to the theme of the Diploma. For example, a student earning the Academic Honors Diploma and using the College Credit Plus option to replace another requirement for the diploma should have College Credit Plus courses relevant to the Academic Honors diploma.

OPTIONS:

College Credit Plus: 12 total College Credit Plus credit hours

Advanced Placement: three courses with score of 3 or higher on AP tests

Career-Technical Assurance Guide (CTAG): 12 total credits

Apprenticeship/Pre-Apprenticeship: Completion or Evidence of Acceptance if required to be older than 18

WorkKeys: Score of 6 or higher on all tests (*void for Career-Tech Honors Diploma)

Armed Services Vocational Battery: Score of 50 or above on the ASVAB

Work-Based Learning: 250 total hours of work-based learning

ACADEMIC HONORS DIPLOMA

Requirements	State Minimum
1 Math	Fourth math must be > Algebra 2
2 Science	One additional unit Advanced Science
3 Social Studies	One additional unit Social Studies
4 World Languages	Three sequential units of one world language, or no less than 2 sequential units of two world languages studied
5 GPA	3.5 on a 4.0 scale
6 ACT/SAT	ACT: Score of 27 or higher, SAT: Score of 1280 or higher
7 Seal Requirement	Earn two additional diploma seals, not including Honors Diploma Seal
8 Experiential Learning	Field Experience, OhioMeansJobs Readiness Seal*, Portfolio or Work-Based Learning

CAREER TECH HONORS DIPLOMA

Requirements	State Minimum
1 Math	Fourth math must be > Algebra 2
2 Career-Tech Coursework	Four units of Career-Tech Courses
3 Career-Tech Proficiency	Earned a cumulative score of proficient or higher on the technical assessments aligned to their program
4 World Languages	Two units of one world language
5 GPA	3.5 on a 4.0 scale
6 ACT/SAT/Workkeys	ACT: Score of 27 or higher, SAT: Score of 1280 or higher Workkeys: Earn a score of six or higher on all three sections of the WorkKeys assessment.
7 Industry-Recognized Seal or Technology Seal	Meet requirements to earn the Industry Recognized Credential Seal or Technology Seal
8 Experiential Learning	Field Experience, OhioMeansJobs Readiness Seal, Portfolio or Work-Based Learning

STEM HONORS DIPLOMA

Requirements	State Minimum
1 Math	Fourth math must be > Algebra 2
2 Science	One additional unit Advanced Science
3 Electives	Two units of additional STEM Courses as electives
4 World Languages	Three sequential units of one world language, or no less than 2 sequential units of two world languages studied
5 GPA	3.5 on a 4.0 scale
6 ACT/SAT	ACT: Score of 27 or higher, SAT: Score of 1280 or higher
7 Industry-Recognized Credential Seal or Fine Arts Seal	Meet requirements to earn the Industry-Recognized Credential Seal or Fine Arts Seal**
8 Experiential Learning	Field Experience, OhioMeansJobs Readiness Seal, Portfolio or Work-Based Learning

ARTS HONORS DIPLOMA

Requirements	State Minimum
1 Math	Fourth math must be > Algebra 2
2 Fine Arts	Four units
3 Electives	Two units of Fine Arts (may overlap with general four units)
4 World Languages	Three sequential units of one world language, or no less than 2 sequential units of two world languages studied
5 GPA	3.5 on a 4.0 scale
6 ACT/SAT	ACT: Score of 27 or higher, SAT: Score of 1280 or higher
7 Fine Arts Seal	Meet local district requirements to earn the Fine Arts Seal
8 Experiential Learning	Field Experience, OhioMeansJobs Readiness Seal, Portfolio or Work-Based Learning

SOCIAL SCIENCE AND CIVIC ENGAGEMENT HONORS DIPLOMA

Requirements	State Minimum
1 Math	Fourth math must be > Algebra 2
2 Social Studies	Two additional units of Social Studies
3 World Languages	Three sequential units of one world language, or no less than 2 sequential units of two world languages studied
4 GPA	3.5 on a 4.0 scale
5 ACT/SAT	ACT: Score of 27 or higher, SAT: Score of 1280 or higher
6 Community Service Seal	Meet local district requirements to earn the Community Service Seal
7 Citizenship Seal	Meet the requirements to earn the Citizenship Seal
8 Experiential Learning	Field Experience, OhioMeansJobs Readiness Seal, Portfolio or Work-Based Learning

Last Day to Change Course Section

The last day to change from one section of a course to another will be three weeks from the start of the semester. Any change after that will be under special circumstances considered by the Principal and School Counselor**.**

Last Day to Drop an Elective Course

The last day to drop an elective course will be one week following the distribution of report cards for the first nine-week grading period. This will be allowed only if there is no more than 1 study hall as a result of this change.

Make Up Credits

All courses that are failed during the freshmen, sophomore, and junior years that are required for graduation, must be made up by May 1st of the senior year. Any required course for graduation that is failed during the senior year cannot be made up to allow the student to graduate with his/her class on the scheduled graduation date. No student will be eligible for credit recovery until the course grade has been finalized.

College Credit Plus (CCP) Courses

CCP replaces Ohio's Post-Secondary Enrollment Options program (PSEO) and all alternative dual enrollment programs previously governed by Ohio Revised Code Chapter 3365. CCP began with the 2015-16 school year.

CCP participation

• All public districts and public institutions of higher education (IHE) must allow college-ready students, grades 7-12, who qualify for college admission to participate. Students are required to demonstrate that they are college ready through ACT scores or other college readiness assessment. Colleges and Universities will set their own requirements. Colleges must have the same requirements for high school students as they do for entry year freshman at the college.

CCP courses must…

• Be the same as those offered on campus (included in IHE course catalog)

• Be nonsectarian and non-remedial

• Apply toward a degree or professional certificate
• Be taught by instructors who meet BOR's academic credential requirements

***** If interested in College Credit Plus, please talk to your School Counselor about how to apply, the required placement test/s, and a course schedule.*****

Laude System

Students will be recognized for achievement based on the board-adopted Laude System.

Philosophy behind the Laude System

* To raise every student to his/her highest potential in the student's area of interest
* To recognize and encourage students to take the appropriate courses that would better prepare the student for the future
* To reward students for taking more rigorous courses and courses that matriculate to a specific career

Process for determining the level of distinction

* The student must have an unweighted 7-semester cumulative GPA of 3.2 and includes all students in the graduating class at both the home school and the career center.
* The student must earn a minimum of 5 honor points for predetermined courses. Students must successfully complete the course to earn honors points.
* A recognition of Summa Cum Laude, Magna Cum Laude, or Cum Laude will be given based on the student's score – see chart for points
* Three graduation speakers will be chosen, The Class President, and two students selected from the pool of Summa Cum Laude who are interested in and agree to speaking at the graduation ceremony. Those names will be placed on a ballot and the high school faculty will vote by secret ballot.
* Final Laude Scores are based on 7th semester Cumulative GPA and 8th semester honor points. If after the 8th semester final calculation, a student's 8th semester cumulative GPA qualifies them for a Laude distinction, the student will receive a certificate after graduation and their Laude Distinction will be noted on their final transcript.

* Honor point courses:
    - All Honor courses
    - All AP courses - Additional .25 Laude point for those who take the National AP Exam and if the student scores a 3 or higher on the AP Exam an additional .25 point will be awarded.
    - All CCP courses
    - Physics
    - Pre-Calculus
    - Calculus
    - Anatomy
    - Chemistry II
    - Foreign Language – 4th level
    - Career Technical Courses that articulate to college credit.
    - PLTW courses in which the student earned an Accomplished or higher score on the Biomedical Science EOC, thus making them eligible for college credit.

* Laude points for AP courses:
    - Students who take and complete an AP course in school or online, but do not take the corresponding National AP Exam for that course will receive 1.0 Laude point.
    - Students who take and complete an AP course in school or online and take the corresponding National AP Exam for that course will receive 1.25 Laude points.
    - Students who take the National AP Exam and receive a score of 3 or higher will receive a 1.50 Laude point.

To calculate your Laude Score

1. The student must have a 3.2 unweighted and cumulative GPA or higher at the end of 7 semesters and at least 5 honor points. GPA will not be rounded up.
2. Any student with a GPA lower than 3.2 or less will not have honors points calculated towards a Laude score
3. You must have successfully passed and completed a class to receive the designated honor points.
4. Add the number of honor points you have earned.
5. Multiply your total number of honor points by your unweighted cumulative GPA rounded to the nearest thousandth.

Calculating Your Laude Score Example:

	Total honor points	**8**
	7 semester unweighted GPA	**X 3.83**
X	(rounded to the thousandth)	
	Total Laude Score	**= 30.64**

Summa Cum Laude Distinction, with highest honor/distinction - 50 Laude Score or more

Magna Cum Laude Distinction, with great honors/distinction - 30 – 49.99 Laude Score

Cum Laude, with honor/distinction 19 – 29.99 Laude Score

National Honor Society

Any junior or senior student wanting to qualify for the National Honor Society must meet the following minimum requirements:

1. Must have a 3.5 cumulative unweighted and unrounded GPA after the first semester of the academic year
2. Must have 2 years of a Foreign Language
3. Must have completed Physical Science and Biology
4. Must have 2 years of a college-prep Math
5. Must have all necessary credits in English, History, Health, and PE
6. Must display outstanding qualities in the areas of academics, service, leadership, and character

Please see your school NHS Advisor for additional school NHS chapter requirements .

Kiwanis Scholarships

Please see the 9-12 student handbook or your **School Counselor** for more information concerning the Kiwanis Scholarships.

Advanced Placement (AP) Courses

Advanced Placement (AP) Courses

District policy for enrollment in an AP Course in school or online
Effective beginning the 2019-20 School Year

Requirements to enroll into an AP Course

1) **Enrollment in an AP Course:**
   a) A student may enroll in an AP course in school or online if they have achieved a "B" or higher grade average in a prior corresponding course and
   b) Student has achieved a 4 or higher on the State Test from a corresponding course or
   c) Student has achieved a college readiness score on the ACT/SAT tests.
      i) Examples: If a student is applying for an AP English course, they must have had a "B" average for the English course the year prior
      ii) If a student is applying for an AP History course online, they must have a "B" average in a prior history course.

d) If the student wants to take an AP course online that is not offered in the district (Ex: AP German, AP Psychology, AP Calculus), then the student must have obtained a "B" average in the closest corresponding course as determined by administration.
    i) Examples: If a student wants to take AP German online, they must have a "B" average in the prior year's Language Course.
    ii) If a student wants to take AP Psychology online they must have a "B" average in the prior year's Social Studies Course.
e) A student must also complete the following requirements prior to being placed in the AP course.
    i) Complete a pre-writing sample for AP English, AP History/Government Course.
        (1) Writing sample will be graded on a district created rubric and students must receive a minimum of a 3 or higher for the writing sample. Rubric will be on a 0 to 5 scale.
    ii) Complete a Basic Knowledge sheet for AP Science and Math courses.
        (1) The Basic Knowledge sheet will allow the student to show they have the basic knowledge in order to take the exam. The sheet will be graded and the student must achieve an 80% or higher.
    iii) Writing Samples and Basic Knowledge Sheets will be turned into the AP coordinator once completed. Student names will be removed and a number will be assigned to each student. Teachers from a different building if available will grade the sheets without knowing who the student is. Writing samples and Basic Knowledge sheets should be completed and turned in by using a word processing program.
f) No student can be placed in an AP course without meeting three out of four requirements.
    i) B or higher in previous course or related course
    ii) 4 or higher on a State tests ex: End of course or Next Generation
    iii) College readiness score on the ACT or SAT
    iv) Writing Samples or Basic Knowledge sheet.
g) Special considerations for a student's placement will be allowed with a majority consensus of the AP Coordinator, AP Teacher, Principal, and Superintendent.
h) Acceptance into an online AP Course is also subject to any additional guidelines set forth by the organization offering the course.

2) Credit for the AP course:

a) Laude System:
    i) Students who take and complete an AP course in school or online, but do not take the corresponding National AP Exam for that course will receive 1.0 Laude point.
    ii) Students who take and complete an AP course in school or online and take the corresponding National AP Exam for that course will receive 1.25 Laude points.
    iii) Students who take and receive an AP exam score of 3 or higher will receive a 1.50 Laude point.

3) Adding or Dropping an AP Course:

a) A student can add or drop an AP Course as long as they meet the district policy for doing so.
b) If a student of the district wants to add a course after the school year starts, they will be responsible to understand and complete any prior assignments on his or her own.
c) If a student moves into the district in the school year and wants to take an AP course, they will be informed of the coursework they have missed to better prepare them, but

they will not be held responsible to complete the assignments if the student was not taking an AP course at the previous school.

d) Course work from another AP course in a different district can be given if the student provides proof of work and the district offers that AP course.

SOLSD is working to increase the number of AP courses taught in our high schools. This requires our district to be approved by the College Board for each AP course. Please see your counselor for courses that have been approved for the 2019-20 school year. For more information about AP visit ***apstudent.collegeboard.org***

Honors Course Policy

Honors Biology - District Policy or Prerequisite:

Students who want to enroll in a Biology Honors Course must meet 2 of the following requirements:

- Grade of B or Higher in a prior corresponding science course
- A score of Accomplished (4) or Advance (5) on a State Test the year prior in a Science course
- A Student has achieved a College readiness score on the ACT/SAT tests
- Achieved an 80% or higher practice exam for the honors course for students that do not have a score for an Ohio State tests in Science.
- Special considerations for a student's placement will be allowed with a majority consensus of the Coordinator of Gifted Services, Teacher of the Honors course, Principal, and Superintendent

Students are expected to earn a grade of "C" or higher. If a student is not meeting the minimum expectation within the first four weeks of the grading period, a conference will take place to include the teacher, parent, student, School Counselor and/or principal to develop a plan for success. If the student, teacher, and parent recognize that the level of difficulty is such that the student is not successful, a level change should occur immediately. Should the student remain in the honors course at the end of the grading period and the student is still not performing at the minimum grade requirement, the student will be withdrawn from the honors course and placed in the regular course.

Honors Math - District Policy

Students who want to enroll in a Math Honors Course must meet 2 of the following requirements:

- Grade of B or Higher in a prior corresponding Math course
- A score of Accomplished (4) or Advance(5) on a State Test the year prior in a Math course
- A Student has achieved a College readiness score on the ACT/SAT tests
- Special considerations for a student's placement will be allowed with a majority consensus of the Coordinator of Gifted Services, Teacher of the Honors course, Principal, and Superintendent

Students are expected to earn a grade of "C" or higher. If a student is not meeting the minimum expectation within the first four weeks of the grading period, a conference will take place to include the teacher, parent, student, School Counselor and/or principal to develop a plan for success. If the student, teacher, and parent recognize that the level of difficulty is such that the student is not successful, a level change should occur immediately. Should the student remain in the honors course at the end of the grading period and the student is still not performing at the minimum grade requirement, the student will be withdrawn from the honors course and placed in the regular course.

English Honors District Policy Prerequisite:

Students who want to enroll in an English Honors Course must meet 3 of the following requirements:

- Grade of B or Higher in a prior corresponding English course
- A score of Accomplished (4) or Advance(5) on the most recent ELA State Test. A Student has achieved a College readiness score on the ACT/SAT tests
- Complete a pre-writing sample for the honors course and achieve a score of 3 or higher using the Pre-AP writing rubric.
- Special considerations for a student's placement will be allowed with a majority consensus of the Coordinator of Gifted Services, Teacher of the Honors course, Principal, and Superintendent

Students are expected to earn a grade of "C" or higher. If a student is not meeting the minimum expectation within the first four weeks of the grading period, a conference will take place to include the teacher, parent, student, School Counselor and/or principal to develop a plan for success. If the student, teacher, and parent recognize that the level of difficulty is such that the student is not successful, a level change should occur immediately. Should the student remain in the honors course at the end of the grading period and the student is still not performing at the minimum grade requirement, the student will be withdrawn from the honors course and placed in the regular course.

History Honors District Policy Prerequisite:

Students who want to enroll in a History Honors Course must meet 2 of the following requirements:

- Grade of B or Higher in a prior corresponding History course
- A Student must receive a score of 80% or higher on a pretest for the history course.
- Complete a pre-writing sample for the honors course and achieve a score of 3 or higher using the Pre-AP writing rubric.
- Special considerations for a student's placement will be allowed with a majority consensus of the Coordinator of Gifted Services, Teacher of the Honors course, Principal, and Superintendent

Students are expected to earn a grade of "C" or higher. If a student is not meeting the minimum expectation within the first four weeks of the grading period, a conference will take place to include the teacher, parent, student, School Counselor and/or principal to develop a plan for success. If the student, teacher, and parent recognize that the level of difficulty is such that the student is not successful, a level change should occur immediately. Should the student remain in the honors course at the end of the grading period and the student is still not performing at the minimum grade requirement, the student will be withdrawn from the honors course and placed in the regular course.

Pre-AP Writing Rubric	
Score	Writing
4 Advanced The response demonstrates or includes:	● Cohesion and the highly effective use and command of language ● A logical structure, with an insightful claim, effective order, and clear transitions ● A strong command of the conventions of standard written English, with almost no errors.
3 Proficient The response demonstrates or includes:	● Cohesion and an adequate use and command of language ● A logical structure, with a plausible claim, effective order, and transitions ● An adequate command of the conventions of standard written English, with only slight errors that do not interfere with meaning
2 Partial The response demonstrates or includes:	● Little to no cohesion or command of language ● An inadequate structure, with an unclear claim and a lack of adequate transitions ● Several errors in the conventions of standard written English that interferes with meaning
1 Inadequate The response demonstrates or includes:	● A complete lack of cohesion or command of language ● A mission or inadequate structure, with no identifiable claim and few if any transitions ● Many errors in the conventions of standard written English that interferes with meaning
Score	Comments:

Rubric Take directly from the Pre-AP English Course Guide pgs. 40-41

Athletic Eligibility

Grades 9 - 12: To be eligible, a student-athlete must be currently enrolled in a member school and have earned at least a 1.75 GPA and received a passing grade in a minimum of five (5) one-credit courses, or the equivalent, in the immediately preceding grading period.

Eligibility for students selecting to participate in CCP must be certain that:

1.) It is up to the student at the post-secondary institution to provide grades or a progress report at the time when the high school's grading period is over. (see Athletic code of Conduct for more detail)

2.) The student-athlete is taking enough post-secondary course work exclusively or between the post-secondary institution and the high school combined to be equivalent to five one-credit courses. Calculating equivalency of credits in the post-secondary institution is conducted in the same manner as in the high school, based on the Carnegie unit. College courses for which three or more semester hours of credit are earned shall be awarded one Carnegie unit. Fractional Carnegie units will be awarded proportionately.

Examples of CCP options:

Example: 1st Nine-Week Grading Period
Subject School Credit & Duration Credit Equivalency (Must Equal 5 Units or Equivalent)
History High School 1 (year course) 1 x 1 = 1
Literature CCP 3 semester hours 1 x 2 = 2
Calculus CCP 5 semester hours 1 x 2 = 2
Biology CCP 3 semester hours 1 x 2 = 2
Total Credits 7 = eligible for 2nd grading period provided five credits passed. The factor of 2 is used for post-secondary institutions that are on the semester system.

Example 2: 4th Nine-Week Grading Period
Subject School Credit & Duration Credit Equivalency (Must Equal 5 Units or Equivalent)
French CCP 5 semester hours 1 x 2 = 2
Sociology CCP 3 semester hours 1 x 2 = 2
Computers CCP 2 semester hours .67 x 2 = 1.34
Geology CCP 3 semester hours 1 x 2 = 2
Total Credits 7.34 = eligible for 1st grading period of next school year provided five credits passed. The factor of 2 is used for post-secondary institutions that are on the semester system.

*****Note that this student is taking all courses in CCP, which is acceptable. *****

A student enrolled in the first grading period after advancement from the eighth grade must have passed 75% of those subjects carried the preceding grading period in which the student was enrolled.

Summer school and other educational options may not be used to substitute for failure to meet the academic standards specified by the Ohio High School Athletic Association and the Switzerland of Ohio Local Schools.

******If you have questions concerning your athletic eligibility, please see your Principal, School Counselor, or Athletic Director as soon as possible.******

List of high school courses in the content areas

(see course description for specific details)

*NCAA Approved SOLSD Courses

English	Math
English 9 *	**Algebra I ***
Honors English 9 *	**Applied Algebra IA**
English 10 *	**Applied Algebra IB**
Honors English 10 *	**Honors Algebra I ***
English 11 *	**Geometry ***
English 12 *	**Honors Geometry ***
AP English Language and Composition *	**Algebra II ***
AP English Literature and Composition *	**Honors Algebra II ***
Communication/Speech	**Advanced Quantitative Reasoning ***
CCP Speech *	**Discrete Math/Computer Science***
CCP Composition I *	**Pre Calculus ***
CCP Composition II *	**Calculus ***
	Probability and Statistics *
	AP Statistics *
	CCP College Algebra *
	CCP College Algebra and Trigonometry *
	CCP Statistics *
	CCP Trigonometry *
Science	**Social Studies**
Biology *	**World History ***
Honors Biology *	**Honors World History ***
Physical Science *	**American History ***
Chemistry I *	**Honors American History ***
Chemistry II *	**American Government ***
Anatomy and Physiology *	**Current Events ***
Earth and Space Science *	**Psychology ***

Ecology * Conservation Science Botany/Horticulture I and II Environmental Science * Forensics * Physics * AP Biology * Agriculture Biology * Zoology * CCP Human Biology * College Biology *	**Sociology * History through Film A and B The Civil War A & B * World Geography * AP US Government and Politics * CCP American National Government * CCP Cultural Anthropology * CCP Microeconomics * CCP Western Civilization * CCP Western Civilization II * CCP American History II ***
World Languages	**Electives/Fine Arts/Health/PE**
French I, II, III, IV * Spanish I, II, III, IV *	**See specific information under the course descriptions for these areas**

Course Descriptions

This Course Description Guide will give you an idea of the courses offered at the high school level. A student should choose courses based upon his/her needs in the future. **While every attempt will be made to offer each course, not all courses are taught each year because of the lack of requests for some courses or due to the lack of a highly-qualified teacher. Courses available based on student interest and teacher availability.**

Scheduling for All High School Courses

Students are to request courses so they will not have more than one study hall. If a student does not request enough courses to fill his/her schedule, he/she will be assigned courses. Some freshmen who are taking P.E. may only be able to carry a maximum of 5.75 units of credit, but every other student must carry at least six (6) units of credit. Students are advised to take health the freshman year. Pupils may carry additional units of credit only after conferring with their School Counselor. **While every attempt will be made to offer each course, not all courses are taught each year because of the lack of requests for some courses or due to the lack of a highly-qualified teacher.**

ENGLISH LANGUAGE ARTS

Suggested ELA Pathways:

- **Honors English 9 ⇨ Honors English 10 ⇨ AP English Language and Composition or CCP English ⇨ AP English Literature and Composition or CCP English**

- **English 9 ⇨ English 10 ⇨ English 11 ⇨ English 12**

English 9 – 1 credit
Course Code: 051
GRADE OFFERING ✅9 ☐10 ☐11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: None

This course consists of Literature, Grammar, and Writing. The Literature portion of this class will consist of the genres of short stories, nonfiction, novels, poetry, drama, and Shakespearean drama. The Literature text also includes vocabulary, language lessons and activities. The Grammar portion of the class will consist of grammar review and reinforcement. The Writing portion of the class will consist of various forms of informal and formal writing; such as journals, written responses, and essays, along with a focus on the writing process.

Honors English 9 – 1 credit
Course Code: 0511
GRADE OFFERING ✅9 ☐10 ☐11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: see Honors Course Policy

<u>English Honors District Policy Prerequisite:</u>

Students who want to enroll in an English Honors Course must meet 3 of the following requirements:

- Grade of B or Higher in a prior corresponding English course
- A score of Accomplished (4) or Advance(5) on the most recent ELA State Test.
- A Student has achieved a College readiness score on the ACT/SAT tests
- Complete a pre-writing sample for the honors course and achieve a score of 3 or higher using the Pre-AP writing rubric.
- Special considerations for a student's placement will be allowed with a majority consensus of the Coordinator of Gifted Services, Teacher of the Honors course, Principal, and Superintendent

Students are expected to earn a grade of "C" or higher. If a student is not meeting the minimum expectation within the first four weeks of the grading period, a conference will take place to include the teacher, parent, student, School Counselor and/or principal to develop a plan for success. If the student, teacher, and parent recognize that the level of difficulty is such that the student is not successful, a level change should occur immediately. Should the student remain in the honors course at the end of the grading period and the student is still not performing at the minimum grade requirement, the student will be withdrawn from the honors course and placed in the regular course.

Honors English 9 is recommended for students who have demonstrated a strong aptitude and interest in reading, writing, speaking, listening, and cooperative learning activities. Ninth grade Honors English will study classic and contemporary literature. They will experience and analyze diverse genres of Language Arts. Poetry, novels, short stories, drama, research, presentations and essay writing will be the focus. Students will need to do an abundant amount of independent reading and will have many project-based assessments. Students should expect numerous writing assignments as well. The Switzerland of Ohio Local School District adopted text as well as a myriad of technological supplements that will be utilized in instruction to broaden and develop excellent communication skills. *Students will be required to read one or more novels over the summer months prior to freshman year. Students who take this class should be self-motivated.*

<u>Freshman ELA Experience</u> – 1 credit
Course Code: 0512 - Elective Credit
GRADE OFFERING ✅9 ☐10 ☐11 ☐12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

Prerequisite: None

This course is intended to provide 9th grade students with a more intense focus on Ohio's New Learning Standards for English Language Arts. Students will be provided with intervention to improve ELA skills. Students will earn a full credit for completion and the course will count toward elective credits.

English 10 – 1 credit
Course Code: 053
GRADE OFFERING ☐9 ✅10 ☐11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC
Prerequisite: English 9

This course consists of Literature, Writing and state ELA testing preparation. The Literature portion of the class will consist of the genres of short stories, nonfiction, novels, poetry, drama, and Shakespearean drama. The literature text also includes vocabulary, language lessons and activities. The literature text is set up much the same as English 9 text, and is a continuation and building of skills taught in the English 9 course. The writing portion of the class will consist of various forms of informal and formal writing; such as journals, written responses, and essays, along with a focus on the writing process. This course will include more frequent essay assignments than the English 9 course. Grammar concepts, though not a focus in this course, will be practiced and reinforced in less frequent intervals, and only as a review.

Honors English 10 – 1 credit
Course Code: 0531
GRADE OFFERING ☐9 ✅10 ☐11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: see Honors Course Policy

This course will include the same components as English 10, but will require more independent work from each student. The course will also explore assignments in a more in-depth way, including discussions and projects. The course will also cover more novels and writing assignments than the regular course. This course will challenge students and prepare them for CCP or AP English courses. Students will further develop writing skills through completion of formal academic writing (compare/contrast, informative, persuasive and literary analysis) as well as informal and creative writing assignments (journal entries, short stories and poetry portfolios). Vocabulary acquisition and grammar instruction will be incorporated through reading, writing and extension activities. *Students in Honors English 10 may be required to complete a Summer Reading Project, as outlined by the individual instructor.*

Sophomore ELA Experience – 1 credit
Course Code: 0532 - Elective Credit
GRADE OFFERING ☐9 ✅10 ☐11 ☐12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

Prerequisite: None

This course is intended to provide 10th grade students with a more intense focus on Ohio's New Learning Standards for English Language Arts. This class is intended to provide sophomore students with a more intense focus in weaker areas to better prepare them for ELA courses throughout high school. Students will earn a full credit for completion and the course will count toward elective credits.

English 11 – 1 credit
Course Code: 055
GRADE OFFERING ☐9 ☐10 ✅11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC

Prerequisite: English 10

Junior English acquaints students with American Literature from the beginning through the present time. Emphasis is placed upon understanding the material; reading it as a reflection of the times; realizing the importance of the historical and societal background; and studying the various genres of the time periods. Various writing assignments, formal and informal, are given throughout the year to develop and improve composition skills. Writing focuses on practical applications as well as a research paper utilizing MLA format. Vocabulary acquisition, literary analysis, and grammar skills are emphasized throughout the year. Students will submit journals from student and teacher-oriented topics. Students utilize the District approved text as well as various technological and tangible supplements.

AP English Language and Composition – 1 credit
Course Code: 070
GRADE OFFERING ☐9 ☐10 ✅11 ✅12– based on availability of AP Instructor
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: See AP District Policy requirements

The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods. Student focus will be on 3 modes of rhetoric:

1. Synthesis
2. Rhetorical Analysis
3. Argument which are the 3 essay types on the AP exam established by the College Board.

**Students placed in Advanced Placement Language and Composition 11 will be required to complete a Summer Reading Project, as outlined by the instructor.*

English 12 – 1 credit
Course Code: 056
GRADE OFFERING ☐9 ☐10 ☐11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC

Prerequisite: English 11

English 12 focuses on the study of British Literature. Students will explore literature from various time periods in order to understand how historical backgrounds and cultural values influence texts. As a college preparatory course, English 12 will require students to develop advanced comprehension and analysis skills. Vocabulary acquisition and grammar instruction will be incorporated throughout the year. Students will complete writing assessments through which they will demonstrate understanding of formal academic writing expectations, including MLA formatting. Focus is placed on developing college-level writing and analysis skills.

AP English Literature and Composition – 1 credit
Course Code: 071
GRADE OFFERING ☐9 ☐10 ✅11 ✅12– based on availability of AP Instructor
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: See AP District Policy requirements

The AP English Literature and Composition course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works. Student focus will be on 3 modes of analysis: Poetry, Short Fiction, and Argument for novels/dramas which are the 3 essay types on the AP exam established by the College Board.

**Students placed in Advanced Placement Literature and Composition 12 will be required to complete a Summer Reading Project, as outlined by the instructor.*

Communication/Speech - .5 credits

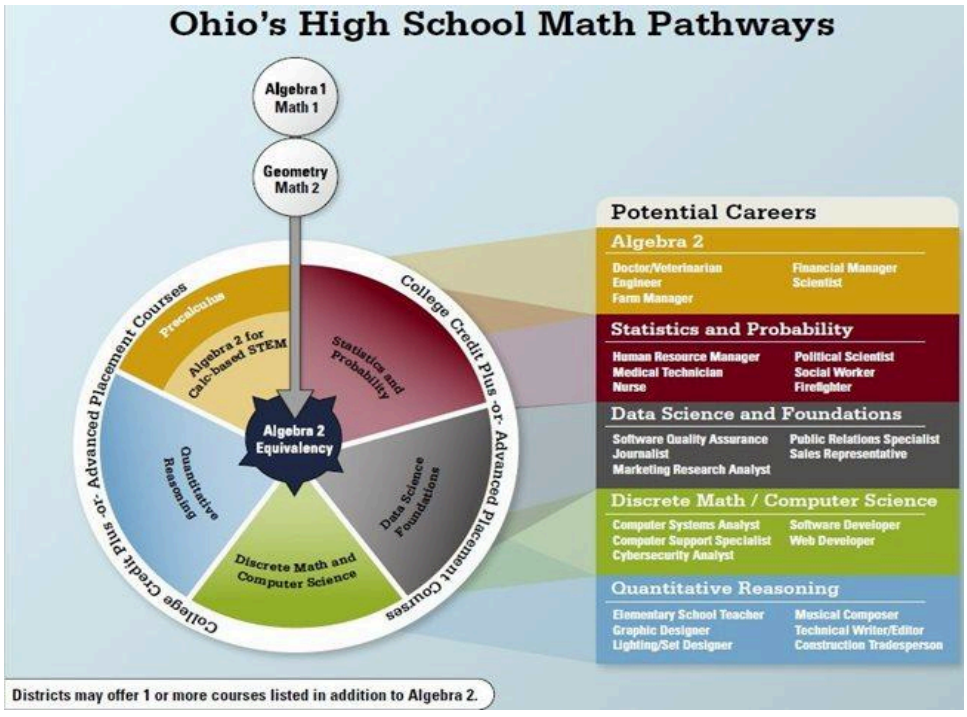
Course Code: 059 - Elective Credit
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: Required for all seniors

Communications is a one-semester course in which students will study, analyze and practice the techniques of formal and informal public speaking. Students will study the organizational patterns of formal academic speeches as well as compose and deliver a variety of speeches and presentations. Students will be required to use and professionally incorporate technology into their assignments, as well as, learn and practice proper viewing, listening and critiquing skills throughout the year. Students will be required to complete formal and informal writing assignments.

MATHEMATICS

Ohio has launched a *Strengthening Ohio High School* Mathematics *Pathways Initiative*. This initiative addresses new guidance around what courses can be considered Algebra 2 equivalent and how the new pathways lead to postsecondary success. The new pathways were designed with a focus on equity, rigor, relevance, coherence and flexibility.



Suggested Math Pathways:

- **Honors Algebra I ⇨ Honors Geometry ⇨ Honors Algebra II or CCP Mathematics ⇨Statistics, or PreCalculus, or CCP Mathematics ⇨ Calculus or CCP Mathematics**

- **Algebra I ⇨ Geometry ⇨ Advanced Quantitative Reasoning or Probability and Statistics, or Algebra II or Discrete Math⇨ Advanced Quantitative Reasoning, or Probability and Statistics, or Algebra II (not previously taken) or Discrete Math**

1st high school math course	2nd high school math course	3rd high school math course	4th/5th high school math course
Choose:	**Choose:**	**Choose:**	**Choose:**
Algebra I	**Geometry**	**Advanced Quantitative Reasoning**	**Advanced Quantitative Reasoning**
Honors Algebra I	**Honors Geometry**	**Probability and Statistics**	**Probability and Statistics**
		Algebra II	**Algebra II**
		Honors Algebra II	**Honors Algebra II**
		Pre-Calculus *prerequisite Algebra II	**Discrete Math Computer Science**
		Discrete Math Computer Science	**Pre-Calculus *prerequisite Algebra II**
		CCP/AP Math course	**Calculus *prerequisite Pre-Calculus**
			CCP/AP Math course

How do I decide what is the best mathematical pathway for my future?

Visit OhioMeansJobs K-12 Career Cluster Inventory https://ohiomeansjobs.ohio.gov

Student Name:_____ Date:_____ Year in School: _____

STUDENT DECISION TREE-PART 1

Step 1: Take a Quiz to discover your career interests.

Write your top three clusters based on the survey below.

1. _____
2. _____
3. _____

Step 2: Read about the OhioMeansJobs K-12 Career Clusters.

Pick your top three career clusters to explore. Tip: You may want to start with the career clusters from Step 1, but it is not required.

1. _____
2. _____
3. _____

Step 3: Answer the questions below while thinking about your future.

What is the ***least*** amount of money I am willing to make?

- ☐ Entry Level (Less than $30,000)
- ☐ Middle-Income Jobs ($30,000-$50,000)
- ☐ Upper-Middle Income Jobs ($50,000-$80,000)
- ☐ High-Income Jobs ($80,000-$100,000)
- ☐ Six Figure Jobs (Greater than $100,000)

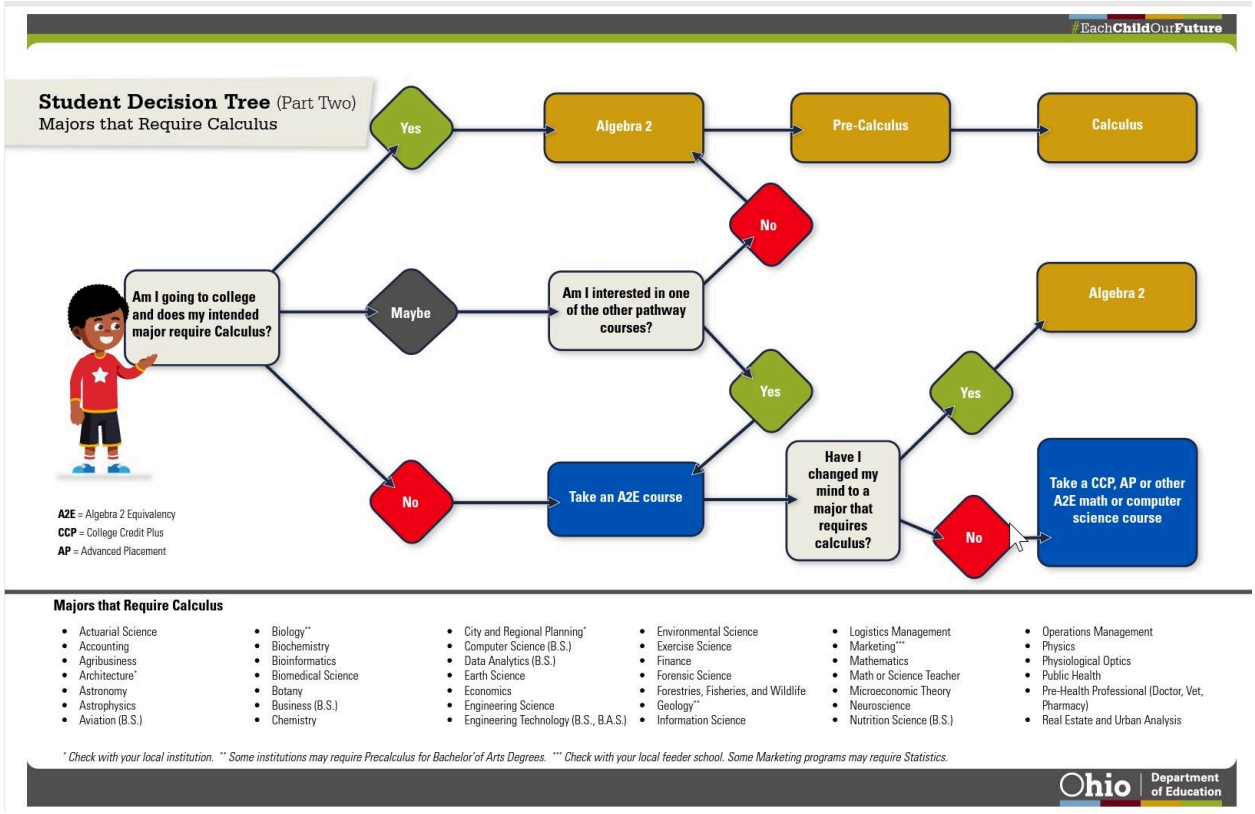
What's the ***maximum*** time I'm willing to invest in postsecondary education?

- ☐ Nothing past high school
- ☐ Certificate (~6-12 Months)
- ☐ Associate Degree (2 years)
- ☐ Bachelor's Degree (4 years)
- ☐ Master's Degree (5-6 years)
- ☐ Doctoral or Professional Degree (8 years)

Step 4: Explore your favorite career clusters with the [OhioMeansJobs Career Clusters Tool](#).

- Visit the website linked above and explore the career clusters you named in Step 2.
- Career pathways are located on the left side of each specific career cluster page. Click on all the pathways and review the available jobs.
- List up to 10 careers you are interested in based on your salary and postsecondary educational preferences?

Career Cluster	Career Pathway	Career	Salary Range	Education/Training Needed



Mathematical Courses for Specific Career Fields

Quantitative Reasoning

Bachelor's or above (non-Calculus)

- Art History
- Communication Studies
- Criminal Justice (Applied degree)
- English
- History
- Human Resources Assistants*
- Intervention Specialist
- Journalism*
- Music
- PreK-5 Elementary Education
- Philosophy
- Public Relations/Advertising*
- Social/Human Services (AAB to BSW)*
- Social Work (AA to BSW)*
- Studio/Fine Arts
- Telecommunication*
- Theatre

Associate degree

- Applied Business (AAS)*
- Applied Marketing (AAB)*
- Computer Network Support Specialists*
- Dental Hygienists*
- Occupational Therapist Assistants*
- Web Developers*

Other Careers

- Agribusiness Systems
- Animal Systems
- Construction
- Design/Pre-Construction
- Environmental Service Systems
- Facility and Mobile Equipment
- Maintenance
- Food Products and Processing Systems
- Lodging
- Logistics Planning & Management Services
- Maintenance/Operations
- Natural Resource Systems Plant Systems
- Power, Structure and Technical Systems
- Recreation, Amusements, and Attractions
- Restaurants and Food/Beverage Services
- Sales and Service
- Transportation Operations
- Transportation Systems/ Infrastructure
- Travel & Tourism

Statistics and Probability

Bachelor's or above (Calculus)

- 6-12 Education (math or science concentration)
- Business Intelligence
- Information Science*
- Statistics

Bachelor's or above (non-Calculus)

- 6-12 Education (non-math or science concentration)
- Anthropology
- Applied Business (AAB)*
- Applied Marketing (AAB)*
- Clinical/Medical Laboratory Science
- Criminal Justice (AA)
- Diagnostic Medical Sonographers*
- Dietetics
- Emergency Medical Technician (EMT)/Paramedic
- Environmental Science & Protection Tech*
- Exercise Science*
- Fire Science/EMT
- Geography
- Health Information
- Journalism*
- Health Sciences
- Management Analysts
- Market Research Analysts and Marketing Specialists*
- Nursing*
- Information Technology*
- Medical Laboratory
- Occupational Therapy*
- Paralegal and Legal Assistants
- Physical Therapy*
- Political Science
- Public Relations/Advertising*
- Radiologic Technologists*
- Respiratory Therapy Psychology (AA to BA)*
- Search Marketing Strategists*
- Social/Human Services (AAS) to BSW*
- Social Work (AA to BSW)*
- Sociology
- Telecommunication*

Associate degree

- Computer Network Support Specialists*
- Dental Hygienists*
- Human Resources Assistants*
- Medical and Clinical Laboratory Technicians*
- Nursing*
- Occupational Therapist Assistants*
- Physical Therapist Assistants*
- Recreation, Amusements, and Attractions
- Restaurants and Food/Beverage Services
- Sales and Service
- Transportation Operations
- Transportation Systems/ Infrastructure
- Travel & Tourism

Algebra 2/Pre-Calculus/Calculus STEM Path

Bachelor's or above (Calculus)

- 6-12 Education (math or science concentration)
- Accounting
- Actuarial
- Aerospace, Agricultural, Civil, and Mechanical Engineering
- Agribusiness (BS)
- Architecture
- Bioengineering/Biomedical Engineering,
- Biology
- Business
- Chemical/Environmental Chemistry
- Computer/Electrical Engineering
- Economics
- Electrical Engineering Technology*
- Engineering Science
- Engineering Technology (BS, BAS)
- Exercise Science*
- Finance
- Geology
- Industrial Engineering
- Mathematics
- Mechanical Engineering Technology*
- Physics
- Pre-Health Professional (Doctor, Vet, Pharmacy)

Associate degree

- Chemical Technicians
- Civil/Construction Engineering Technology
- Computer Network Support Specialists*
- Electro-Mechanical Technicians
- Electrical and Electronic Engineering Technicians
- Environmental Science & Protection Tech*
- Industrial Engineering Technicians
- Mechanical Engineering Technicians
- Radiologic Technologists*

Computer Science/ Discrete Math

Bachelor's or above (Calculus)

- Computer Network Architects
- Computer Science (BS)
- Computer Systems Analysts
- Computer Systems Engineers/ Architects
- Engineers and Testers Software Developers
- Network and Computer Systems Architects

Bachelor's or above (non-Calculus)

- Computer and Information Systems Managers
- Computer Programmers*
- Computer Systems Analysts
- Database Administrators
- Software Applications
- Software Developers*
- Network and Computer Systems Administrators
- Information Security Analysts
- Software Quality Assurance
- Information Technology*
- Project Managers

Associate degree

- Computer Network Support Specialists*
- Computer Programmers*
- Database Administrators
- Information Technology*
- Network and Computer Project Managers
- Software Developers*
- Software Developers, Applications
- Systems Administrators
- Web Developers*

Certificate/Bootcamps

- Computer Technician
- Cyber Security Analysts
- Junior Programmer
- Network Administrator
- Network Analyst
- Network Engineer

Other Careers

- Computer User Support Specialist

Data Science Foundations

Bachelor's or above (Calculus)

- Business Intelligence Analysts
- Data Science
- Information Science*
- Marketing
- Software Developers*

Bachelor's or above (non-Calculus)

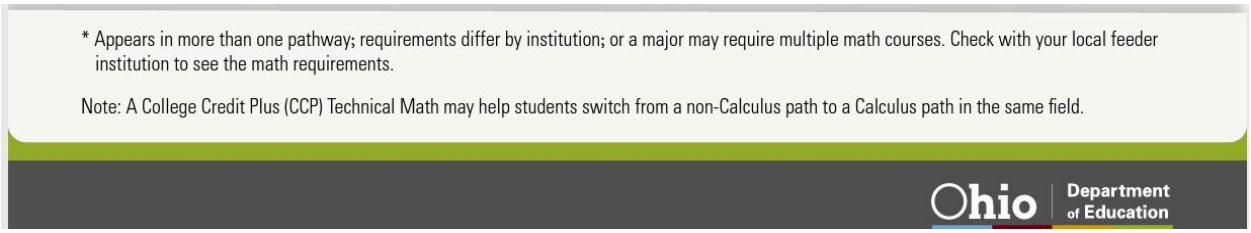
- Any Arts or Humanities degree that requires Quantitative Reasoning
- Applied Business (AAB)*
- Applied Marketing (AAB)*
- Computer Programmers*
- Criminal Justice (Applied degree)
- Database Administrators
- Journalism*
- Market Research Analysts and Marketing Specialists*
- Management Analysts*
- Project Managers
- Public Relations/Advertising*
- Search Marketing Strategists*
- Software Developers*
- Software Quality Assurance
- Telecommunication*

Associate degree

- Any Arts or Humanities degree that requires Quantitative Reasoning
- Computer Network Support Specialists*
- Web Developers*

Certificate/Bootcamps

- Data Analytics
- Data Science



- **All students who participate in the honors mathematics courses will be assessed to determine eligibility each year based on multiple standardized assessments.**

Algebra I – 1 credit
Course Code: 113
GRADE OFFERING ✅9 ☐10 ☐11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: Any freshmen, who did not take 8th grade Algebra the previous year, must take Algebra.

Algebra I introduces the students to problem solving using unknowns and the real number system. Topics will include solving linear equations with applications to various problems, absolute values, inequalities, polynomials, polynomial factorizations and algebraic fractions. The student will determine solutions to first and second-degree equations through factoring and the quadratic formula and apply these methods to written problems. Two variable equations will be introduced and solved by graphing on the x/y coordinate plane and through systems of equations.

Honors Algebra I – 1 credit
Course Code: 113H
GRADE OFFERING ✅9 ☐10 ☐11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: see Honors Course Policy

Honors Math - District Policy

Students who want to enroll in a Math Honors Course must meet 2 of the following requirements:

- Grade of B or Higher in a prior corresponding Math course
- A score of Accomplished (4) or Advance(5) on a State Test the year prior in a Math course
- A Student has achieved a College readiness score on the ACT/SAT tests

- Special considerations for a student's placement will be allowed with a majority consensus of the Coordinator of Gifted Services, Teacher of the Honors course, Principal, and Superintendent

Students are expected to earn a grade of "C" or higher. If a student is not meeting the minimum expectation within the first four weeks of the grading period, a conference will take place to include the teacher, parent, student, School Counselor and/or principal to develop a plan for success. If the student, teacher, and parent recognize that the level of difficulty is such that the student is not successful, a level change should occur immediately. Should the student remain in the honors course at the end of the grading period and the student is still not performing at the minimum grade requirement, the student will be withdrawn from the honors course and placed in the regular course.

Honors Algebra I introduces the student to problem solving using unknowns and the real number system. Topics will include solving linear equations with applications, absolute values including equations and graphs, inequalities, polynomials and polynomial factorization, algebraic fractions, linear and quadratic functions and their graphs. Honors Algebra I will have a greater emphasis on exponents and include radicals, radical equations, and the Pythagorean theorem. The student will solve first and second-degree equations and functions using factoring methods, graphing techniques with calculators, and the quadratic formula. Two variable equations and inequalities are solved using graphing techniques, and systems.

Applied Algebra I A – 1 credit
Course Code: 113A

GRADE OFFERING	✅9	☐10	☐11	☐12
BUILDING OFFERING		☐MCHS	✅RHS	☐SHCC

Prerequisite: *Placement based on prior math performance on state test and/or teacher recommendation.*

Applied Algebra I A is the first course in a two-year sequence designed for students who benefit from a slower pace and increased support in mastering foundational algebra concepts. This course covers approximately the first half of the traditional Algebra I curriculum, allowing more time for guided practice, hands-on activities, and real-world applications to build confidence and strengthen problem-solving skills. Topics include the real number system, operations with integers and rational numbers, expressions, functions, linearity, slope, creating equations from word problems, and inequalities. Students will also be working with two-variable equations and the coordinate plane. The course emphasizes step-by-step skill development to prepare students for Applied Algebra I B.

Applied Algebra I B – 1 credit
Course Code: 113B

GRADE OFFERING ☐9 ✅10 ☐11 ☐12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

Prerequisite: Successful completion of Applied Algebra I A or teacher recommendation.

Applied Algebra I B is the second course in the two-year Applied Algebra I sequence, continuing the slower-paced, supportive approach to ensure student mastery of key algebra concepts. This course covers the remaining content of the traditional Algebra I curriculum, including systems of equations, exponentials, polynomials, factoring, algebraic fractions, and solving quadratic equations by factoring and using the quadratic formula. Students will apply these skills to a variety of written and real-world problems, using multiple methods such as graphing, substitution, and elimination. The extended timeline provides opportunities for deeper understanding, consistent review, and preparation for the Algebra I end-of-course state assessment required for graduation.

Geometry – 1 credit
Course Code: 115
GRADE OFFERING ✅9 ✅10 ☐11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC

Prerequisite: Algebra I

Geometry begins with the study of points, lines and planes. It extends into formulas, segments, graphing, equations of lines, angles, perpendiculars, parallels, triangles, polygons, similarity, radicals, basic trigonometry and circles. Also included are numerous definitions, postulates, theorems and properties, as well as their applications to writing formal and informal proofs.

Students who need additional support may enroll in the Geometry extension class which will allow students a double period to complete the Geometry credit. Enrollment in this extension course must be approved by the school.

Geometry with Application – 1 credit
Course Code: 1152
GRADE OFFERING ✅9 ✅10 ☐11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: being enrolled in Geometry course

This course is designed to provide support and to coincide with a Geometry course. This class is not remedial but will provide immediate support and interventions for students. Students will receive an elective credit for this course.

Honors Geometry – 1 credit
Course Code: 115H
GRADE OFFERING ✅9 ✅10 ☐11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: see Honors Course Policy

Honors Geometry further develops students' understanding of Geometry concepts using a more rigorous approach than the regular Geometry course. Honors Geometry begins with the study of points, lines and planes. It extends into formulas, segments, graphing, equations of lines, angles, perpendiculars, parallels, triangles, polygons, similarity, congruence, radicals, trigonometry and circles. Also included are numerous definitions, postulates, theorems and properties, as well as their applications to writing formal and informal proofs.

Algebra II Equivalent Courses - may take more than one of these courses to meet the 4 math credits for graduation:

Algebra II/Honors Algebra II, Advanced Quantitative Reasoning, Probability and Statistics, and Discrete Math/Computer Science

- ★ **based on interest and teacher availability Discrete Math/Computer Science may be offered at one or more of our buildings.**

Discrete Math/Computer Science – 1 credit - meets Algebra 2 equivalent for graduation
Course Code: 111300
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC - based on teacher and student interest, see your School Counselor for more information

Prerequisite: Successful completion of Geometry or Honors Geometry.
Students who successfully complete the Advanced Quantitative Reasoning and/or Probability and Statistics course may also take Discrete Math/Computer Science.

Discrete Math/Computer Science (DM/CS) will explore a variety of discrete math topics through a mix of hands-on classroom activities, traditional mathematical/logical reasoning and interactive computer science activities designed for students with no prior coding experience. Topics include Computational Thinking, Computer Logic, Game Theory, Counting/Combinatorics, Probability, Connectivity, Iteration and Recursion, and Cryptography. All topics emphasize logical reasoning, proof, and communication with precise mathematical and computer science language.

Algebra II – 1 credit - meets Algebra 2 equivalent for graduation
Course Code: 114
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: Successful completion of Geometry or Honors Geometry.
Students who successfully complete the Advanced Quantitative Reasoning, Discrete Math/Computer Science and/or Probability and Statistics course may also take Algebra II.

The course will emphasize the development and solving of linear and quadratic equations and inequalities over both the real and complex number systems. Graphical representation and analysis of these functions will be performed using pencil & paper, graphing calculators, or computer apps. Students will learn about and problem solve with systems of equations, radical equations, rational expressions and equations. Additional topics will include methods for solving higher order equations, exponential, logarithmic, and trigonometric functions and applications. A focus on application and word problems will be used throughout the course.

Honors Algebra II – 1 credit - meets Algebra 2 equivalent for graduation
Course Code: 114H
GRADE OFFERING ☐9 ✅10 ✅11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: see Honors Course Policy

Honors Algebra II further develops students' understanding of Algebraic concepts using a more rigorous approach than the regular Algebra II course. The course will emphasize the development and solving of linear and quadratic equations and inequalities over both the real and complex number systems. Graphical representation and analysis of these functions will be performed using pencil & paper, graphing calculators, or computer apps. Students will learn about and problem solve with systems of equations, radical equations, rational expressions and equations. Additional topics will include methods for solving higher order equations, exponential, logarithmic, and trigonometric functions and applications. A focus on application and word problems will be used throughout the course. The course content and pacing is intended to prepare students for success in Precalculus, Calculus, college entrance exams and those interested in pursuing a field of study requiring a deeper understanding of mathematics at the college level.

<u>Advanced Quantitative Reasoning</u> – 1 credit - meets Algebra 2 equivalent for graduation
Course Code: 1144
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC

Students who successfully complete an Algebra II/Honors Algebra II , Discrete Math/Computer Science, and/or Probability and Statistics course may also take <u>Advanced Quantitative Reasoning</u>.

Recommended Eligibility: At least two units of credit in high school mathematics; and Algebra and Geometry end-of-course state tests or Math 1 and Math 2 end-of-course state tests.

Target Student: A student who needs a third or fourth credit in mathematics and is not intending to pursue a career that requires calculus.

This course is designed to promote reasoning, problem-solving, and modeling through thematic units focused on the mathematical practices while reinforcing and extending content in Number and Quantity, Algebra, Functions, Statistics and Probability, and Geometry. Quantitative reasoning and modeling involve the application of mathematics to real-world situations, with careful attention to the choice of units and contextual challenges. Problem-solving requires analyzing an unfamiliar situation and devising a solution strategy. Problem-solving and modeling mathematics together provide opportunities for students to experience success with mathematics, not merely improve their self-perception. These habits and skills promote perseverance and cut across disciplines, thus providing a gateway into successful postsecondary education and a variety of careers.

Probability and Statistics – 1 credit - meets Algebra 2 equivalent for graduation

Students who successfully complete an Algebra II/Honors Algebra II , Discrete Math/Computer Science, and/or Advanced Quantitative Reasoning course may also take. Probability and Statistics

Course Code: 1162
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC

Prerequisites: Algebra/Honors Algebra I and Geometry/Honors Geometry

This course is designed to develop a greater understanding and appreciation for and skill in applying statistical techniques in the decision-making process. Topics include: descriptive statistics, probability, and statistical inference. Practical examples based on real data are used throughout the course. Students will plan and conduct experiments or surveys and analyze the resulting data.

AP Statistics - 1 credit
Course Code: 1162P
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ✅SHCC

Prerequisite: See AP District Policy requirements and successful completion of Algebra II

The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP

Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding.

Pre-Calculus – 1 credit
Course Code: 116

GRADE OFFERING	☐9	☐10	✅11	✅12
BUILDING OFFERING		✅MCHS	✅RHS	✅SHCC

Prerequisites: Algebra II/Honors Algebra II

This subject matter of Pre-Calculus draws together topics covered in both Algebra II and Geometry. Algebraic function, inequalities, and conic sections are all discussed using the methods of Analytic Geometry. The study of Trigonometry is continued with special emphasis on the abstract rather than the concrete applications. Other topics covered are logarithms.

Calculus – 1 credit
Course Code: 118

GRADE OFFERING	☐9	☐10	☐11	✅12
BUILDING OFFERING		✅MCHS	✅RHS	☐SHCC

Prerequisite: Pre-Calculus

Calculus is equivalent to a freshman level college mathematics course. Calculus is a unique mathematics topic that focuses on three main concepts: limits, areas under a curve, and the study of tangent line application. It prepares students for advanced study in any of the Science or Engineering fields. Pre-Calculus topics such as functions, including trigonometric functions and limits. The course introduces derivatives of functions, the application of the Chain Rule, and implicit differentiation. Other topics will include basic differential equations and integration techniques such as anti-derivatives, integration by substitution, and integration by parts. The course will focus on problem solving applications of derivatives, integrals and differential equations in Science, Engineering and other fields.

SCIENCE

Suggested Science Pathways:

- ➢ **Honors Biology ⇨ Physical Science ⇨ Chemistry &/or Anatomy ⇨ Chemistry II & Physics &/or CCP Anatomy**
- ➢ **Biology ⇨ Physical Science ⇨ 1 credit of higher level science ⇨ Science elective**

Biology – 1 credit
Course Code: 132
GRADE OFFERING ✅9 ☐10 ☐11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: None

The student will study the structure and function of organelles and effects of solutions. The course will include the major cellular processes such as: photosynthesis, respiration, nucleic acids, protein synthesis and cell division. The student will study genetics and evolution and how it relates to modern time. The student will study the characteristics of living things and their processes along with ecology.

Honors Biology – 1 credit (see Agricultural and Environmental Systems Career Field and Pathways for additional course(s) that may meet the Biology graduation requirement.)
Course Code: 1321
GRADE OFFERING ✅9 ☐10 ☐11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Honors Biology - District Policy or Prerequisite:

Students who want to enroll in a Biology Honors Course must meet 2 of the following requirements:

- Grade of B or Higher in a prior corresponding science course
- A score of Accomplished (4) or Advance (5) on a State Test the year prior in a Science course
- A Student has achieved a College readiness score on the ACT/SAT tests
- Achieved an 80% or higher practice exam for the honors course for students that do not have a score for an Ohio State tests in Science.
- Special considerations for a student's placement will be allowed with a majority consensus of the Coordinator of Gifted Services, Teacher of the Honors course, Principal, and Superintendent

Students are expected to earn a grade of "C" or higher. If a student is not meeting the minimum expectation within the first four weeks of the grading period, a conference will take place to include the teacher, parent, student, School Counselor and/or principal to develop a plan for success. If the student, teacher, and parent recognize that the level of difficulty is such that the

student is not successful, a level change should occur immediately. Should the student remain in the honors course at the end of the grading period and the student is still not performing at the minimum grade requirement, the student will be withdrawn from the honors course and placed in the regular course.

Prerequisite: see Honors Course Policy

This course will focus on the interaction of organisms with their environment. The course focuses on cellular structure and function, genetics and DNA replication, evolution, biodiversity and ecosystems. Chemical processes that living things perform, such as cellular respiration, photosynthesis and protein synthesis will be discussed. Discussions on current events, such as habitat loss, adaptations, climate change and its effect on life on the planet will occur.

Physical Science – 1 credit (see Agricultural and Environmental Systems Career Field and Pathways for additional course(s) that may meet the Physical Science graduation requirement.)
Course Code: 131
GRADE OFFERING ☐9 ✅10 ☐11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC

Prerequisite: None

The student will study energy, motion, matter and their interactions. The emphasis will be placed upon the laboratory skills necessary for the above studies. Topics will include the classification of matter, atoms, the periodic table, chemical bonds, chemical reactions, motion, the effects of forces, energy transformation, the effects of waves, and the universe.

Chemistry – 1 credit * meets graduation requirements for Advanced Science
Course Code: 133
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC

Prerequisite: Physical Science or (*Agriculture, Food and Natural Resources) *and Algebra I

Chemistry is the science that deals with the structure and composition of matter and the changes it undergoes. The principles discussed in class are illustrated and utilized in laboratory work. The major principles studied include the phases of matter and chemical reactions at microscopic and macroscopic levels.

Chemistry II – 1 credit * meets graduation requirements for Advanced Science
Course Code: 1361
GRADE OFFERING ☐9 ☐10 ☐11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: Chemistry I

Chemistry II topics include chemical reactions, mass and moles, energy in reactions, properties of solids, liquids and gasses and chemical bonding in materials. This course will place a strong emphasis on laboratory work and analysis of data.

Anatomy & Physiology – 1 credit * meets graduation requirements for Advanced Science
Course Code: 1341
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC

***Prerequisite: Biology or* Animal and Plant Science, or Animal Science Technology**

The study of anatomy and physiology is where the form and function of the body is studied. A dissection specimen is used for the gross and micro study of anatomy and the physiological activities of the body from cells to organ systems are studied

.

Physics – 1 credit * meets graduation requirements for Advanced Science
Course Code: 135
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: Chemistry and Algebra II

Physics investigates the relationship between matter and energy. Basic physics covers mechanics and when time permits wave motion. Students will examine the causes of motion and the mathematical description of motion in both one dimension and two-dimensional forms. Basic trigonometry and vector notation will be introduced as supporting mathematical concepts to these studies. Wave motion may include mechanical, sound and light waves. Energy, energy transformations, energy transport and energy transfers are explored in both mechanical and wave systems. Laboratory work will provide opportunities to examine both physical and mathematical concepts applied to real problems and to critically analyze acquired data.

Earth & Space Science – 1 credit * meets graduation requirements for Advanced Science
Course Code: 143
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC

Prerequisite: Physical Science

The course begins by looking at soil, the top layer of the solid Earth and interface between rock, water and atmosphere. Students will then explore the nature of the dynamic Earth and the

internal and external processes that are continually at work shaping the planet. The course continues with an investigation into Earth's neighborhood in space and what effects space can have on planet earth.

Ecology - .5 credits * meets graduation requirements for Advanced Science
Course Code: 141
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: Biology

Ecology will be a course in which the fundamentals of the relationships among living things and the environment are studied.

Conservation Science - .5 credits * meets graduation requirements for Advanced Science
Course Code: 142
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

Prerequisite: Biology or Animal Science

The foundation of the Conservation Science course is conservation and the related outdoor recreational activities that fund the North American Model of Wildlife Conservation:hunting, fishing, boating, trapping and shooting sports. Students will develop skills, build an understanding of science and learn scientific techniques taught through the lens of conservation with an emphasis on hands-on, real-world activities. Conservation Science gives students a foundational basis for how these activities directly benefit habitat acquisition, enhancement and protection as well as wildlife management, including game, nongame and endangered species.

Introduction to Forensics - 1 credits * meets graduation requirements for Advanced Science
Course Code: 137
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC

Prerequisite: Biology

Forensic Science is the application of science (chemistry, physics, and biology) to the criminal and civil laws that are enforced by police agencies in a criminal justice system. Content focuses on the history of forensic science, crime scene investigation, hair and fiber analysis, fingerprint examination, serology, blood spatter, DNA profiling, toxicology, and death investigation. Students are taught the proper collection, preservation, and laboratory analysis of various samples.

Advanced Forensics - 1 credits * meets graduation requirements for Advanced Science
Course Code: 1372
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC

Prerequisite: Successful Completion of Forensics I

This class is designed for students who wish to continue working in the hands-on field of criminology. Students will use problem-solving skills, laboratory science, and content knowledge of all fields of science to solve hypothetical crimes at an advanced level. Content focuses on arson investigation, soil analysis, glass evidence, tool marks, ballistics, questioned documents, and forensic anthropology.

Botany/Horticulture I - .5 credits *This semester course meets.5 credit of graduation requirements for Advanced Science
Course Code: 148A
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

Prerequisite: None

This course will explore plant anatomy and physiology, as well as factors that influence growth, and the diversity of plant life. Labs will include using microscopes of cellular structure and growing plants.

Botany/Horticulture II - .5 credits * This semester course meets.5 credit of graduation requirements for Advanced Science

Course Code: 148B
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

Zoology - .5 Credits * meets graduation requirements for Advanced Science
Course Code: 551
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

Prerequisite: None

This semester course provides a survey of invertebrates and vertebrates, as well as animal taxonomy. The focus of this course will include classification as well as the anatomy and physiology of worms, echinoderms, mollusks, arthropods, fish, amphibians, reptiles, birds, and mammals. The course includes dissections of some of the organisms studied.

SOCIAL STUDIES

Suggested SS Pathway:

- ➢ **Honors World History (CCP World History) ⇨ Honors American History (CCP American History) ⇨ American Government, AP Government, or CCP Government ⇨ SS Electives or additional CCP courses**
- ➢ **World History ⇨ American History ⇨ American Government ⇨ SS Electives**

World History – 1 credit
Course Code: 151
GRADE OFFERING ✅9 ☐10 ☐11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: All freshmen need to take this course

This course examines world events from 1600 to the present. It explores the impact of the democratic and industrial revolutions, the forces that led to world domination by European powers,
the wars that changed empires, the ideas that led to independence movements and the effects of global interdependence.

Honors World History – 1 credit
Course Code: 151H
GRADE OFFERING ✅9 ☐10 ☐11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite – meeting Honor District Policy requirements

History Honors District Policy Prerequisite:

Students who want to enroll in a History Honors Course must meet 2 of the following requirements:

- Grade of B or Higher in a prior corresponding History course
- A Student must receive a score of 80% or higher on a pretest for the history course.

- Complete a pre-writing sample for the honors course and achieve a score of 3 or higher using the Pre-AP writing rubric.
- Special considerations for a student's placement will be allowed with a majority consensus of the Coordinator of Gifted Services, Teacher of the Honors course, Principal, and Superintendent

Students are expected to earn a grade of "C" or higher. If a student is not meeting the minimum expectation within the first four weeks of the grading period, a conference will take place to include the teacher, parent, student, School Counselor and/or principal to develop a plan for success. If the student, teacher, and parent recognize that the level of difficulty is such that the student is not successful, a level change should occur immediately. Should the student remain in the honors course at the end of the grading period and the student is still not performing at the minimum grade requirement, the student will be withdrawn from the honors course and placed in the regular course.

Students will need to complete in-depth research on various topics throughout the course in class and independently. This will include analyzing primary sources, independent reading, critical thinking skills, and creating written assignments. Students will synthesize and analyze different perspectives throughout World History to apply what they have learned to societal issues in real world settings, and to prepare to participate in civil life.

American History – 1 credit
Course Code: 153
GRADE OFFERING ☐9 ✅10 ☐11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC

Prerequisite: All sophomores need to take this course

This course examines the history of the United States of America. 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. Topics include, but are not limited to, immigration, labor movements, imperialism, economic theories, World War I and World War II. Several out-of-class written assignments and projects will be completed by the end of the year. Related films and documentaries are viewed and discussed. Tests and quizzes may consist of multiple choice, matching, true/false, fill-in the blank, short answer and essay questions.

Honors American History – 1 credit
Course Code: 153H
GRADE OFFERING ☐9 ✅10 ☐11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: see Honors Course Policy

This course examines the history of the United States of America Understanding how these events came to pass and their meaning for today's citizens is the purpose of this course. Some topics include: immigration, labor movements, imperialism, economic theories, World War I and World War II. Several out-of-class written assignments and projects will be completed by the end of the year.

History through Film A – .5 credit
Course Code: 159A
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

***Prerequisite: successful completion* of World History and American History**

This course will analyze significant themes, events and individuals in history as interpreted through the use of film. Topics include: warfare, noteworthy figures, the economy and sports. Students will learn to view films critically while also exploring the use of film as a tool of historical education. This course is designed to be primarily student-centered instruction. Most class time will be spent interactively with in-class discussions and film assessments.

History through Film B– .5 credit
Course Code: 159B
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

***Prerequisite: successful completion* of World History and American History (students do not need to have taken History through Film A before taking this course.)**

This course will analyze significant themes, events and individuals in history as interpreted through the use of film. Topics include: warfare, noteworthy figures, the economy and sports. Students will learn to view films critically while also exploring the use of film as a tool of historical education. This course is designed to be primarily student-centered instruction. Most class time will be spent interactively with in-class discussions and film assessments.

American Government – 1 credit
Course Code: 154
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC

Prerequisite: All students need to take this course their junior or senior year.

National, state, and local government levels are studied with an emphasis on the current government and the people involved. Specific topics of study include the basic principles of the

U.S. Constitution, the amending process, individual rights and government protection of minority groups, the structure and function of the three branches, the Ohio Constitution, political parties and interest groups, and U.S. fiscal and monetary policy. Current events, projects, films, and documentaries are all used to enhance learning. Tests and quizzes may consist of multiple choice, matching, true/false, fill-in the blank, short answer, short answer and extended response questions.

AP U.S. Government and Politics - 1 Credit

Course Code: 154P

GRADE OFFERING ☐9 ☐10 ✅11 ✅12 based on availability of AP instructor

BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite- meeting AP District Policy requirements

The AP U.S. Government and Politics course provides a college level, nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles and behaviors that characterize the constitutional system and political culture of the United States. Students will study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes and behaviors. They will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. In addition, they will complete a political science research or applied civics project.

The primary focus of this course is to prepare students for success in college, as well as, completion of the Advanced Placement U.S. Government and Politics Exam

Leadership Through History – .5 credits

Course Code: 162 -Elective credit in Social Studies

GRADE OFFERING ☐9 ✅10 ✅11 ✅12

BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

Prerequisite: B or better average in World History/American History

(Grades 10-12) (Credit .5)

This course explores how leadership has shaped world events. The course will be focused on, but not limited to the American experience. Students will analyze political, military, social and cultural leaders to understand leadership styles, decision-making and ethics.

American History Through Sports – .5 credits
Course Code: 163 -Elective credit in Social Studies
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

Prerequisite: B or better average in World History/American History

This course will explore the story of the United States through the lens of sports. Students will examine how athletics have influenced and been representative of major historical events in American History. Through primary sources, documentaries, statistical analysis, and class debate, students will connect sporting events to broader themes in American History.

Current Events – .5 credits
Course Code: 158 -Elective credit in Social Studies
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: None

The dynamics of global interactions among nations and regions present issues that affect all humanity. These dynamics include: competing beliefs and goals; methods of engagement; and conflict and cooperation. Contemporary issues have political, economic, social, historic and geographic components. Approaches to addressing global and regional issues reflect historical influences and multiple perspectives. The student will, along with the teacher, provide worthwhile topics for class discussion. Daily news sources, such as newspapers, television news shows, radio, magazines and the Internet will be used.

World Geography - .5 credits
Course Code: 160 - Elective credit in Social Studies
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: None

This course includes the study of the world's people, places and environments, with a focus on world regions. Particular emphasis is placed on students' understanding and applying geographic concepts and skills to their daily lives.

The Civil War_- .5 credit for each
Course Code: 161A- Elective credit in Social Studies
Course Code: 161B- Elective credit in Social Studies

GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: World History, American History (this course does not replace credit for American History)

This course is a study of the American Civil War. Topics will range from the causes of the war itself to the era of Reconstruction. Emphasis will be placed on the contributions of both Union and Confederate military leadership. Students will explore Civil War battles on two different levels: the strategy of major commanders and developments within specific battles that affected the decisions of officers on the field. Students will also examine how the nation coped with the war and its aftermath.

Sociology - .5 credits
Course Code: 157- Elective credit in Social Studies
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC

Prerequisite: None

This is an introductory course on the study of society and group relationships. Students examine a variety of topics including culture (language, customs, norms, and values), socialization, group dynamics, deviance and collective criminal behavior, family structure, poverty, religion, and social change. Students can expect to complete and participate in projects, class discussions, and research.

Psychology - .5 credits
Course Code: 156 - Elective credit in Social Studies
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC

Prerequisite: None

Students will learn a range of topics traditionally covered in an introductory course in psychology. The course begins by exploring the science of psychology, methods of research, and data collection. Students then delve into the structure and function of the brain, sensation, perception, theories of learning, memory, personality theory, and abnormal psychology including mental illness and treatment. Students can expect to complete and participate in projects, experiments, class discussions, and research.

ELECTIVES

Yearbook – 1 credit
Course Code: 058 - Elective Credit
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

Prerequisite: Teacher Recommendation

The Yearbook course is a yearlong course designed to create, publish and distribute the school's yearbook. Students in this course are required to learn basic elements of design, layout and photography; become familiar with the Jostens Yearbook Avenue and Photoshop programs; learn techniques of selling ads, and then sell ads in the business community and to senior parents; create layouts and complete pages of the yearbook; and distribute the yearbook to the school population. Outside class time is often required for members of the yearbook staff. All staff members must recognize they represent SOLSD, their respective high school, the Yearbook Staff, and the Yearbook Advisors. Students must sign a contract stipulating they will act appropriately and commit their time to the creation of the Yearbook.

Newspaper/Yearbook II– 1 credit
Course Code: 058 - Elective Credit
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ☐SHCC

Prerequisite: Yearbook

The Newspaper/Yearbook course is a yearlong course designed to create, publish and distribute the school's yearbook and newsletter. Students in this course are required to learn and apply elements of design, layout and photography; continue working with the Jostens Yearbook Avenue and Photoshop programs; learn techniques of selling ads, and then sell ads in the business community and to senior parents; create layouts and complete pages of the yearbook/newspaper; and distribute the yearbook/newspaper to the school population. Outside class time is often required for members of the yearbook/newspaper staff. All yearbook/newspaper staff members must recognize they represent SOLSD, their respective high school, the yearbook/newspaper Staff, and the yearbook/newspaper advisors. Students must sign a contract stipulating they will act appropriately and commit their time to the creation of the yearbook/newspaper.

<u>ACT Prep</u> - .5 credits – Grades 9-12
Course Code: 550A
Course Code: 550B

GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: None

ACT Prep Course Description: The ACT/College Prep course will emphasize ACT test-taking strategies, specifically math skills, language skills, reading skills, and science-reasoning skills. Students will study and practice listening and note taking techniques, test taking strategies, questioning and thinking skills, information retrieval, pre-ACT test practice, memory technique, reading in the content areas, vocabulary development, and college application completion with the central goal to increase both subtest scores and composite scores. All four ACT subtests will be reviewed: English, Math, Reading, and Science Reasoning.

<u>Journalism</u> - .5 credits
Course Code: 0559 and 05591 Journalism and Social Media I & 2
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

Students learn to write in various styles, including hard news, features, editorials, and reviews.

<u>Communication through Social Media</u> - .5 credits
Course Code: TBD
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

In this course, students will learn concepts and principles used in social media communications. Students will learn data-driven marketing and communications strategies and how to apply them to various forms of social media. Students will discuss social, historical, ethical, and economic dimensions of social media..

ART

<u>Art I</u> – 1 Credit
Course Code: 021
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: None

In the first course in high school art, the student will be exposed to a variety of media as well as what it takes to skillfully use that media. Using the elements of art and the principles of design as a framework, students will investigate a variety of experiences and concepts. Students explore various two dimensional and three dimensional art media using a variety of expressive and technical ideas.

<u>Art II</u> – 1 Credit
Course Code: 022
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: Art I

In this course, the art student will continue to expand his/her knowledge of the visual arts by learning new techniques and methods, to handle new media and to further his/her understanding of familiar media. In this course, the student will also begin to concentrate on specific media and areas of the visual arts for which he/she feels a preference.

<u>Art III</u> – 1 Credit
Course Code: 023
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

Prerequisite: Art I and Art II

In this course, the student will begin to work on an individual basis. By the time the student has reached this level, he/she has become acquainted with and fairly competent in the various media. The student in this class will expand his/her knowledge of the various media and continue with the refinement of techniques.

Art IV– 1 Credit
Course Code: 024
GRADE OFFERING ☐9 ☐10 ☐11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

Prerequisite: **Art I, Art II, and Art III**
In this final course, the student will work on a very individualized basis. At this level, the student is thoroughly acquainted with the media and techniques available in the Art classes. From this point, the student will work more selectively on problem-type projects of his/her own choosing. Through experimentation, the student will determine the scope and length to which to carry out the project.

Drawing and Painting– 1 Credit
Course Code: 0231
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

Prerequisite: **Art I and Art II**

A continuation of the elements and principles of art, this class is used to develop the skills and sensitivity of drawing in a variety of methods and techniques. Students will increase awareness of composition and skills. This course will rely on the study of theories, methods, and painting techniques for landscapes, still-life and varied compositions with special emphasis on the elements and principles of art in painting. Watercolor, acrylic and oils will be used throughout.

Ceramics I– 1 Credit
Course Code: 0219
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

Prerequisite: **None**

The purpose of this course is to give students an extensive experience in the introduction of ceramics. It is the study and use of ceramic procedures and techniques, including hand forming, slab building, tile-making, and an intro to wheel throwing and surface manipulation.

Ceramics II – 1 Credit – Grade 10 - 12 – MCHS
Course Code: 02192

GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

Prerequisite: **Ceramics I**

This visual arts course is designed for the continued study and application of problems in wheel-throwing and handbuilding techniques. Students will understand more advanced processes of ceramics and demonstrate greater competency through successful completion of various three-dimensional projects. Students will be expected to show their work at various exhibitions and begin to build a portfolio of their work as a collection of actual pieces and in digital form.

Introduction to Photography I – 1 Credit
Course Code: 0221
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ☐SHCC

Prerequisite: **Art I**

Description: This class will be used to develop the skill of photography. Students will be learning photography basics such as aperture and shutter speed, as well as the rule of thirds, composition, studio lighting techniques, landscape and portrait photography. Students will also gain knowledge of basic photography editing tools by exploring Photoshop and other editing software.

AP Art 2D Design– 1 credit
Course Code: 021P
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

This portfolio is designated for work that focuses primarily on the use of two-dimensional elements and principles of design. Students should consider how materials, processes, and ideas can be used to make art that exists on a flat surface. Students can work with any materials, processes, and ideas for this portfolio. Students must submit five selected works that demonstrate 2-D skills and the synthesis of materials, processes, and ideas. For the sustained investigation, students must submit 15 digital images that demonstrate investigation through practice, experimentation and revision.

AP Art Design – Drawing – 1 credit
Course Code: 022P
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

This portfolio is designated for work that focuses on the use of mark-making, line, surface, space, light and shade, and composition. Students should consider marks that can be used to make drawings, the arrangement of marks, the materials and processes used to make marks, and relationships of the marks and ideas. Students can work with any materials, processes, and ideas for this portfolio. Students must submit five selected works that demonstrate drawing skills and the synthesis of materials, processes, and ideas. For the sustained investigation, students must submit 15 digital images that demonstrate investigation through practice, experimentation and revision.

AP Art 3D Design - 1 credit
Course Code: 023P
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

This portfolio is designated for work that focuses on the use of three-dimensional elements and principles of design. Students should consider how materials, processes, and ideas can be used to make art that involves space and form. Students can work with any materials, processes, and ideas for this portfolio. Students must submit two views of the five selected works (10 images) that demonstrate 3-D skills and the synthesis of materials, processes, and ideas. For the sustained investigation, students must submit 15 digital images that demonstrate investigation through practice, experimentation and revision.

FOREIGN LANGUAGE

Spanish Concentration

<u>Spanish I</u> – 1 Credit
Course Code: 065
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: None

Spanish I is an introductory course that concentrates on listening and speaking skills, with reading and writing appropriate for beginners. All students start at the Novice Low level. Students will be able to express likes, dislikes, wants, and desires in the target-language. They will also be able to describe people, places, and things. Culture within Latin America and Spain will be explored and compared with American culture through exposure to current events, art, music and dance, cinema, food, pastimes, values, holidays, architecture, and language. Participation is a must.

Spanish II – 1 Credit
Course Code: 066
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: Spanish I

Spanish II builds upon the skills students mastered at Spanish I. Emphasis is still centered around listening and speaking, but reading and writing are a bit more complex. Besides mastering the present tense, students will become familiar with and use the 2 past tenses in Spanish. Students will be able to express their daily activities, past activities, and immediate future plans / activities. Cultural activities will still be based upon current events, art, music and dance, cinema, food, pastimes, values, holidays, architecture, and language.
Participation is a must.

Spanish III – 1 Credit
Course Code: 067
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: Spanish II

Spanish III builds upon the skills students mastered at Spanish II. The class is mostly conducted in Spanish (gradually increases throughout the year). Student work becomes more independent in nature; reading, writing, listening and speaking continue to be integral parts of their course work. Students must read and understand selected pieces of literature and write reflections on various topics. Students will master the 2 past tenses and will become familiar with the future and conditional tenses as well as the subjunctive mood. Students will continue their studies of the Spanish language, history, and culture.

Spanish IV – 1 Credit
Course Code: 068
GRADE OFFERING ☐9 ☐10 ☐11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: Spanish III

Spanish IV is more advanced than the previous courses. The last year of the Spanish program focuses on preparing students for world language placement at the college level. The class is conducted mainly in Spanish. Students will continue to study literature, art, and cinema in the target-language. Students will continue to read other topics as well based on history, current events / issues, and cultural differences. All grammatical tenses will be covered in this course.

Latin American/Spanish Culture and Influence – 0.5 Credit

Course Code: 0655
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

Prerequisite: None

This course will focus on the cultures and traditions of the Spanish-speaking world, involving the countries and regions within Latin America, Spain, and a part of Africa. As such, the curriculum will include customs, food, geography, history, art, music, film, literature, and current events. While no prerequisites are necessary to take this course, students should expect to be exposed to the Spanish language at times throughout the semester.

French Concentration

French I – 1 Credit
Course Code: 061
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

Prerequisite: None

French I is an introductory course that concentrates on listening and speaking skills, with reading and writing appropriate for beginners. All students start at the Novice Low level. Students will be able to express likes, dislikes, wants, and desires in the target-language. They will also be able to describe people, places, and things. Culture will be explored and compared with American culture through exposure to current events, art, music and dance, cinema, food, pastimes, values, holidays, architecture, and language. Participation is a must.

French II – 1 Credit
Course Code: 062
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

Prerequisite: French I

French II builds upon the skills students mastered at French I. Emphasis is still centered around listening and speaking, but reading and writing are a bit more complex. Besides mastering the present tense, students will become familiar with and use the 2 past tenses in Spanish. Students will be able to express their daily activities, past activities, and immediate future plans / activities. Cultural activities will still be based upon current events, art, music and dance, cinema, food, pastimes, values, holidays, architecture, and language.
Participation is a must.

French III – 1 Credit

Course Code: 063
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

Prerequisite: French II

French III builds upon the skills students mastered at French II. The class is mostly conducted in French (gradually increases throughout the year). Student work becomes more independent in nature; reading, writing, listening and speaking continue to be integral parts of their course work. Students must read and understand selected pieces of literature and write reflections on various topics. Students will master the 2 past tenses and will become familiar with the future and conditional tenses as well as the subjunctive mood. Students will continue their studies of the Spanish language, history, and culture.

MUSIC

All music courses fulfill the high school fine-arts graduation requirement

Vocal Music (Choir) – 1 credit
Course Code: 122
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: Students must be interested in singing.

Choir is open to all students who have demonstrated an interest in the concert choir, group singing, and making music. This class allows students to develop their individual and group vocal abilities through a performance of quality choral repertoire across multiple genres. Repertoire will be studied in preparation for public performances. After-school practices may be scheduled in preparation for concerts. Students may be expected to attend after-school performances.

Instrumental Music (Band) – 1 credit
Course Code: 121
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: Students must possess the ability to play an instrument.

This class will meet five times a week and will schedule practices outside of normal school hours. This class includes several outside participation activities, including, but not limited to:

- Parades and rehearsals throughout the summer
- Parades during the school year
- Football games (half-time)
- Participation at county fair in the summer
- Marching Band Contests
- District and State music contests
- Concerts
- Participation in assemblies
- Jazz band
- Private lesson recital
- Ensemble rehearsal

This course is designed to include all students who want to learn about music and participate in band. Students will develop their abilities through a variety of band repertoire to include, but not limited to, standard band music, current band music, and popular music. Band performances may include concerts, band festivals, solo and ensemble festivals, football games, basketball games, parades, school and community events, and tours. After-school practices may be scheduled throughout the school year. Students are expected to attend all after-school rehearsals and performances.

Piano Keyboarding I – 1 credit
Course Code: 123K
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

Prerequisite: None

The purpose of this course is to give students the opportunity to learn piano keyboarding. The class instruction is designed so that students are enabled to: (1) Perform simple accompaniments and songs, (2) Perform with proper posture, hand position, fingering, rhythm and articulation, (3) Listen to, analyze, sight read and study piano literature, (4) Make interpretive decisions.

Piano Keyboarding II – 1 credit
Course Code: 123K2
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

Prerequisite: Piano Keyboarding I

This performing arts class will focus on developing techniques of sight-reading, transposition, accompanying, technique, and repertoire. Music theory concepts will be reinforced through keyboard application. Students are expected to perform and demonstrate mastery of the piano keyboarding techniques learned in this class.

Piano Keyboarding III – 1 credit
Course Code: 123K3
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

Prerequisite: Piano Keyboarding II

This performing arts class will focus on developing techniques of sight-reading, transposition, accompanying, technique, and repertoire. Music theory concepts will be reinforced through keyboard application. Students are expected to perform and demonstrate mastery of the piano keyboarding techniques learned in this class.

Music Exploration – 1 credit
Course Code: 125O, S, U
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

Prerequisite: None

This course is designed to provide students an opportunity to explore, create and perform music. Students will learn proper singing techniques, and play instruments. They will also learn how to compose and record their own music using computer-based music software and will improve their music-reading skills and develop a better understanding of music.

History of Pop and Rock Music – 1 credit
Course Code: 124
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

Prerequisite: None

This course will cover the basics of pop and rock music history, and it will help students to gain a better understanding and appreciation of pop and rock music genres. Students will discuss the various times and eras of pop music genres, the musical and cultural trends of those eras, and staple performers and songs from those eras. Students will also listen to staple

music from these various genres and eras. Pop music genres covered will include; but not be limited to: rock, pop, country, and hip hop/rap.

Beginning Guitar Class – 1 credit
Course Code: 123G
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

Prerequisite: None

Beginning Guitar Class - Prerequisite: Students must possess either the ability to play the guitar or the desire to learn to play the guitar. Grades: 9-12, Description: This course will cover the basics of playing guitar at a beginning level. Students will focus on developing individual and group performance skills. These skills include guitar playing technique, group performance skills, the rehearsal and performance of guitar music, music reading, and music fundamentals. Fundamentals include various style techniques, reading music notation, reading chord symbols and tablature, and learning from peers. In addition, students will gain a better understanding of various musical genres that use the guitar. Classroom music will include pop, rock, folk, classical, blues, and jazz music. This course meets five times a week. Outside of classroom participation such as recitals or concerts is expected.

HEALTH & PHYSICAL EDUCATION

Physical Education – 0.25 Credit
Course Code:
Grade 9: 082
Grade 10: 084
GRADE OFFERING ✅9 ✅10 ☐11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: All freshmen and sophomores need to take this course.

O, S, U grade

Both units are required courses by the State of Ohio for graduation. The course consists of (2) one-semester courses with one the freshman year and one the sophomore year. PE 9 & 10 do not count into the student cumulative GPA. Improvement in the principles of physical fitness and skills are sought. Cardiovascular and respiratory fitness through aerobic style activities are taught. From the basics of walking through running and rope jumping to circuit training are

covered. Calisthenics, weights and other power and flexibility measures are also used. The student will be required to change into proper attire and participate in each activity.

The 9th grade year consists of more team-oriented games: flag football, volleyball, soccer, etc.

The 10th grade year includes some of the 9th grade activities but with more emphasis put on the individual and carry-over activities important for later life.

****** Students involved in athletics may be able to receive P.E. credit without taking the course. Please see your School Counselor or athletic director for more information******

Course Code 082w – PE Waiver 9 will receive a grade of S that is not counted into the student's GPA

Course Code 084w – PE Waiver 10 will receive a grade of S that is not counted into the student's GPA

Health – 0.5 Credits
Course Code: 081
GRADE OFFERING ✅9 ☐10 ☐11 ☐12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: All freshmen need to take this course.

This is a required course by the State of Ohio for graduation. This course consists of one semester dealing with the most basic of health related issues that will be important for physical, mental, social, emotional and spiritual wellness. Some important course related topics deal with: making healthy choices, problem solving, hygiene, personality development, handling emotions, stress and defense mechanisms, nutrition, diet and exercise, substance abuse, human development and some infectious diseases including AIDS and other communicable diseases.

Advanced PE – 0.5 Credit (full year course)
Course Code: 0820
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: Teacher approval and PE 9 and PE 10

O, S, U grade

Advanced PE is a class intended for student athletes to supplement their overall conditioning process for their individual health and who have already met PE 9 & 10 requirements. The program will include total body conditioning with emphasis placed on aerobic, anaerobic, strength, power, speed and flexibility accompanied with injury prevention, injury care, diet, rest and mental preparation. Classroom work will include students gaining knowledge of the

physiology of exercise along with training methodology. Students who participate in three sports will have preference because of their lack of training time in a school year.

Exercise Physiology – .5 credit
Course Code: 089
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

This course addresses the principles of the physiology of the human body during exercise with emphasis on cardiopulmonary and neuromuscular systems.

Nutrition and Wellness - .5 credit
Course Code: 091225
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

This course provides students with an overview of good nutrition principles that are necessary for physical and mental wellness and a long, healthy life.

Sports Medicine - .5 credits
Course Code: 087
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: Health and Biology

The purpose of this course is to provide an overview of the measures for the prevention, management and rehabilitation of athletic related injuries. Students will study basic anatomy as it applies to athletic injuries, protective equipment taping and bracing to protect the injured area and different theories of evaluation and rehabilitation techniques as they apply to athletic injuries. Problems such as nutrition, physical examination, wound care, environmental conditions and therapeutic modalities are discussed.

Career Technical Education - Swiss Hills Career Center

Students at Monroe Central High School and River High School have the option of attending Swiss Hills Career Center during their sophomore, junior and senior years to receive career technical training. There are many opportunities for students. Students are encouraged to make choices based upon their needs and desires. Parents are encouraged to be part of this decision-making process by talking to administrators, counselors and Career Readiness Coordinator at the Career Center, Monroe Central High School and River High School.

Career Technical Pathway to College

All programs at Swiss Hills can lead to Post-Secondary Education in either a two-year or four-year college, depending on the entrance requirements of the particular college. In addition, college credit can be earned through specific CT courses. For Senior Only Programs, consulate your School Counselor or contact Swiss Hills Career Center.

SWISS HILLS CAREER CENTER

Our Objective:

The primary objective of the Career Technical training programs at Swiss Hills Career Center is to assist students, businesses, and industry in promoting growth through quality education and training.

Our Vision:

Every Swiss Hills Career Center career tech program graduate is prepared for successful employment and ongoing education.

Our Mission:

The Mission of Swiss Hills Career Center is to prepare all students for lifelong learning through challenging academic education and technical literacy.

Our Commitment:

The Staff at Swiss Hills Career Center is committed to:

- Achieving excellence
- Delivering results
- Responding to our community needs
- Creating an environment for success

Swiss Hills Career Center provides:

- Options and Opportunities
- Real-world Learning
- Partnerships with business and industry
- Productive citizens

Advisory Committees:

Each Career Tech program has an Advisory Committee which is designed to assist in meeting the workforce development needs of the community and interests of the individual students. The dialogue between advisory committee members and career technical educators fosters a shared responsibility for preparing students for a place in the workforce and in society. Members may include former students, representatives of professional associations, community business and industry, and post-secondary institutions.

Certificate of Completion:

Each student who completes a Career Technical program with a minimum of a "C" average and a 90% attendance rate will qualify for a Certificate of Completion. The Certificate of Completion and a Career Passport will be awarded to successful program completers.

Early Placement:

Apprenticeships, Job shadowing, and "on the job" training are part of the experiences at Swiss Hills. Students meeting requirements are able to complete their high school diploma while advancing themselves in their chosen career field.

Ag Business/Production (A0) Animal Science/Mgt (A2) ✅MCHS ✅RHS ✅ SHCC	**Business Administration & Management (C4)** ✅MCHS ✅RHS ☐ SHCC	**Construction Trades (DF) Heavy Equipment (DD)** ☐MCHS ☐RHS ✅ SHCC
Engineering (F6) ☐MCHS ✅RHS ✅ SHCC	**Allied Health and Nursing (JM)** ☐MCHS ☐RHS ✅ SHCC	**Culinary and Food Service (L0)** ☐MCHS ☐RHS ✅ SHCC
Cosmetology (M1) ☐MCHS ☐RHS ✅ SHCC	**Criminal Justice (P1)** ☐MCHS ☐RHS ✅ SHCC	**Manufacturing (R9)** ☐MCHS ☐RHS ✅ SHCC
Automotive Technologies (T9) ☐MCHS ☐RHS ✅ SHCC	**Maritime** ☐MCHS ☐RHS ✅ SHCC	**Welding (R8)** ☐MCHS ☐RHS ✅ SHCC

CTE Credits will be based on hours of instruction for each course and may vary by course and building. Example 120 hours = 1 credit, 240 hours = 2 credits. Students who complete a career development event (CDE) may earn .25 additional credit at the end of the course when documentation is provided.

Additional Career Tech Information

Tech Prep:
Each of our programs articulate with area colleges through the Ohio College Tech Prep Consortium. Students will be given college credit for some of the courses taken at Swiss Hills.

Career Technical Honors Diploma:
Students who complete an intensive career technical education curriculum may earn a diploma with honors from the home high school. Refer to the Honors Diploma Section for further details.

Industry Credentials:
Upon successful completion, students are able to earn an industry credential. They include:

** WebXam & WorkKeys Tests - All programs*

** OHSA - Occupational Safety & Health Administration 10-Hour - All programs*
** STNA - State Tested Nurse Assistant & First Aid/CPR - Medical Technologies*
** CCNA - Cisco Certified Network Associate- Networking*
** NATEF - National Automotive Technicians Education Foundation- Automotive Technology*
** AWS - American Welding Society -Welding Technology*
** State Board of Cosmetology License - Cosmetology*
** Microsoft Office Specialist - Business, Admin., & Mgt.*
** ServSafe - Restaurant Mgt.*
** ETA - Electronic Technician Association - Electronics*

Career-Technical Student Organization (CTSO)

- BPA
- DECA
- FCCLA
- FFA
- SkillsUSA

Career Connections

A Career Pathway is a collective look at education and training, wage and outlook information for related occupations. These pathways offer an overview of the various career options along with education and training that can begin as early as grade 7. Whether a student is interested in going to college, getting a certificate or working right after high school, career pathways can be customized for any ambition or plan. For additional career planning resources, visit **OhioMeansJobs.com.**

Another great resource for career planning is the **Ohio Department of Education and Workforce Career Connections** page at Career pathways. Many pathways are available to explore by clicking on the area of interest.

AGRICULTURE AND ENVIRONMENTAL SYSTEMS CAREER FIELD PATHWAY & COURSES

The Agricultural and Environmental Systems Career Field prepares students for careers in Agribusiness and Production Systems, Animal Science and Management, Bioscience, Horticulture, Natural Resource Management and Power Technology.

Agribusiness and Production Systems Pathway

Agribusiness and Production Systems program areas apply animal, plant and environmental sciences to the production, management, marketing, distribution and processing of agronomic

crops and domesticated livestock. Communications, business principles and leadership skill development are essential to these program areas.

Careers for which this pathway prepares students include:

Farmer
Advisor
Grain Buyer
Surveyor
Livestock Buyer

Postsecondary majors for which this pathway prepares students include:

Agribusiness/Agricultural Business Operations
Agricultural and Extension Education Services
Agricultural Business and Management
Agricultural Economics
Agricultural Production Operations
Agricultural Public Services
Small Business Administration/Management
Applied Economics
Banking and Financial Support Services
Business/Corporate
Communications
Finance and Financial Management Services
Marketing/Marketing Management
Merchandising and Buying Operations
Agronomy and Crop Science/Crop Production
Entomology
Plant Pathology/Phytopathology
Plant Protection and Integrated Pest Management
Science Technologies

Animal Science and Management Pathway

Animal Science and Management program areas will prepare students for careers in training and marketing domesticated and exotic animals. Students will gain the necessary technical and academic skills in anatomy and physiology, nutrition, reproduction, health, genetics and behavior.

Careers for which this pathway prepares students include:

Veterinarian
Breeder
Zoologist
Ferrier
Trainer
Groomer

Postsecondary majors for which this pathway prepares students include:

Animal/Livestock Husbandry and Production
Dairy Science
Equestrian/Equine Studies
Veterinary/Animal Health Technology/Technician and Veterinary Assistant
Zoology/Animal Biology

Agribusiness and Production Systems (A0) RHS

☐MCHS ✅RHS ☐SHCC	010105	Agriculture, Food and Natural Resources (AFNR)
☐MCHS ✅RHS ☐SHCC	010920	Livestock Selection, Nutrition and Management

☐MCHS ✅RHS ☐SHCC	010115	Bus Mgmt Agri & Enviro Systems
☐MCHS ✅RHS ☐SHCC	010125	Animal and Plant Science
☐MCHS ☐RHS ☐SHCC	010720	Environmental Sci for Ag & Natural Resources
☐MCHS ☐RHS ☐SHCC	010915	Animal Health and Disease
☐MCHS ☐RHS ☐SHCC	010945	Animal Anatomy and Physiology
☐MCHS ✅RHS ☐SHCC	010190	Ag & Environ Sys Capstone

Animal Science and Management (A2) SHCC, MCHS

✅MCHS ☐RHS ☐SHCC	010105	Agriculture, Food and Natural Resources (AFNR)
✅MCHS ☐RHS ✅SHCC	010925	Companion Animal Selection, Nutrition and Management
☐MCHS ☐RHS ✅SHCC	010935	Equine Selection, Nutrition and Management
✅MCHS ☐RHS ☐SHCC	010910	Animal Science and Technology
✅MCHS ☐RHS ✅SHCC	010915	Animal Health and Disease
✅MCHS ☐RHS ✅SHCC	010920	Livestock Selection, Nutrition and Management
✅MCHS ☐RHS ✅SHCC	010930	Veterinary Science
✅MCHS ☐RHS ☐SHCC	010720	Envir Sci for Ag & Natural Resources
☐MCHS ☐RHS ✅SHCC	010945	Animal Anatomy and Physiology
☐MCHS ☐RHS ✅SHCC	072150	Medical Terminology
✅MCHS ☐RHS ☐SHCC	010115	Bus Mgmt Agri & Enviro Systems
✅MCHS ☐RHS ☐SHCC	011020	Meat Science and Technology
✅MCHS ☐RHS ☐SHCC	010190	Ag & Environ Sys Capstone
✅MCHS ☐RHS ☐SHCC	010190RC	Agriculutral Record Keeping

Agriculture, Food and Natural Resources (AFNR) - meets Physical Science credit requirements
Subject Code: 010105
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

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

This course is offered during the Freshmen year and can be taken in place of the Physical Science course. (Ohio Standards covered in the AFNR /Agri. Science courses are the same as those in Physical Science.) Upper class students may take this course as an elective. A Web Exam is required upon completion of this course.

Animal Anatomy and Physiology * meets graduation requirements for Biology and Advanced Science
Subject Code: 010945
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students will examine the structure and function of the major organ systems as well as the function and principle of blood flow in animals. Students will study internal and external anatomical parts, their functions, and will investigate the relationship among these parts and systems within the body of an animal. Throughout the course, students will apply the internal functions of anatomical structures to the business and industry principles of the animal industry.

Animal Health and Disease * meets graduation requirements for Advanced Science
Subject Code: 010915
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ✅SHCC

Students will examine causes, symptoms, and treatment of common diseases with emphasis on developing preventative health management plans. Topics will include the study of pathogens, and classifying types of diseases and disorders. Students will perform animal health assessments and compare to standard characteristics. Throughout the course, students will utilize principles of technology to manage information systems, and research issues affecting the industry.

Animal and Plant Science meets Biology credit requirements
Subject Code: 010125
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

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

Animal Science and Technology - meets Biology credit requirements
Subject Code: 010910
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program
2. Successfully complete secondary course and earn a qualifying score of 50 or higher on the corresponding End of Course examination

Students will learn and apply responsible animal management principles and routine husbandry practices. Topics will include nutrition, feeding, and caring for animals, body/carcass composition evaluation, and applying marketing principles to the sale and distribution of animal products. Learners will investigate animal genetics and how it impacts principles of animal improvement, selection and marketing. Throughout the course, learners will develop business leadership, problem-solving and communication skills in relation to the science of animals.

Business Management for Agricultural and Environmental
Systems Subject Code: 010115
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅ RHS ☐SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program
2. Successfully complete secondary course and earn a qualifying score of 63 or higher on the corresponding End of Course examination

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

Companion Animal Selection, Nutrition and Management * meets graduation requirements for Advanced Science
Subject Code: 010925
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ✅SHCC

Students will identify and apply responsible animal science principles and routine husbandry practices to companion animals. Topics will include principles and practices of nutrient utilization, breeding programs and management of facility/housing design, meal plans and general care practices. Students will apply knowledge of companion animal care to enhance animal growth, enrichment, training, and education engagement programs. Throughout the course, students will follow practices for care and legal compliance in relation to classification of animals.

Environmental Science for Agriculture and Natural Resources * meets graduation requirements for Advanced Science
Subject Code: 010720
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

***Prerequisite: Physical Science or AFNR* Agriculture, Food and Natural Resources/Agricultural Science and Biology**

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program
2. Successfully complete secondary course and earn a qualifying score of 59 or higher on the corresponding End of Course examination

Students will study relationships between organisms and their environment. Principles of biogeochemical cycles, air-water-land relationships, non-point pollution, and wetlands will be applied. Students will examine fundamentals of resource development, agriculture sustainability, energy needs and pollution control. They will analyze and interpret data gathered from studies on the ecosystem. Throughout this course, students will develop responses to environmental problems and develop management strategies for responsible conservation and resource development.

Equine Selection, Nutrition and Management * meets graduation requirements for Advanced Science
Subject Code: 010935
GRADE OFFERING ☐9 ☐10 ☐11 ☐12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students will identify and apply responsible animal science principles and management practices to equine populations. Topics will include equine nutrition, selection, reproduction and facility design and management. They will apply knowledge of equine science to enhance animal growth, enrichment and training, along with providing educational and visitor engagement programs. Throughout the course, students will develop management plans that reflect the classification of animals and follow best practices for care and legal compliance.

Livestock Selection, Nutrition and Management * meets graduation requirements for Advanced Science
Subject Code: 010920
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC

Students will identify and apply principles and routine husbandry practices to production animal populations. Topics will include principles of nutrition, feed utilization, animal welfare, selection and management of facilities and herd populations. Students will apply knowledge of production animal care to enhance animal growth, selection of breeding stock, and management practices. Throughout the course, students will develop management plans reflecting practices for care and legal compliance.

Meat Science and Technology
Subject Code: 011020
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

Students will apply food chemistry and microbiology to processing, preservation, packaging, storage and marketing of meat products. Students will design and implement a quality assurance program that meets legal compliance and demonstrates knowledge of safe operation and maintenance of equipment and facilities. Students will evaluate carcass composition, assign quality grades, and examine value added products. Throughout the course, students will demonstrate customer service and sales techniques while understanding the scope and importance of business and safety regulations.

Veterinary Science * meets graduation requirements for Advanced Science
Subject Code: 010930
GRADE OFFERING ☐9 ☐10 ✅11 ✅12

BUILDING OFFERING ✅MCHS ☐RHS ✅SHCC

Students will learn causes, symptoms, and treatment of common diseases with special emphasis on developing preventative health management plans and breeding programs. Topics include veterinary pharmacology, radiology and imaging techniques, principles of surgery, safe laboratory skills, and the concepts of ethics and professionalism in the workplace. Students will develop skills in inquiry and statistical methods. Throughout the course, learners will utilize principles of technology to manage information systems, and research issues affecting the industry.

Agricultural and Environmental Systems Capstone
Subject Code: 010190
GRADE OFFERING ☐9 ☐10 ☐11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC

Agricultural Record Keeping
Subject Code: 010190RC - see instructor for more information

Students apply Agricultural and Environmental Systems program knowledge and skills in a more comprehensive and authentic way. Capstones are project/problem-based learning opportunities that occur both in and away from school. Under supervision of the school and through partnerships, students combine classroom learning with work experience to benefit themselves and others. These can take the form of mentorship employment, cooperative education, apprenticeships and internships.

ARTS & COMMUNICATIONS CAREER FIELD PATHWAY & COURSES

The Arts and Communication Career Field prepares students for careers in Media Arts, Performing Arts and Visual Design.

The Media Arts program areas prepare students for careers in various fields of communication such as journalism and commercial photography and film. Students gain the necessary technical and academic skills to develop and distribute mass media content.

Careers for which this pathway prepares students include:

Technical Writer/Editor
Videographer Announcer
Audio Engineer Reporter/Journalist
Content Strategist
Photographer

Postsecondary majors for which this pathway prepares students include:

Advertising
Writing
Communication
Film/Cinema/Video/Photographic Studies
Journalism
Public Relations/Image Management
Photography
Social Media/Emerging Technologies

Media Arts (B0)

✅MCHS ☐RHS ☐SHCC	340110	Intro to Media Arts
✅MCHS ☐RHS ☐SHCC	340150	Photographic Composition
✅MCHS ☐RHS ☐SHCC	340155	Photographic Production
✅MCHS ☐RHS ☐SHCC	340350	Social Media Communications
✅MCHS ☐RHS ☐SHCC	340120	Digital Image Editing
✅MCHS ☐RHS ☐SHCC	340006	Business of Arts and Communication
✅MCHS ☐RHS ☐SHCC	340160	Multi-Media Web Productions

Introduction to Media Arts – this course counts as a Fine Arts credit

Subject Code: 340110
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

In this first course of the Media Arts pathway students will learn the basics of how to convey messages through journalism, commercial advertising and marketing. They review the accuracy and impact of words and visuals used in news, advertisements and commercials. They learn essential terminology and basic tools for delivering messages. They understand the content length, deadlines and responsibilities of various delivery channels.

Digital Image Editing – this course counts as a Fine Arts credit

Subject Code: 340120
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC
Prerequisite: Introduction to Media Arts and Photographic Composition
Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Students must pass the corresponding End-of-Course (WebXam[tm]) examination with a qualifying score of 44 or higher.
2. Students must work with their secondary institution to ensure that their official high school transcript, official WebXam[tm] score, and the $(CT)^2$ Verification Form are submitted to the post-secondary institution where the student chooses to enroll. The post-secondary institution must also be a part of the statewide agreement or offer the career-technical discipline in which to facilitate credit transfer.
3. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program

This class will utilize Adobe Photoshop (most current version available).

This course focuses on manipulating images for final output through print and Web-based production. Students obtain a brief perspective on analog image editing and delve into the world of editing digital photos, illustrations and other artwork. They learn to adjust resolution and exposure, modify color, compress data and format and manage files. Students will use problem-solving strategies and work collaboratively to complete the creative process with artists, printers and Web developers.

Multi-Media Web Production - this course counts as a Fine Arts credit

Subject Code: 340160
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

The focus of this course is on merging different types of media on the Internet. Students combine text, still photography, audio, videography and graphic arts to create interactive Web pages. They demonstrate creative, digital storytelling accessible from multiple platforms. Students learn project management and marketing. They learn how to create Web content that is accessible by individuals with visual disabilities.

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:
1. Matriculate to an institution of higher education with an approved or comparable program within 3 years of graduating from an approved career-technical education institution.
2. Successfully complete secondary course and earn a qualifying score of 53 or higher on the corresponding end-of-course examination.

The focus of this course is on merging different types of media on the Internet. Students combine text, still photography, audio, videography and graphic arts to create interactive Web pages. They demonstrate creative, digital storytelling accessible from multiple platforms. Students learn project management and marketing. They learn how to create Web content that is accessible by individuals with visual disabilities.

Photographic Composition – this course counts as a Fine Arts credit
Subject Code 340150
GRADE OFFERING ☐9 ✅10 ☐11 ☐12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC
Prerequisite: Introduction to Media Arts

Aesthetics and techniques are essential to producing a good photograph. This course focuses on capturing and manipulating images in digital photography with some skill development in printing and enlarging. Topics include camera functions, mechanics of image capture, image manipulation, and print production. Students shoot photographs in various studio and indoor and outdoor settings.

Photography Production - this course counts as a Fine Arts credit

Subject Code: 340155
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC
Prerequisite: Introduction to Media Arts, Photographic Composition, and Digital Image Editing

Students advance their digital photographic knowledge and skill using camera raw files with a focus on commercial use and knowledge of production software. Emphasis is on creative expression and client communication to increase marketability of product. Topics include white balance, saturation, contrast and color correcting. Students apply copyright and fair use guidelines.

Social Media Communications
Subject Code: 340350
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

In this course, students will learn concepts and principles used in social media communications. Students will learn data-driven marketing and communications strategies and how to apply them to various forms of social media. Students will discuss social, historical, ethical, and economic dimensions of social media.

Video Production - this course counts as a Fine Arts credit

Subject Code: 340145

GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

Prerequisite: Introduction to Media Arts
This course focuses on video production for commercial use. Students plan and coordinate work with clients to produce projects on a tight timeline. They learn how to read and interpret a script, select and maintain equipment and combine graphics, text and special effects. Skills attained include pre-production documentation and planning, in-production audio and video recording; and post-production editing and distribution.

Business of Arts and Communications
Subject Code: 340006
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

A growing number of professionals make a living in industries related to arts and communications. From event management to tracking expenses, students learn the business side of visual, media and performing arts. Topics include marketing, branding, producing, promoting, booking, budgeting and merchandising, etc. Students learn and apply intellectual property rights, licensing, copyright, royalties, liabilities and contractual agreements. They learn how both profit and non-profit organizations businesses operate.

BUSINESS AND ADMINISTRATIVE SERVICES CAREER FIELD PATHWAY & COURSES

The Business Management and Administrative Services Finance and Marketing Career Fields prepare students for careers in various business disciplines across a variety of industries important to the economic vitality of the State of Ohio. Students may also pursue entrepreneurship within a specific discipline.

Business Management and Administrative Services Pathway
The Business Management and Administrative Services program areas will prepare students for technical and professional level careers in business management, human resources, operations management, distribution and logistics, supply chain and legal or medical office management.

Careers for which this pathway prepares students include:

Business Information Specialist
Customer Service Associate
Distribution Manager
Medical Billing and Coding Associate
Office Manager
Product Associate
Project Coordinator
Records Manager
Small Business Owner
Supply Chain Associate
Training Specialist
Transportation Manager

Postsecondary majors for which this pathway prepares students include:

Business Administration or Management
Business Information Systems
Entrepreneurship
Human Resources Management
International Business
Medical Coding
Office Administration
Operations Management
Project Management
Supply Chain Management

Business and Administrative Services (C4)

☐MCHS ✅RHS ☐SHCC	141000	Business Foundations
☐MCHS ✅RHS ☐SHCC	141025	Management Principles
☐MCHS ✅RHS ☐SHCC	142000	Fundamentals of Business and Administrative Services
☐MCHS ✅RHS ☐SHCC	142005	Office Management

Business Foundations
Course Code: 141000
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

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

Management Principles
Course Code: 141025
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Students will apply management and motivation theories to plan, organize and direct staff toward goal achievement. They will learn to manage a workforce, lead change, and build relationships with employees and customers. Students will use technology to analyze the internal and external business environment, determine trends impacting business, and examine risks threatening

organizational success. Ethical challenges, project management and strategic planning will also be addressed.

Fundamentals of Business and Administrative Services
Course Code: 142000
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

This is the first course specific to the Business and Administrative Services career field. It introduces students to the specializations offered in Business and Administrative Services. Students will obtain fundamental knowledge and skills in general management, human resources management, operations management, business informatics and office management. They will acquire knowledge of business operations, business relationships, resource management, process management and financial principles. Students will use technological tools and applications to develop business insights.

Office Management
Course Code: 142005
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program
2. Successfully complete secondary course and earn a qualifying score of 54 or higher on the corresponding End of Course examination

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

FINANCE AND MARKETING
CAREER FIELD PATHWAY & COURSES

Finance Pathway

The Finance program areas will prepare students for technical and professional level careers in financial and operational accounting, financial and investment planning, banking, insurance and business financial management.

Careers for which this pathway prepares students include:

Benefits Manager
Cash Manager
Claims Adjuster
Compliance Associate
Customer Service Representative
Financial Analyst
Financial Planner
Loss Control Manager
Small Business Accounting
Treasury Associate

Postsecondary majors for which this pathway prepares students include:

Accounting
Business Analysis
Economics
Finance
Financial Services
Insurance Management
Information Systems
Real Estate and Urban Analysis

Finance (G2)

☐MCHS ✅RHS ☐SHCC	141000	Business Foundations
✅MCHS ☐RHS ☐SHCC	143020	Fundamentals of Financial Services
✅MCHS ✅RHS ☐SHCC	143005	Financial Accounting
✅MCHS ☐RHS ☐SHCC	143015	Managerial Accounting

Business Foundations
Course Code: 141000
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

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

Financial Accounting
Course Code: 143005
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

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.

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Matriculate to an institution of higher education with an approved or comparable program within 3 years of graduating from an approved career-technical education institution.
2. Successfully complete the secondary course earn a qualifying score on the corresponding end of course examination

Fundamentals of Financial Services
Course Code: 143020
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

Students will develop knowledge and skills needed in the banking, insurance and investment industries. They will analyze banking products and services, determine ways in which insurance reduces risk, and calculate insurable losses. Students will also learn to sell financial products and build positive relationships with clients and colleagues. They will use financial ratios to evaluate company performance and select profitable investments for clients. Technology, employability skills, leadership and communications will be incorporated in classroom activities.

Managerial Accounting
Course Code: 143015
Pre-requisite: Financial Accounting
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ☐SHCC

Students will use financial information to make strategic business decisions. They will monitor business profitability, measure the cost-effectiveness of expenditures, prepare budget and forecast reports, and set achievable business financial goals. Students will also use critical information on financial documents to determine risks to short-term and long-term business success. Technology, employability skills, leadership and communications will be incorporated in classroom activities.

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program

2. Successfully completed the secondary course.
3. Successfully complete the secondary course earn a qualifying score on the corresponding end of course examination

CONSTRUCTION TECHNOLOGIES
CAREER FIELD PATHWAY & COURSES

The Construction Technologies Career Field prepares students for careers in designing, planning, managing, building and maintaining commercial, industrial and residential structures and infrastructures. Students in the Construction Technology career field may continue into registered apprenticeship or traditional postsecondary programs. Apprenticeship opportunities may be found at the Ohio State Apprenticeship Council website (http://jfs.ohio.gov/apprenticeship/index.stml).

Construction Design and Management Pathway

Design program areas will prepare students for careers dealing with construction design, facility maintenance, construction management and site safety and heavy equipment operations.

Careers for which this pathway prepares students include:

Architectural Designer
Interior Designer
Civil Drafting Engineering
Project Manager
Custodian Site Manager
Facility Maintenance Technician/Manager
Site Safety Coordinator
Heavy Equipment Operator
Surveyor

Postsecondary majors for which this pathway prepares students include:

Architectural Drafting
Building/Construction Site Management/Manager
Construction Management
Heavy/Industrial Maintenance Equipment Technologies
Interior Design

Structural Systems Pathway

Structural program areas will prepare students for careers in occupations related to Carpentry and Masonry construction and maintenance.

Careers for which this pathway prepares students include:

Brick, Block and Cement Mason
General Contractor
Carpenter
Remodeler
Drywall Technician
Roofer
Flooring Specialists

Postsecondary majors for which this pathway prepares students include:

Building Construction Technology
Cabinetmaking and Millwork
Construction Trades
Structural Engineering

Building Maintenance Pathway (DD)

Provide maintenance & repair, lawn care, carpet cleaning, and floor refinishing in commercial settings. Work hands-on in a variety of local businesses to develop employability, problem-solving, and life skills. Deliver excellent customer service, independently and in teams, while developing critical professional skills.

CAREER FOCUS: Prepared for immediate employment, advanced certifications, and further education

Construction Design and Management (DF) (Heavy Equipment)

☐MCHS ☐RHS ✅SHCC	178000	Construction Technology
☐MCHS ☐RHS ✅SHCC	178018	Construction Safety & Crew Leadership
☐MCHS ☐RHS ✅SHCC	178026	Heavy Equipment Operating
☐MCHS ☐RHS ✅SHCC	178027	Construction Survey Site Logistics

Structural Systems (DD)

☐MCHS ☐RHS ✅SHCC	178000	Construction Technology
☐MCHS ☐RHS ✅SHCC	178002	Mechanical Electircal and Plumbing Systems
☐MCHS ☐RHS ✅SHCC	178005	Masonry Brick and Block
☐MCHS ☐RHS ✅SHCC	178006	Concrete and Residential Masonry
☐MCHS ☐RHS ✅SHCC	178008	Residential Electrical
☐MCHS ☐RHS ✅SHCC	178022	Construction Management
☐MCHS ☐RHS ✅SHCC	178029	Construction Pre-Apprentice Capstone

☐MCHS ☐RHS ✅SHCC	178001	Carpentry & Masonry Tech
☐MCHS ☐RHS ✅SHCC	178018	Construction Safety & Crew Leadership

Building Maintenance (DD)

☐MCHS ☐RHS ✅SHCC	178024	Facility and Building Maintenance
☐MCHS ☐RHS ✅SHCC	178002	Mechanical, Electrical and Plumbing Systems
☐MCHS ☐RHS ✅SHCC	178029	Construction/Building Maintenance Capstone
☐MCHS ☐RHS ✅SHCC	178030	Principles of Wood Construction
☐MCHS ☐RHS ✅SHCC	178000	Construction Technology-Core & Sustainable Construction

Construction Technology – Core and Sustainable Construction
Subject Code: 178000
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students will learn principles in basic safety (10-hr OSHA), construction math, hand and power tool and operation, blueprint reading, material handling, communication and employability skills. An emphasis will be placed on safe and green construction practices.

Carpentry and Masonry Technical
Skills Subject Code: 178001
GRADE OFFERING ☐9 ☐10 ✅11 ☐12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program
2. Successfully completed the secondary course.
3. Successfully complete the secondary course earn a qualifying score on the corresponding end of course examination

This first course in the pathway will introduce to students the materials, methods, and equipment used in carpentry and masonry. Students will organize a project work sequence by interpreting plans and diagrams within a construction drawing set. They will layout and install basic wall,

floor and roof applications. Students will perform introductory concrete applications including formwork, reinforcement, mixing, and finishing. Current advancements in technology, safety, applicable code requirements and correct practices are learned.

Mechanical, Electrical and Plumbing Systems
Subject Code: 178002
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students learn physical principles and fundamental skills across mechanical systems in construction. Students will select materials, assemble, and test basic electrical circuits. Students will select materials and assemble simple copper and plastic plumbing applications for both supply and drains. They will perform simple maintenance of electric motors, electric fixtures and plumbing fixtures. Students will be able to select and install basic ductwork components and learn the operation and maintenance of heating and cooling equipment.

Masonry-Brick and Block
Subject Code: 178005
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

The focus of this course will be on the technical aspects of masonry with emphasis on developing introductory skills in laying block and brick. They will learn the physical attributes of masonry materials and the tools required in masonry construction. Students will learn the principles necessary to construct structures with a variety of brick and block materials. Throughout the course, the safe handling of materials and personal safety are emphasized.

Concrete and Residential Masonry
Subject Code: 178006
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

In this course, students will learn to read and interpret construction plans and drawings for masonry applications. They will learn to select materials based on physical attributes and job requirements. Students will set grades and construct forms, for concrete foundations, footings, and retaining walls. They will mix, reinforce, pour and finish concrete in various residential and commercial applications.

Residential Electrical
Systems Subject Code: 178008
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

This course will emphasize electrical theory, materials, equipment and general methods used in residential construction. Students will navigate the National Electrical Code, learn worksite safety and understand licensing and permitting requirements. They will interpret plans and job specifications and calculate loads and service requirements. Students will install, test and repair receptacle outlets, lighting and small appliance circuits. They will understand circuit protection concepts and install a subpanel. Specialty circuit installation will be addressed.

Construction Safety and Crew Leadership
Subject Code: 178018
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program
2. Successfully completed the secondary course.
3. Obtain a valid OSHA 30 hour card in general construction

This course covers OSHA standards (30-hr OSHA) and requirements as they apply to the construction industry and crew/project management. Topics include safety and health hazards, safe practices, construction safety management, and crew management. Emphasis is on hazard identification, avoidance, control and prevention.

Construction Management
Subject Code: 178022
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

This course provides an integrated look at balancing the planning, estimating, and directing of construction operations. Students learn the process of creating and monitoring a construction project including standard agreements, bidding, estimates and project schedules. Students will learn to manage change orders, accident prevention and loss control, closeouts, and claims with an emphasis in production and quality control. Additionally, students will apply leadership, communications, and problem-solving skills to construction management.

Heavy Equipment Operations
Subject Code: 178026
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students perform heavy equipment operating techniques and perform operator level maintenance. Students will learn to survey using lasers, transits and machine control systems. Additionally, students learn the techniques and processes for clearing, grubbing, stripping,

excavating, backfilling, stockpiling, and cutting and spreading of fill material. Throughout the course, safety is emphasized.

Construction Surveying and Site Logistics
Subject Code: 178027
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students use surveying, topographic, satellite positioning, and geomatic instruments to locate and prepare a site for construction. Students establish lot and building lines as well as grade levels, and use site plans and elevation drawings to determine excavation needs. Students locate and mark underground and overhead services, identify soil conditions that may require shoring and position batter boards. Additionally, students identify the parameters for site selection, zoning regulations, and the process for filing building permits.

Construction Pre-Apprenticeship/Capstone
Subject Code: 178029
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in Construction programs in a more comprehensive and authentic way. Capstones often include project/problem-based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.

Facility and Building Maintenance

Subject Code: 178024

GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students are introduced to the maintenance and management processes used in public buildings and industrial facilities. Students will troubleshoot building and systems issues and provide solutions following applicable procedures and standards. Students will operate and maintain machinery and equipment used in grounds and facilities maintenance tasks. Throughout the course, the safe handling of materials, personal safety, prevention of accidents and the mitigation of hazards are emphasized.

Principles of Wood Construction

Subject Code: 178030

GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students will engage in the introductory skills utilized in working with various wood construction materials. They will l earn to use basic measuring tools, hand tools and machines, common to the wood industry, to construct basic projects. Additionally, students will examine various wood construction materials and their properties. Throughout the course, students will learn components of site and personal safety.

FAMILY & CONSUMER SCIENCES
CAREER FIELD PATHWAY & COURSES

Family and Consumer Sciences (FCS) is a set of courses that draws from a range of disciplines and contexts (education, business, social, economic, cultural, technological, geographical, political) to achieve optimal and sustainable living for individuals, families and communities.

The FCS curriculum is structured into one pathway. The pathway has been divided into clusters of courses based on their subject content and standards. Courses listed below have been identified as the recommended FCS program of study, that was developed from industry validated skills from initial employment of the continuation of education.

Family Consumer Science

✅MCHS ✅RHS ☐SHCC	091201	Intro to Family and Consumer Sciences
✅MCHS ✅RHS ☐SHCC	091205	Principles of Food
☐MCHS ✅RHS ☐SHCC	091210	Global Foods
✅MCHS ✅RHS ☐SHCC	091225	Principals of Nutrition and Wellness
✅MCHS ✅RHS ☐SHCC	091402	Career and College
✅MCHS ☐RHS ☐SHCC	091500	Interior Design and Furnishing
✅MCHS ✅RHS ☐SHCC	091025	Child Development
☐MCHS ✅RHS ☐ SHCC	093005	Personal Wellness and Development
☐MCHS ✅RHS ☐ SHCC	093010	Personal Wellness
✅MCHS ✅RHS ☐SHCC	153001	Personal Finance Management

☐MCHS ✅RHS ☐ SHCC	091215	Food Science
☐MCHS ✅RHS ☐ SHCC	091403	Leadership Engagement
☐MCHS ✅RHS ☐ SHCC	091410	Transitions and Careers

Introduction to Family and Consumer Sciences – .5 credit (Recommended as an introductory course)
Course Code: 091201
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

This first course will provide students with an overview of the four major content areas of Family and Consumer Sciences. Students will be introduced to child development, family relationship concepts and how they relate to family dynamics. Additionally, students will identify financial literacy and consumer economic principles. Students will understand the concepts of design through textiles for personal and home use. Throughout the course, students will develop communication, leadership and career investigation skills.

Personal Financial Management– .5 credit
Course Code: 153001
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

Prerequisite: None – recommended for all sophomores
Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

a) Students must pass the corresponding End-of-Course (WebXam^{tm}) examination with a qualifying score of 55 or higher.
b) Students must work with their secondary institution to ensure that their official high school transcript, official WebXam^{tm} score, and the $(CT)^2$ Verification Form are submitted to the post-secondary institution where the student chooses to enroll. The post-secondary institution must also be a part of the statewide agreement or offer the career-technical discipline in which to facilitate credit transfer.
c) Matriculate to an institution of higher education with an approved or comparable program within 3 years of graduating from an approved career-technical education institution.

In this course, students will develop personal financial plans for individual well-being. Throughout the course, students will develop financial literacy skills to provide a basis for responsible citizenship and career success. Additional topics will include analyzing services from financial institutions, consumer protection, investing and risk management.

Child Development– .5 credit
Course **Code: 091025**
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

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.

Principles of Food– .5 credit
Course Code: 091205
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

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.

Food Science (formerly known as Principles of Food II) - .5 Credit
Course Code: 091215
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

In this course, students will apply basic culinary practices and understand how flavor, texture and appearance are affected during food preparation. Students will evaluate chemical reactions as they occur in cooking methods and assess how to control high-risk food safety situations. Food safety and sanitation techniques will align to industry-recognized certifications.

Career & College Readiness– .5 credit
Course Code: 091402
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

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, develop interviewing skills and participate in internships. Additional topics will include principles and techniques of professionalism, networking, conflict-resolution, negotiation, leadership and entrepreneurship.

Global Foods_– .5 credit
Course Code: 091210

GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

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.

Personal Wellness_– .5 credit
Course Code: 093010
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

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

Principles of Nutrition and Wellness_– 1 credit
Course Code: 091225
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ☐SHCC

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

Personal Wellness and Development_– 1 credit
Course Code: 093005
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

In this course students will develop a personalized approach to healthy living. An emphasis will be placed on developing personal health for an adolescent that can be used as they transition through life. Additional topics will focus on problem-solving, work ethics, nutritional and food selections, family dynamics and personal health.

Leadership and Community Engagement_– 1 credit

Course Code: 091403
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

In this course, students will learn how to become an active community member and citizen. An emphasis will be placed on in-service learning, leadership training and teambuilding opportunities. Additional topics will include public policy issues, community and global engagement.

Transitions and Careers
Course Code: 091410
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

In this course, students will analyze interests, aptitudes and skills to prepare for careers and transition through life. An emphasis will be placed on work ethics, team building, communication and leadership skills. Additional topics will include technology etiquette and career planning.

ENGINEERING & SCIENCE TECHNOLOGIES CAREER FIELD PATHWAY & COURSES

Courses in Engineering and Science Technologies Pathway F6

Pathway Courses	Subject Code
Engineering Design (CTAG)	175001
Engineering Principles (CTAG)	175002
Computer Aided Drafting and Modeling (CTAG)	175006
Digital Electronics (CTAG)	175007
Mechanical Engineering	175008
Engineering Capstone (Apprenticeship/Paid Work Placement Opportunities)	175009
Analog Based Electronic Device	175012
Engineering Logic	175017
AC Electronic Circuits	175100
DC Electronic Circuits (CTAG)	175105
Aviation (CTAG)	177013
Unmanned Aircraft System	177024
Plan Reading (CTAG)	178019
Architecture Design - Structural and Mechanical/Electrical/Plumbing	178020
Architecture Design - Site and Foundation Plans	178021

Engineering Design (3D CAD Modeling and Print Reading)
Course Code: 175001
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ✅SHCC

Prerequisite: None

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Successfully completed the secondary course.
2. Matriculate to an institution of higher education with an approved or comparable course no later than 3 years after completing the approved secondary program.
3. Earn a qualifying score on the end of course exam.

Students will learn the application of the engineering design process. Topics include work-processes, optimization methods, design optimization and risk management tools. Students will use 2D and 3D modeling software to help them design solutions to proposed problems, document their work and communicate solutions. Additionally, students will interpret industry prints and create working drawings from functional models. Emphasis is given to experimental problem solving in real systems equipped with additive and subtractive prototyping devices including a laser engraver, 3D Printer, 3D Carving machine, CNC and vinyl printer/cutter. Students will design and model a CO2 powered F1 Race Car and race it on an 80' racetrack.

Engineering Principles (Mechatronics)
Course Code: 175002
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ✅SHCC

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

Computer Numerical Control Technology with Industrial Mills and Lathes
Course Code: 176007
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Successfully completed the course.

2. Matriculate to an institution of higher education with an approved or comparable course no later than 3 years after completing the approved secondary program.
3. Earn a passing score on the end of course exam.

In this course, students will use computer numerical control (CNC) programming to mill products composed of various materials. Students will prepare numerical control programs in positioning systems using standard industrial G and M codes. They will program computerized numerical control mills and lathes.

Computer Aided Drafting and Modeling (previously, Computer Integrated Manufacturing)
Course Code: 175006
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program
2. Successfully complete secondary course and earn a qualifying score of 60 or higher on the corresponding End of Course examination

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

Digital Electronics
Course Code: 175007
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Matriculate to an institution of higher education with an approved or comparable program within 3 years of completing the approved secondary program.
2. Successfully complete the course.
3. Submitted coursework must include proof of a laboratory component.

NOTE: 4 semester hours of credit can be earned for college course CTEET002- Digital Electronics (OET002)

• Students must include proof of laboratory component with their submission.
Students are introduced to the process of combinational and sequential logic design. The system uses a precise sequence of discrete voltages, representing numbers, non-numeric symbols or

commands for input, processing, transmission, storage or display. Engineering standards and methods for technical documentation will also be learned.

Mechanical Engineering (previously -Mechanisms and Drives)
Course Code: 175008
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ✅SHCC

Students will learn the principles and practices of machine operation and machine applications. They will learn how machine components such as gears, belts, sprockets, bearings, clutches, couplings, springs, etc. contribute to the application for which the machine is designed. They will also examine the basic drives of such mechanisms as electric motors and hydraulic & pneumatic actuators.

Engineering Capstone
Course Code: 175009
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ✅SHCC

The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in an Engineering program in a more comprehensive and authentic way. Capstones often include project/problem based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.

Pre-Engineering Technologies
Course Code: 175015
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ✅SHCC

Students will acquire knowledge and skills in problem solving, teamwork and innovation. Students explore STEM careers as they participate in a project-based learning process, designed to challenge and engage the natural curiosity and imagination of middle school students. Teams design and test their ideas using modeling, automation, robotics, mechanical and computer control systems, while exploring energy and the environment.

Engineering Logic
Course Code: 175017
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ☐SHCC

Students will apply the processes of digital circuit theory, combinational and sequential logic as it relates to circuit design and operation. Students will identify numbering systems, arithmetic and Boolean operations and apply simplification methods. Emphasis will be given to the analysis of wiring schematics and diagrams for accuracy and function. In addition, students will use electronic components to construct and troubleshoot digital circuits. AC

AC Electronic Circuits
Course Code: 175100
GRADE OFFERING ☐9 ☐10 ☐11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students will learn the fundamental principles of electricity with emphasis on AC (alternating current) circuits. They will use concepts of Ohm's Law, the Power Formula and Kirchhoff's Law with series, parallel and series-parallel circuit applications. The relationship between electricity and magnetism and motor theory will also be introduced. The student will master electrical safety, breadboard wiring, basic circuit troubleshooting, operation of function generator, digital multimeter (DMM) and oscilloscope.

DC Electronic Circuits
Course Code: 175105
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Students must matriculate to an institution of higher education with an approved or comparable program within 3 years of completing the approved secondary program.
2. Students must successfully complete the course with a qualifying cut score of 61 or higher on the End-of-Course examination from an approved high school program.
3. Students must include proof of laboratory components with their submission.
4. Students must complete the prerequisite requirement for College Algebra at the matriculating institution.
5. Students will not receive post-secondary credit for DC Circuits until this prerequisite is satisfied.

Students will learn the fundamental principles of electricity with emphasis on DC (direct current) circuits. They will use concepts of Ohm's Law, the Power Formula and Kirchhoff's Law with series, parallel and series-parallel circuit applications. The student will master electrical safety, breadboard wiring, basic circuit troubleshooting, operation of DC power supply and digital multimeter (DMM).

Plan Reading
Course Code: 178019
GRADE OFFERING ☐9 ✅10 ✅11 ✅12

BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program.
2. Successfully complete secondary course and earn a qualifying score on the End of Course examination.

Students learn blueprint reading as it relates to architecture and construction. Students will use scaling, orthographic projections, dimensioning practices, symbols, notations, and abbreviations to perform area calculations and to interpret floor plan, section, and elevations. Using construction plans, students will identify problems or shortcomings related to the layout and installation of materials for the project.

PAES Lab - MCHS, RHS

Course Code: PAESLAB

Prerequisite: Enrollment upon teacher recommendation in grades 7-12

Students in the Practical Assessment Exploration System (PAES) Lab will acquire knowledge and develop skills while exploring various jobs using real tools while developing proper work behaviors. This will be presented through small tasks and problem solving situations focused on functional and vocational skills. Students will learn basic general work and life skills through a variety of assessment tools. Students will be engaged through hands-on learning that will provide a pathway to a possible career. Students will be given a variety of tasks to perform relating to a wide array of job skill sets including computer technology, construction/industrial, processing/production, consumer/service, and business/marketing. This course will also fulfill the financial literacy instruction requirement for graduation.

GROUND TRANSPORTATION CAREER FIELD PATHWAY & COURSES

Technical and professional level careers in planning, management and movement of people, materials and goods by road, pipeline, air, rail and water and related services such as infrastructure planning and management, logistics services and mobile equipment and facility maintenance.

Ground Transportation - Auto (T9)

☐MCHS ☐RHS ✅SHCC	177000	Ground Transportation Maintenance

☐MCHS ☐RHS ✅SHCC	177001	Ground Transportation Engine and Power Trains
☐MCHS ☐RHS ✅SHCC	177006	Automotive Engineerting Performance
☐MCHS ☐RHS ✅SHCC	177030	Automotive Braking System
☐MCHS ☐RHS ✅SHCC	177031	Automotive Steering and Suspension Systems
☐MCHS ☐RHS ✅SHCC	010225	Hydraulics & Pneumatics
☐MCHS ☐RHS ✅SHCC	177002	Ground Transportation Electrical/Electronics
☐MCHS ☐RHS ✅SHCC	177023	Transportation Capstone

Ground Transportation Maintenance
Subject Code: 177000
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

In this first course, students will apply skills needed to inspect and perform general service on vehicles. Students will research applicable service information and technical service bulletins and perform maintenance on vehicles. Students will inspect and service engine, drive train, suspension, steering, electrical and braking systems. Students will perform ignition maintenance including spark plug/glow plug and ignition wire and coil pack replacement. Additionally, students change fluids, filters and inspect vehicles for leaks and fluid condition.

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program.
2. Successfully complete secondary course and earn a qualifying score on the end of course examination

Ground Transportation Engine and Power Train
Subject Code: 177001
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students will inspect, adjust and repair internal combustion engines and drivetrain. Topics include physical and mechanical principles of engines, transmissions and transaxles,

differentials and cooling systems. Students will learn precision measurement, inspection, and reconditioning techniques. Students will also identify customer's needs, determine labor rates, and create estimates.

Ground Transportation Electrical/Electronics
Subject Code: 177002
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Student will diagnose and repair vehicle electrical systems, including chassis electrical, charging, starting and lighting systems. Students will learn the fundamentals of direct current (DC) electronics including series, parallel, and series-parallel circuits. Students will use electronic diagnostic tools, read schematics, and use printed and electronic resources to troubleshoot electrical circuits, test components and replace defective modules.

Automotive Engine Performance
Subject Code: 177006
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students will research vehicle service histories using model specific service bulletins. Students will test and diagnose for engine performance in fuel, air induction and exhaust systems using advanced testing procedures. Topics include computerized engine controls including retrieving and recording diagnostic trouble codes using On Board Diagnostics (OBD). Additionally, students will diagnose drivability and emissions problems resulting from malfunctions of interrelated systems.

Automotive Brake Systems
Subject Code: 177030
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students will perform inspections, troubleshoot malfunctions and service automotive brake systems. Students will identify poor performing hydraulic brake systems and replace malfunctioning components. Additionally, students will disable and enable supplemental restraint systems (SRS) and replace antilock brake systems components.

Automotive Steering and Suspension Systems
Subject Code: 177031
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students will perform inspections, troubleshoot malfunctions and service automotive

undercarriage systems. Students will install coil and leaf springs, shock absorbers and struts, and replace wheel bearings. Students will inspect and replace automotive steering components and perform wheel alignments.

Hydraulics and Pneumatics
Course Code: 010225
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program
2. Successfully complete secondary course and earn a qualifying score of 61 or higher on the corresponding End of Course examination

Students will learn to diagnose, repair and rebuild hydraulic systems and their components. Students will learn the physical and mechanical principles of both hydraulic and hydrostatic operating units. Topics include testing system components and properly maintaining hydraulic and hydrostatic circuits. Students will demonstrate contamination control and system cleanliness in both hydraulic and hydrostatic operating systems. Throughout the course, site and personal safety procedures and business practices are reinforced.

Transportation Capstone
Subject Code: 177023
GRADE OFFERING ☐9 ☐10 ☐11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in Transportation program in a more comprehensive and authentic way. Capstones often include project/problem-based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.

HEALTH SCIENCE
CAREER FIELD PATHWAY & COURSES

The Health Science Career Field prepares students for careers in Allied Health and Nursing, Exercise Science and Sports Medicine, Health Information Management and Medical Bioscience.

Allied Health and Nursing Pathway

Allied Health and Nursing program areas will prepare students with the mathematics, science and technical skills to provide clinical assistance in patient care, emergency interventions (CPR, first-aid, AED), nutrition, dentistry and surgery.

Careers for which this pathway prepares students include:

Dental Assistant
Patient Care Assistant
Licensed Practical Nurse (LPN)
Pharmacy Aide/Technician
Medical Assistant
Surgical Technician
Nurse Aide (including STNA)
Respiratory Technician
Phlebotomist
Optometry

Postsecondary majors for which this pathway prepares students include:

Clinical Nutrition
Community Health and Preventative Medicine
Occupational Health and Industrial Hygiene
Dental Laboratory Technology
Optics/Optical Sciences
Health Care Administration
Gerontology
Licensed Practical Nurse Training
Register Nursing
Surgical Technology

Allied Health and Nursing (JM)

☐MCHS ☐RHS ✅SHCC	072001	Health Science Technology
☐MCHS ☐RHS ✅SHCC	072015	Nutrition and Wellness
☐MCHS ☐RHS ✅SHCC	072040	Human Anatomy
☐MCHS ☐RHS ✅SHCC	072050	Patient Centered Care
☐MCHS ☐RHS ✅SHCC	072055	Patient Centered Care and Diagnostics
☐MCHS ☐RHS ✅SHCC	072060	Lifespan Development
☐MCHS ☐RHS ✅SHCC	072100	Clinical Laboratory Techniques
☐MCHS ☐RHS ✅SHCC	072150	Medical Terminology
☐MCHS ☐RHS ✅SHCC	072105	Health Science Capstone
☐MCHS ☐RHS ✅SHCC	072035	Principles of Allied Health

☐MCHS ☐RHS ✅SHCC	BCAHT1000	Intro to Health Profession
☐MCHS ☐RHS ✅SHCC	BCBIO2110	A & P I with lab
☐MCHS ☐RHS ✅SHCC	BCLAB1110	Basic Lab Tech
☐MCHS ☐RHS ✅SHCC	BCPSY1130	Human Development
☐MCHS ☐RHS ✅SHCC	BCNUT1110	Normal Nutrition

Patient Centered Care
Subject Code: 072050
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students will apply psychomotor nursing skills needed to assist individuals in meeting basic human needs. Students will implement interventions following a nursing assistant plan of care. Students will collect the patient's vital signs including temperature, pulse rate, respiration rate, and blood pressure. Students will perform phlebotomy procedures with emphasis on infection prevention, universal precautions, proper patient identification, specimen acquisition, handling, and processing. Additionally, students will observe patients' physical, mental, and emotional conditions and document any change.

Principles of Allied Health
Subject Code: 072035
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

In this first course students will apply knowledge and clinical skills necessary to assess, plan, provide, and evaluate care to patients in varied healthcare settings. Students will apply first aid principles and techniques needed for response to choking, cardiopulmonary resuscitation, and other life-threatening emergencies. Emphasis will be placed on regulatory compliance, patient safety, pathophysiology, and medical interventions. Additionally, this course introduces psychomotor skills needed to assist individuals in meeting basic human needs.

Patient Centered Care and Diagnostics
Subject Code: 072055
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

In this course, students establish and implement treatment plans while providing primary nursing care. Topics include pharmacology, phlebotomy, mental health nursing and acute care nursing. Students use diagnostic techniques to develop patient health assessments. Emphasis is placed on the synthesis of information gathered through health history, observation, and the detection of

deviations and variations from normal physical characteristics. In addition, students learn the legal and ethical principles needed to function within the scope of practice.

Lifespan Development and Medical Intervention
Subject Code: 072060
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students gain necessary skills and knowledge to meet the needs of individuals from infancy through the human life cycle in a safe, legal, and ethical manner using the nursing process. Topics include physical, psychological, and cultural variations associated with maturing and aging. Emphasis will be placed on regulatory compliance, patient assessment, patient safety, and medical interventions. Additionally, students use psychomotor nursing skills to assist in day-to-day patient care activities.

Clinical Laboratory Techniques
Subject Code: 072100
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program.
2. Successfully complete secondary course and earn a qualifying score of 60 or higher on the End of Course examination

Students will apply practical application of a wide range of clinical duties. Topics covered will include hematology, urinalysis, hematopoiesis processes, body chemistry, microbiology, and blood typing. Students will perform laboratory exercises illustrating principles of the cell and human physiology. Emphasis is given to safe handling, collection procedures, and preparation of specimens. Additionally, students will correlate and document clinical findings and maintain quality management in a clinical laboratory.

Health Science Capstone
Subject Code: 072105
GRADE OFFERING ☐9 ☐10 ☐11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in the Health Sciences program in a more comprehensive and authentic way. Capstones often include project/problem based learning opportunities that occur both in and

away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.

Nutrition and Wellness
Subject Code: 072015
GRADE OFFERING ☐9 ☐10 ☐11 ☐12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students will increase their knowledge of comprehensive health and wellness. Students will be able to identify the components of fitness and communicate the relationship between physical fitness, physical performance, injury prevention, and nutritional intake. Students will evaluate an individual's state of nutrition based upon the impact of personal choices and social, scientific, psychological and environmental influences. Further, students will calculate an individual's kilocalorie burn rate and recommend an ideal diet and physical fitness plan.

Medical Terminology
Subject Code: 072150
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program
2. Successfully complete secondary course and earn a qualifying score of 60 or higher on the End of Course examination.

This course focuses on the applications of the rules for constructing and defining medical terms with an emphasis on building a working medical vocabulary. Topics include using the appropriate abbreviations and symbols for anatomical, physiological and pathological classifications and the associated medical specialties and procedures. Students will decipher medical terms by identifying and using word elements with an emphasis on derivation, meaning, and pronunciation. Further, students will interpret and translate medical records and documents.

Human Anatomy and Physiology
Subject Code: 072040
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ✅RHS ✅SHCC

In this course, students will demonstrate knowledge of body systems with emphasis on the interrelationships between structure and physical function. Students will analyze and evaluate how the body systems respond to physical activity, disease, and aging. Students will use data acquisition software to monitor abnormal physiology and body functions (e.g., muscle

movement, reflex, respiratory, and voluntary actions). Further, students will analyze descriptive results of abnormal physiology and evaluate clinical consequences.

Health Science and Technology
Subject Code: 072001
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

This first course in the career field provides students an overview of the opportunities available in the healthcare industry. Students will learn fundamental skills in effective and safe patient care that can be applied across a person's lifespan. They will also be introduced to exercise science and sports medicine, the field of biomedical research and the importance of managing health information.

Health Science Capstone
Subject Code: 072105
GRADE OFFERING ✅9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ✅SHCC

Students enrolled in this class must also be enrolled in one of the other Health Science Career Field courses.

The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in the Health Sciences program in a more comprehensive and authentic way. Capstones often include project/problem based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.

HOSPITALITY
CAREER FIELD PATHWAY & COURSES

The Hospitality and Tourism Career Field prepares students for careers in various hospitality and tourism disciplines across a variety of industries important to the economic vitality of the State of Ohio. Students may also pursue entrepreneurship within a specific discipline.

Culinary and Foodservice Operations Pathway
Educational programs in culinary and foodservice operations prepare learners for careers in the art and science of food preparation and presentation as well as the skills needed for restaurant management.

Careers for which this pathway prepares students include:

Banquet Setup Employee
Caterer
Catering and Banquet Manager
Executive Chef
Food and Beverage Manager
Line Cook Pastry and Specialty Chef
Personal Chef
Restaurant Manager
Restaurant Owner
Sous Chef

Postsecondary majors for which this pathway prepares students include:
Catering
Culinary Arts
Culinary Science Technology
Hospitality Management
Restaurant and Foodservice Management
Restaurant Owner

Culinary and Food Service Operations (L0)

☐MCHS ☐RHS ✅SHCC	330025	Catering and Banquest Service
☐MCHS ☐RHS ✅SHCC	330105	Contemporary Cuisine
☐MCHS ☐RHS ✅SHCC	330110	Dining Room Service and Operation
☐MCHS ☐RHS ✅SHCC	330000	Hospitality Fundamentals
☐MCHS ☐RHS ✅SHCC	330100	Fundamentals of Food Production
☐MCHS ☐RHS ✅SHCC	330120	Restaurant Management
☐MCHS ☐RHS ✅SHCC	330125	Baking & Pastry Arts

Hospitality Fundamentals
Subject Code: 330000
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ✅MCHS ☐RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program
2. Successfully complete secondary course and earn a qualifying score of 68 or higher on the corresponding End of Course examination to earn 2 semesters of college credit.

This first course in the career field will introduce students to culinary arts, foodservice operations, lodging, travel and tourism. Students will obtain knowledge of customer service principles and examine the impact of cultural, historical, social and technological developments on key segments of the industry. They will also apply safety and sanitation techniques to prevent

and control injuries, illnesses and diseases in the workplace. Business law, employability skills, leadership and communications will be addressed.

Catering and Banquet Service Operations
Subject Code: 330025
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students will design and manage catering and banquet operations. They will recommend types of food functions and food-and-beverage services to clients, create menus for special occasions and events, and determine financial requirements. Students will hire, train, and supervise staff; manage event logistics, operations and service providers; and oversee dining room operations. Customer service; food, equipment and site safety; and high-volume food production will also be addressed.

Fundamentals of Food Production
Subject Code: 330100
GRADE OFFERING ☐9 ✅10 ✅11 ☐12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

3. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program
4. Successfully complete secondary course and earn a qualifying score of 76 or higher on the corresponding End of Course examination to earn 4 semesters of college credit.
5. Students must hold a current ServSafe® Manager Certification offered through the National Restaurant Association (NRA) for an additional 2 semester hours of college credit.

Students will prepare food products and beverages according to standardized recipes. They will apply plating and presentation principles to deliver attractive menu items, establish food specifications and prep lists, and develop ingredient and portion control guides. Safety and sanitation, standard knife skills, and culinary math will be emphasized. Employability skills, leadership and communications will also be incorporated.

Contemporary Cuisine
Subject Code: 330105
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program
2. Students must hold a current ServSafe® Manager Certification offered through the National Restaurant Association (NRA) for an additional 2 semester hours of college credit.

Students will prepare regional and international food products and beverages according to standardized recipes. They will research and develop marketable new recipes, plan and design menus, and calculate food requirements and costs. Selection, use, maintenance and storage of commercial equipment, machines, tools and tableware will be emphasized. Food science, inventory management, food presentation, and safety and sanitation will also be addressed.

Dining Room Service and Operations
Subject Code: 330110
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students will apply strategies and techniques to identify and meet dining guest needs. They will provide table and beverage service; maintain eating areas, meeting spaces and serving stations; manage online reservations and orders; and monitor table turns, wait lines and table assignments. Nutritional analysis, types of table service, safety and sanitation, cultural intelligence, employability skills and communications will also be addressed.

Restaurant Management
Subject Code: 330120
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:
1. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program
2. Successfully complete secondary course and earn a qualifying score of 66 or higher on the corresponding End of Course examination
3. Students must hold a current ServSafe® Manager Certification offered through the National Restaurant Association (NRA) for an additional 2 semester hours of college credit.

Students will apply management principles to plan, organize and direct restaurant staff toward goal achievement. They will hire, train, and supervise employees; establish processes to facilitate restaurant operations; and plan and design menus. Students will also forecast and schedule food production, establish food specifications, select vendors, calculate costs, and purchase food and nonfood products. Other topics include food science, nutritional analysis, business law and ethics, economics and marketing.

Baking and Pastry Arts
Subject Code: 330125
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program
2. Students must hold a current ServSafe® Manager Certification offered through the National Restaurant Association (NRA) for an additional 2 semester hours of college credit.
3. Successfully complete secondary course and earn a qualifying score of 70 or higher on the corresponding End of Course examination

Students will apply food-science principles to prepare and bake breads, desserts and pastries. They will also use specialized decorating and presentation techniques to decorate cakes, cookies, pastries, and other baked goods. Students will select quality ingredients, determine food costs, and research and develop marketable new recipes and food concepts. Personal safety, food safety, and equipment safety will be emphasized.

Hospitality and Tourism Capstone
Subject Code: 330130
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in the program in a more comprehensive and authentic way. Capstones often include project/problem based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.

HUMAN SERVICE
CAREER FIELD PATHWAY & COURSES

Pathway Cosmetology and Barbering Pathway

Students interested in personal care services will apply the skills and knowledge they learn to enhance clients' personal and professional images through physical and personal appearance services. Services will include but are not limited to, hair design and styling, skin and nail care.

Cosmetology (M1)

☐MCHS ☐RHS ✅SHCC	174125	Fundamentals Hair Cutting
☐MCHS ☐RHS ✅SHCC	174130	Advance Hairstyling
☐MCHS ☐RHS ✅SHCC	174135	Fundamentals Chemical Services
☐MCHS ☐RHS ✅SHCC	174145	Hand and Foot Care
☐MCHS ☐RHS ✅SHCC	174010	Human Service Capstone

Fundamentals of Hair Cutting and Styling
Subject Code: 174125
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students will learn basic shampooing, conditioning and haircutting including trimming, wet styling and thermal styling techniques when working with natural and synthetic hair. Students will also learn infection control and safety along with the science of ergonomics.

Advanced Hair Cutting and Styling
Subject Code: 174130
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students will learn advanced cutting and formal styling using specialized equipment and techniques. This course offers enhanced training in current trends and razor techniques.

Fundamentals of Chemical Services
Subject Code: 174135
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students will apply basic skills, knowledge, and safety practices when giving permanent/chemical waves, curl re-forming, chemical relaxers and hair color techniques to include tinting, highlighting, bleaching, and foiling.

Hand & Foot Treatment Fundamentals and Enhancements
Subject Code: 174145
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students will learn the knowledge and skills to perform both manicures and pedicures. They will learn how to maintain personal hygiene and infection control. Students will give plain/oil manicures, pedicures, and hand/arm & foot/leg massages. Enhanced hand and foot treatments using specialized products and techniques will be performed.

Human Services Capstone
Subject Code: 174010
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in Human Resources programs in a more comprehensive and authentic way. Capstones often include project/problem-based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.

LAW & PUBLIC SAFETY
CAREER FIELD PATHWAY & COURSES

Technical and professional level careers in judicial, legal, public administration, public safety and protective services and homeland security including public planning, emergency management planning, fire protection, emergency medical services and the criminal justice system.

The Law and Public Safety Career Field prepares students for careers protecting lives and property in the areas of law enforcement, private security, corrections, firefighting and the emergency medical service.

Criminal Justice

Criminal Justice program areas will prepare students for careers in law enforcement, private security and corrections. Students will gain the necessary technical and academic skills to protect lives and property through crime prevention, detection and investigation.

Careers for which this pathway prepares students include:
Crime Lab Technician Police Officer
Corrections Officer Security Officer

Postsecondary majors for which this pathway prepares students include:
Criminal Justice/Law Enforcement Administration

Criminology
Crisis/Emergency/Disaster Management
Forensic Psychology
Forensic Science and Technology
Homeland Security
Pre-Law Studies
Security and Loss Prevention Services

Criminal Justice (P1)

☐MCHS ☐RHS ✅SHCC	170912	Security and Protective Services
☐MCHS ☐RHS ✅SHCC	170914	Investigation and Forensics
☐MCHS ☐RHS ✅SHCC	170916	Homeland Security Protecting
☐MCHS ☐RHS ✅SHCC	170911	American Criminal Justice Syst
☐MCHS ☐RHS ✅SHCC	170913	Police Work & Practice in Public Safety
☐MCHS ☐RHS ✅SHCC	170915	Correctional System & Services
☐MCHS ☐RHS ✅SHCC	072040	Human Anatomy
☐MCHS ☐RHS ✅SHCC	072150	Medical Terminology

Homeland Security Protecting America's Critical Infrastructure
Subject Code: 170916
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

In Homeland Security, students will learn techniques to secure and protect America's people and infrastructure from natural and manmade disasters. Students will look at a range of issues including cyber security, intelligence gathering, and local emergency planning that can be applied in their own community. Students will also learn to manage critical incidents through training in National Incident Management and the Incident Command System. Students will complete multiple FEMA certifications in this course.

The American Criminal Justice System
Subject Code: 170911
GRADE OFFERING ☐9 ✅10 ✅11 ☐12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

This first course in the Criminal Justice pathway traces the history, organization, and functions of local, state, and federal law enforcement. Students will study criminal behavior and apply constitutional and criminal law to crime and punishment. Students will learn law enforcement terminology, classifications and elements of crime, and how various court systems are used to judge and punish offenders.

Security and Protective Services
Subject Code: 170912
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Private Security is an ever-expanding industry that requires trained professionals that can detect, deter, and investigate crime. The course focuses on private security measures used to protect lives, property, and proprietary information. Students completing the Ohio Peace Officer Training Academy Private Security curriculum provided by an approved instructor will be eligible to sit for the OPOTA certification exam as a private security guard.

Police Work and Practice in Public Safety
Subject Code: 170913
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

In this course, students will learn the skills necessary to prevent, detect and react to crime. Students will learn self-defense and subject control techniques, methods to conduct patrols, surveillance, and traffic procedures. Students will understand the ethical and legal responsibilities of police officers on patrol. Additionally, students will learn the operations of police and emergency telecommunication systems.

Investigations and Forensics in Criminal Investigations
Subject Code: 170914
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Forensic Science uses a structured and scientific approach to the investigation of crimes including assault, abuse and neglect, domestic violence, accidental death and homicide. Students will learn the psychology of criminal behavior and apply it to investigative procedures. Students

will collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis, ballistics, and blood spatter analysis.

The Correctional System and Services
Subject Code: 170915
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

The correctional officer plays a critical role in the criminal justice system. In this course students will learn institutional rehabilitation and community corrections strategies that prepare them for work in a correctional setting. The student will learn the role and responsibilities of a correctional officer including processing inmates, maintaining security in a correctional setting, and understanding inmate mental health needs.

Law and Public Safety Capstone
Subject Code: 170346
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

The course provides opportunities for students to apply knowledge, attitudes and skills that were learned in Law and Public Safety in a more comprehensive and authentic way. Capstones often include project/problem based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.

MANUFACTURING
CAREER FIELD PATHWAY & COURSES

Metallurgy (Welding) (R8)

☐MCHS ☐RHS ✅SHCC	176000	Gas Metal Arc Welding
☐MCHS ☐RHS ✅SHCC	176007	Computer Numerical Control
☐MCHS ☐RHS ✅SHCC	176001	Shielded Metal Arc Welding

☐MCHS ☐RHS ✅SHCC	176015	Welding Fabrication

Gas Metal Arc Welding
Course Code: 176000
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ✅SHCC

Students will use the Gas Metal Arc Welding process (GMAW) to safely join various types of metal. They will cut metals using oxy-fuel processes and perform multiple types of welds and joints in all positions, up to and including overhead. They will select the appropriate type of electrode wire and shielding gas, and they will adjust welding equipment based on the physical characteristics and metal properties. Students will apply quality control factors to evaluate weld quality.

Gas Tungsten Arc Welding
Course Code: 176003
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ✅SHCC

Students will use the Gas Tungsten Arc Welding process (GTAW) to safely join various types of metal. They will perform multiple types of welds and joints in all positions, up to and including overhead. They will select the appropriate type of electrode, filler metal and shielding gas. They will be able to adjust welding equipment based on the physical characteristics and properties of the metal. Students will apply quality control factors to evaluate weld quality.

Shielded Metal Arc Welding
Course Code: 176001
GRADE OFFERING ☐9 ☒10 ☒11 ☒12
BUILDING OFFERING ☐MCHS ☐RHS ☒SHCC

Students will be able to use the Shielded Metal Arc Welding process (SMAW) to safely join various types of metal. They will perform multiple types of welds and joints in all positions, up to and including overhead. They will select the appropriate type of electrode and adjust welding equipment based on the physical characteristics and properties of the metal. Students will apply quality control factors to evaluate the quality of welds.

Welding Fabrication
CourseCode: 176015
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students will apply the knowledge and skills necessary to safely fabricate parts by cutting, drilling, bending, shaping, forming, edging and assembling stock to drawing dimensions. Students will identify weld types, fasteners and adhesives to join materials.

Advanced Manufacturing (R9)

☐MCHS ☐RHS ✅SHCC	175003	Manufacturing Operations
☐MCHS ☐RHS ✅SHCC	176007	CNC Programming and Machining
☐MCHS ☐RHS ✅SHCC	176025	Industrial Robotics
☐MCHS ☐RHS ✅SHCC	176035	Principles of Advanced Manufacturing
☐MCHS ☐RHS ✅SHCC	175006	Computer Aided Drafting and Modeling
☐MCHS ☐RHS ✅SHCC	176008	Manufacturing Capstone

Manufacturing Operations
Course Code: 175003
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Successfully completed the course.
2. Matriculate to an institution of higher education with an approved or comparable course no later than 3 years after completing the approved secondary program.
3. Earn a passing score on the end of course exam.

Students will learn the production processes applied across manufacturing operations. Students will be able to demonstrate a broad array of technical skills with an emphasis given to quality practices, measurement, maintenance and safety.

Computer Aided Drafting and Modeling (previously - Computer Integrated Manufacturing)
Course Code: 175006M
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ✅RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

1. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program

2. Successfully complete secondary course and earn a qualifying score of 60 or higher on the corresponding End of Course examination

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

CNC Programming and Machining (previously, Computer Numerical Control Technology with Industrial Mills and Lathes)
Course Code: 176007
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access
college credit for this course:

1. Successfully completed the course.
2. Matriculate to an institution of higher education with an approved or comparable course no later than 3 years after completing the approved secondary program.
3. Earn a passing score on the end of course exam.

In this course, students will use computer numerical control (CNC) programming to mill products comprised of various materials. Students will prepare numerical control programs in positioning systems using standard industrial G and M codes. They will program computerized numerical control mills and lathes.

Principles of Advanced Manufacturing
Course Code: 176035
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

3. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program
4. Successfully complete secondary course and earn a qualifying score of 61 or higher on the corresponding End of Course examination
5.

This course introduces students to modern manufacturing organizations, technology, business systems, and problem solving. Provides the fundamentals of Lean Manufacturing, Quality Systems and Statistical Process Control, documentation and standard operating procedures, concepts in measurement, geometric dimensioning and tolerancing, visualization and graphics.

Manufacturing Capstone
Subject Code: 176008
GRADE OFFERING ☐9 ☐10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in a Manufacturing program in a more comprehensive and authentic way. Capstones often include project/problem based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.

MARITIME
CAREER FIELD PATHWAY & COURSES

Students enrolled in the Innovative Pathway for Maritime will complete coursework from the Construction Trades, Manufacturing (Welding), and Transportation. The last grading period of the senior year, students will enroll in the Maritime Deckhand training course to earn a Deckhand Certification through Mountwest Community College.

Maritime Occupations I
Subject Code: 170801A - Level 1
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Introduction to deckhand responsibilities. Orientation with the basic rules of the road, safety regulations, basic knot tying and procedures. This course also deals with basic boat systems, requirements of the U. S. Coast Guard on inland waterways. The course is also an introduction to Deckhand Training and the basic requirements while on deck. This course also includes fire training, man overboard, incapacitation drills and sinking and flooding drills.

Maritime Occupation II
Subject Code: 170801B - Level 2
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

This course deals with a more in-depth look at the Deckhand component. Components such as rigging, throwing lines, tying off barge to shore and barge to barge are instructed. This course

will utilize the concept of lead man on the deck. This will be a teaching component of students under the direction of the instructor. The course will expand upon previous trainings required by the U. S. Coast Guard from Maritime Occupations I.

Hydraulics and Pneumatics
Course Code: 010225
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Student Requirements for CTAG Credit: The following steps must occur for secondary students to access college credit for this course:

6. Matriculate to an institution of higher education with an approved or comparable program within 3 years after completing the approved secondary program
7. Successfully complete secondary course and earn a qualifying score of 61 or higher on the corresponding End of Course examination

Students will learn to diagnose, repair and rebuild hydraulic systems and their components. Students will learn the physical and mechanical principles of both hydraulic and hydrostatic operating units. Topics include testing system components and properly maintaining hydraulic and hydrostatic circuits. Students will demonstrate contamination control and system cleanliness in both hydraulic and hydrostatic operating systems. Throughout the course, site and personal safety procedures and business practices are reinforced.

AC Electronic Circuits
Course Code: 175100
GRADE OFFERING ☐9 ☐10 ☐11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students will learn the fundamental principles of electricity with emphasis on AC (alternating current) circuits. They will use concepts of Ohm's Law, the Power Formula and Kirchhoff's Law with series, parallel and series-parallel circuit applications. The relationship between electricity and magnetism and motor theory will also be introduced. The student will master electrical safety, breadboard wiring, basic circuit troubleshooting, operation of function generator, digital multimeter (DMM) and oscilloscope.

Heavy Equipment Operations
Subject Code: 178026
GRADE OFFERING ☐9 ✅10 ✅11 ✅12
BUILDING OFFERING ☐MCHS ☐RHS ✅SHCC

Students perform heavy equipment operating techniques and perform operator level maintenance. Students will learn to survey using lasers, transits and machine control systems.

Additionally, students learn the techniques and processes for clearing, grubbing, stripping, excavating, backfilling, stockpiling, and cutting and spreading of fill material. Throughout the course, safety is emphasized.