

**Canal Winchester  
High School  
Academic Handbook  
& Course Offerings  
2021-22**



**Canal Winchester**  
LOCAL SCHOOLS

# Preparing for the Future

Dear Students and Parents,

The Canal Winchester High School Academic Handbook provides information to assist in choosing courses to meet graduation requirements and to prepare for possible career pathways after high school.

We encourage students to take the time to look over the course offerings and engage in discussion with your parents about preparing for a future after graduation. High school is a time for not only completing necessary graduation courses, but also exploring different areas of interest. Students should choose courses that will be challenging and lay the groundwork for college or a career after high school. Please talk with your teachers, school counselors, and principals about your goals for the future and the courses needed to reach those goals.

Changes have been made to course offerings to align with new state graduation and testing requirements. In addition, the high school is offering courses geared towards specific career pathways after high school.

Please refer to the information provided in this handbook to check your progress and to stay on track for meeting the graduation requirements.

Our goal is for each student to be prepared for their future after high school, whether that is college or career. If you have questions, don't hesitate to contact one of our staff members.

Sincerely,  
The Canal Winchester High School Staff

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**Canal Winchester**  
LOCAL SCHOOLS

## IMPORTANT MESSAGE for 2021-22 School Year

**Be sure to understand the course delivery method available for the course you are looking to take. Not all classes are offered in every method.**

High School Course Delivery Methods:

- **S (Single)** Traditional face to face class approximately 45 minutes and meets every school day
- **B (Block)** Class meets 2x per week face to face for longer class periods
- **O (Online)** Created by CW teachers using CW curriculum and Canvas; will be asynchronous (no live teaching) but will have strict due dates throughout course; students may be required to come in for assessments

For Online and Web-Based courses students will **NOT** be scheduled into a class period, but will complete the course independently and possibly outside of the normal school day. Students should consider time management skills and ability to work without supervision before signing up for this type of course. Online courses will allow students to take additional classes they may not originally have been able to fit into their schedule. *\*Please realize that all course sections are built on student scheduling requests and preferred delivery methods may not always be available.*

CWOLA (Canal Winchester Online Learning Academy) was created out of necessity for the 20-21 school year due to the Covid-19 pandemic. Canal Winchester will still continue to offer a complete 100% online format that may include CW teacher created courses as well as purchased digital curriculum. Students interested in a full-online learning schedule will need to complete this **ONLINE FORM** (also on HS webpage) to be reviewed by HS Administration for approval and will be contacted by their assigned counselor prior to scheduling for approval and support in creating a schedule for the 21-22 school year.

## Current High School Students

School counselors will meet with students by grade level in late January/early February to discuss curriculum/graduation requirements and the course offerings. Students will then work with their teachers and families to create a meaningful schedule with supervision from the school counseling office. Students will have an open enrollment window to register for classes in PowerSchool. A student or parent may contact the counseling office to make an appointment with his/her school counselor to discuss class schedule. Parent signature will be REQUIRED on final copy of scheduled classes sent home with student in May. If student does not submit a schedule one will be created for student. No class changes after June 1st.

## Current 8th Grade Students

For current 8th grade students, school counselors will meet with 8th grade students in late January/Early February to discuss scheduling and a parent meeting will also be offered at that time. Students will work with their current counselor/teachers and family to create a schedule. Parent signature will be REQUIRED on final copy of requested classes sent home with student in May. If students fail to return a signed scheduling sheet, a schedule will be created for them. If a student or parent would like to meet with a high school counselor to discuss his/her schedule, please contact the counseling office for an available time.

## SCHEDULING PROCESS

Students are provided scheduling information in February to schedule courses for the following school year. Students and families should explore the Course Offerings Handbook online for all possible selections. Students will have an open enrollment window to register for classes in PowerSchool. A final paper copy of classes requested will be sent home with student in May. This is NOT the actual schedule, just confirming the courses (with alternates) selected by the student. Parent signature will be REQUIRED on final copy of scheduled classes sent home with student in May. **Schedule changes will NOT be made after June 1st.** Course offerings are subject to change.

## CHANGE IN COURSE OFFERINGS

Course offerings may be eliminated due to insufficient enrollment. Students should sign up for additional classes on the scheduling sheet. Should this occur, one of the alternates will be scheduled.

## GUIDELINES FOR SCHEDULE CHANGES

Any changes in a student's schedule must be handled through the counseling department. It is important to realize that our master schedule is based upon the student requests made in February. In May, a verification of course selection will be sent home. Students should contact their counselor at that time if a change is requested. In order to be fiscally responsible, the number of class sections within each subject area is based on these projections. These requests also dictate new teacher hires during the summer. **Schedule changes will NOT be made after June 1st.** (Exceptions: computer error; semester imbalances, replacement of summer school course(s) successfully completed, schedule changes for extra-educational options approved by the administration, and adjustments for handicapped students.) Schedules are provided to each student at the beginning of the school year or upon enrolling. The schedule is based on student needs and available class space. It is important to note that some courses may be denied because of available space or the need to take prerequisites. Once the new school year has started, please follow the dates listed on the Guidance website for schedule changes and dropping a course.

## STUDY HALL

Study hall may be taken, simply note on your scheduling form that you would like either a year or semester study hall. If your schedule is not filled completely counselors may fill with a study hall. A student may not schedule more than ONE study hall per semester. (Seniors qualifying for early release may also take a study hall)

## SCHEDULING TIPS

- Please use the directions for PowerSchool
- Students should rank their elective classes and provide alternates that will be scheduled, based on space, if the initial classes requested are not offered, are full, or are in conflict with each other.
- All students must be enrolled in six classes per semester
- A student may not schedule more than ONE study hall per semester. (Seniors qualifying for early release may also take a study hall)
- Students with graduation requirements to meet have preference in all classes.
- All yearly subjects are passed or failed on the basis of the final yearly grade. Semester subjects are passed or failed on the basis of the final semester grade.
- It is highly recommended for student athletes to take 6 courses per semester (not including a study hall).

## DROPPING A COURSE

Only upon approval of a counselor and the course teacher may a class be dropped for academic reasons. A year-long or semester subject may be dropped prior to the end of the first two weeks of school as long as dropping the class will keep the appropriate number of classes in the student's schedule. If the subject is dropped after that time, the individual receives an "F" for a final grade.

## CREDIT RECOVERY

Should a student have a credit deficiency and need to recover enough credits to graduate, the Canal Winchester School District offers an online program through TRECA. This program allows students to catch up on courses needed to graduate high school. Classes are conducted at school during the regular school day. Although the courses are completed online, a facilitator is present to keep students on track. Permission and placement into TRECA must be granted by a principal. Courses completed through TRECA may not be accepted by the NCAA.

## EARNED CREDITS FOR STUDENT CLASSIFICATION

GRADES 9-12 Students are promoted by the number of credits they have cumulatively earned.

Sophomores 5 credits

Juniors 10 credits

Seniors 15 credits

To Graduates 21 credits

## COURSE RETAKE OPTION

Students who have earned credit in a course, but with a grade of "D", may retake the course for the opportunity to improve the grade.

This is especially encouraged in situations where a grade of "C" or higher is necessary in order to advance in a developmental sequence. \*\*Both course experiences will be indicated on the transcript, but with only the second grade, whether higher or lower, being figured into the cumulative grade point average.

Students enrolled in a class under the grade improvement policy must adhere to the same deadlines for adding or dropping those classes as are established for all other classes, with the same penalties for non-compliance.

Courses repeated must be taken in sequence, ex. a student who has successfully completed Algebra 2 cannot then repeat Algebra 1 under the grade improvement policy.

This will only apply to courses taken during the regular school year, not to courses retaken in summer school.

All teachers involved must give approval to the use of the grade improvement policy in each specific instance.

## GRADES

CWHS has a standard grading procedure, as well as additional notations that may indicate work in progress or incomplete work. The purpose of a grade is to indicate the extent to which the student has acquired learning. In general, students are assigned grades based upon test results, homework, projects and classroom participation. Each teacher may place a different emphasis on these areas in determining a grade and will so inform the students at the beginning of the course. If a student is not sure how grades will be determined, s/he should ask the teacher. The grading scale is as follows:

Percent	Letter Grade	GPA Scale
93-100	A	4.0
90-92	A-	3.7
87-89	B+	3.3
83-86	B	3.0
80-82	B-	2.7
77-79	C+	2.3
73-76	C	2.0
70-72	C-	1.7
67-69	D+	1.3
63-66	D	1.0
60-62	D-	0.7
0-59	F	0.0

Students who earn a C or higher in an Advanced Placement course (one taken at Canal Winchester High School that has been approved through the College Board Course Audit review process) OR a College Credit Plus Course will have .025 points added (per class) onto their cumulative GPA at the conclusion of the school year. For the graduating class, a straight numeric rank will be used for end of the year honors. Senior recognition will be based on grades, grade point average, and ACT/SAT scores at the end of the seventh semester.

## SCHOLASTIC HONOR ROLL

Students with a 3.0 GPA for the semester (not quarter) grading period will be placed on the scholastic honor roll.

## FLEX CREDIT

Credit Flexibility was established as an opportunity for students to create unique learning situations allowing them to demonstrate their understanding and skills according to their individual learning styles and experiences. The Credit Flex option applies to any coursework, assessment or performance completed outside of traditional Canal Winchester course offerings. All high school students have the opportunity to submit an application for Credit Flexibility. Students also have the option of taking the Canal Winchester High School Physical Education Flex Credit Study Plan. This plan is offered through Canal Winchester Local Schools only. See counselor for forms.

## VALEDICTORIAN AND SALUTATORIAN

Valedictorian and Salutatorian will be determined by the final average at the end of the third nine weeks during the senior year.

The student with the highest average for four years will be the Valedictorian and the student with the second highest average will be the Salutatorian. Percentage grades will be used to determine the Valedictorian and Salutatorian.

## COMMENCEMENT

It is a privilege, not a right, to participate in commencement exercises. Seniors must meet all local and state requirements, including state mandated proficiency tests in order to participate in the commencement exercise. Additionally, seniors must have paid all fees, fines, and charges, and served all disciplinary assignments before s/he can participate in the commencement exercise.

## EARLY GRADUATION

Seniors desiring to graduate at the end of the first semester must pick up a packet and application from the counseling office. Application must be submitted to the principal no later than the last week of school in their junior year. Those wanting to graduate at end of junior year must apply by May of sophomore year.

To request mid-year graduation, the student must:

- Have earned the required EOC exam points
- Have obtained Senior status (15 credits)
- Have earned 3 Math and 3 English credits

Early graduates are not eligible for valedictorian or salutatorian.

## FEES

Fees are board approved in May and are subject to change. All fees must be paid (including previous years) to receive a diploma.

## CHROMEBOOK PROTECTION FEE

Student may pay an optional protection fee (\$20/year) to cover any damage or loss up to \$150 to assigned Chromebook. Must be paid prior to issue date or pay late fee. No waivers. See Chromebook handbook for details.

## GRADING PERIODS

A report card will be posted in PowerSchool at the end of each 9-week period indicating grades for each academic class. When a student appears to be at risk of failure, notification in a progress report will be provided to the parents so they can talk with the teacher about what actions can be taken to improve poor grades.

## POWERSCHOOL

A student's academic progress is available to students and parents 24/7 through the online PowerSchool, located on the district website



**www.cwschools.org.** Students in grades 6-12 have individual access to the account, and parents may have their own password and access to the student's information. Please go to the website and follow instructions to obtain access codes to set up an account. High school students should be responsible for monitoring grades. When a student appears to be at risk for failure, a notification in a progress report will be provided to the parents so they can talk with the teacher about the actions needed to improve poor grades.

## AP ADVANCED PLACEMENT



The College Board's Advanced Placement courses are college-level classes in a wide variety of subjects that you can take while still in high school. They offer you challenging course work and a taste of what college classes are like. AP courses are for any student who is academically prepared and motivated to take on college-level courses. Students are expected to take the AP Exam at the end of each AP course (May; exam fee \$94) The AP Exam is the final step you take after a year of hard work in an AP class. These standardized exams are designed to measure how well you've mastered the content and skills of the course — a successful score could even earn you credit and advanced placement in college. Teacher recommendation is highly suggested before signing up for AP

## COLLEGE CREDIT PLUS

Eligible students can take a course and earn high school and college credit that appears on both their high school and college transcripts, dual credit. Ohio public school districts and Ohio public colleges and universities must participate in College Credit Plus. Nonpublic high schools and colleges or universities may choose to participate. To be eligible, students must meet the admission standards of the participating college or university to which they apply for enrollment. The student is enrolled in both high school and college and can attend the class in any setting arranged by the college. However if a student fails a College Credit Plus course the student is now responsible for repayment to the district for the costs incurred for enrollment in that course.



A meeting for parents and students will be held each year to provide additional information for those wanting to participate in this program. Please check the counseling website for meeting date.

Dual credit courses are marked by this symbol in our handbook.

Dual credit courses can be any of the following:

- ⇒ Courses taken @ CWHS with a CW Staff instructor 
- ⇒ Courses taken @ CWHS with a college/university instructor
- \*\*The courses listed in this book are all located @ CWHS
- ⇒ Courses taken offsite at a local college campus

Please check the high school webpage COLLEGE CREDIT PLUS tab for full details, forms and additional information.

More info visit Ohio Higher Ed website [www.ohiohighered.org](http://www.ohiohighered.org)

## PATHWAYS

High school courses can give you a head start on a career pathway or provide you with a certificate after the successful completion of courses to give you an advantage when applying for jobs after high school.

Please carefully review the pathways and course requirements in the course offerings before signing up. Per College Credit Plus, an orientation meeting may be required before course work can begin. Courses may be taken as single electives and not as part of the complete pathway. Courses are considered electives and may or may not fulfill the basic English and math requirements needed for graduation. **Pathways** classes are marked by the arrow symbol ➤

### Sample Pathway available at Canal Winchester High School Campus

Student earns 19 semester credits over two years taking CCP courses offered at CWHS.

JUNIOR YEAR	
1 <sup>st</sup> semester	2 <sup>nd</sup> semester
MKTG 1230/BMGT 1008 Business Management & Marketing 457 (5) Composition I ENG 1100 (3)	Composition II ENG 2367 (3)
SENIOR YEAR	
1 <sup>st</sup> semester	2 <sup>nd</sup> semester
College Algebra Math 1148 (4)	Trigonometry Math 1149 (4)

### Sample Pathway available at Columbus State Community College

Student earns 32 semester credits over two years with a combination of courses taken both on the high school and college campus.

JUNIOR YEAR	
1 <sup>st</sup> semester	2 <sup>nd</sup> semester
Composition I ENG 1100 (3)	Composition II ENG 2367 (3)
Computer Concepts & Applications CSCI 1101 (3)	Marketing Principles MKTG 1230 (3)
	Intro to American Government POLS 1100 (3)
SENIOR YEAR	
1 <sup>st</sup> semester	2 <sup>nd</sup> semester
College Algebra Math 1148 (4)	Trigonometry Math 1149 (4)
Intro to Psychology PSY 1100 (3)	Comparative Politics POLS 1200 (3)
	Intro to Sociology SOC 1101 (3)

**NATIONAL HONOR SOCIETY**

National Honor Society membership is an honor awarded to students in a highly competitive process that evaluates the following criteria:

- Scholarship - Must have cumulative GPA of 3.6 on a 4.0 scale
- Service - This involves voluntary contributions made by a student to the school or community, done without compensation.
- Leadership - Student leaders are resourceful, good problem solvers, and idea contributors. Leadership experiences can be drawn from school or community activities while working with or for others.
- Character - The student of good character is cooperative; demonstrates high standards of honesty and reliability; shows courtesy, concern, and respect for others; and generally maintains a clean disciplinary record.

The selection process is as follows:

1. A student must have a mini-mum cumulative GPA of 3.60 to be eligible for NHS. Cumulative GPA includes any high school credit courses taken as a middle school student.
2. A packet that includes NHS expectations, application requirements, and application paperwork will be distributed to eligible students.
3. All required forms must be completed and returned to the NHS advisor by the given dead-line. All deadlines are firm and failure to meet a deadline will result in automatic ineligibility.
4. A completed application must include: -An intent for consideration form, cover letter, academic résumé, three recommendations from non-familial high school teachers or coaches, one recommendation from a non-familial community member, and a completed service hours form.
5. All high school staff will then have the opportunity to evaluate the service, leadership, and character of applicants with whom they have had professional interaction (class, athletics, clubs, activities, etc.).
6. A five-member Faculty Council, who is appointed by the High School administration and re-mains anonymous, will then re-view, with names redacted, all applications, high school staff evaluations, attendance reports, and discipline records to determine selection into NHS.
7. The Faculty Council's decision is final. Council members' identities and all applicant information are kept confidential, before, during and after the process.
8. Non-selected applicants will receive a letter in the mail.
9. Selected applicants will be tapped during school hours. Induction ceremony shall occur approximately one (1) week after tapping.

**REQUIRED to GRADUATE\* (21 CREDITS)**

English	4 credits	
Math	4 credits	
Science (1 life and 1 physical)	3 credits	
Social Studies	3 credits	
World Language	NA	
Visual/Performing Arts	1 credit	VPA
Financial Literacy	.5 credit	
Health	.5 credit	
PE**	.5 credit	**
Electives	4.5 credits	21 credits
Grade Point Average		NA
ACT/SAT Score		NA

\*Additional requirements may be needed for college admissions and/or an Honors diploma

\*\*You may participate in Marching Band and/or Athletics to obtain your required Physical Education credit. (You must complete at least 2 seasons of participation in your four years of high school to meet this substitution requirement)



**ELIGIBILITY STANDARDS FOR ATHLETIC PARTICIPATION**

Eligibility for each grading period is determined by grades received the preceding grading period. In order to be eligible, a student in grades 9-12 must be currently enrolled and must have been enrolled in school the grading period (nine weeks) immediately preceding and must have received a grade point average of 1.65 or higher in that preceding grading period. A student may receive an "F" and still participate as long as his/her GPA is a 1.65 or above.

Additionally, Ohio High School Athletic Association requires the following. In order to be eligible, a student in grades 9-12 must be currently enrolled, must have been enrolled in school the grading period immediately preceding (nine weeks), and must be receiving passing grades during that grading period in subjects that earn a minimum of 5.0 credits per year toward graduation. (OHSAA) **STUDENTS MUST BE PASSING FIVE (5) CLASSES/GRADING PERIOD AND PER SEMESTER WITH A CREDIT VALUE OF .50 OR HIGHER EACH SEMESTER**

- Enrollment in at least six classes, not including P.E., is strongly encouraged for all prospective athletes.
- MIDTERM GRADE CHECKS Eligibility is checked at midterm each grading period. Students must be enrolled in and passing at least five (5) classes with a credit value of .50 or above. Penalty: If a student is found ineligible at the midterm check, s/he will be ineligible for the following week and will be checked weekly thereafter until eligibility is regained.



**NCAA ACADEMIC ELIGIBILITY**

Students considering participating in athletics during enrollment in a college or university need to read the important following information. Student-athletes wishing to participate in NCAA Div. I or Div. II athletics as freshman need to register with the NCAA Eligibility Center.



**www.eligibilitycenter.org**

Student-athletes must meet GPA, standardized test scores (ACT/SAT), and core course requirements to be eligible for collegiate athletics. For further information and questions regarding eligibility, please check the NCAA Eligibility Center web page above or contact your counselor.

**SCHOLAR ATHLETE**

Student/athletes maintaining a 3.5 GPA or higher while participating in a sport, will be named a scholar athlete

**SEAL of BILITERACY** is a recognition given by the state to students who have demonstrated high levels of proficiency in English and at least one other language. The seal will appear on the student's transcript. A student who is within 15 months of graduation (typically March of their junior year) may apply for the Seal of Biliteracy and/or test for the additional foreign language requirement.

- Students must have earned a proficient level or higher on their ELA I and II EOC exam or have earned a remediation-free score on the English and reading sections of the ACT or SAT.
- Students must earn the appropriate score on one of the state-approved foreign language exams.

Students interested in earning the Seal of Biliteracy should contact their World Language teacher or school counselor.

## CAREER & TECHNICAL EDUCATION (CTE)

is an educational strategy for providing young people with the academic, technical, and employability skills and knowledge to pursue postsecondary training or higher education and enter a career field prepared for ongoing learning (Partnership for 21st Century Skills, Association for Career and Technical Education, & National Association of State Directors of Career Technical Education Consortium, 2010). CTE is eliminating vocational education that consisted of low-level courses, job training, and single electives and replacing it with academically rigorous, integrated, and sequenced programs of study that align with and lead to postsecondary education. These programs

**Eastland-Fairfield Career & Technical Schools** offer nearly 40 programs for you to choose from while you're in high school. Their programs provide you with the opportunity to pursue your talents and interests, whether you're planning to pursue college or a real-world career. It's a head start that lets you explore your choices now ... and can help you make the most of your choices after graduation. Eastland-Fairfield Career & Technical School District programs are open to all eleventh and twelfth grade students within our district who demonstrate the ability and interest to attend. Students remain enrolled in and still graduate from this school and are encouraged to continue participation in our high school extracurricular activities. With programs on two campuses and five satellite locations, Eastland-Fairfield is closer than you think. Satellite programs are offered at Canal Winchester, Gahanna, Groveport Madison, New Albany, Pickerington North, and Reynoldsburg High Schools. **FAST TRACK TO A SATISFYING CAREER**

The Eastland-Fairfield learning environment extends far beyond the classroom. Internships, job shadowing, community service, field trips, guest speakers, and cooperative education all provide valuable experience, connections, and practice in using technical and people skills.

### JUMP START ON COLLEGE AND SAVING MONEY

Not only do Eastland-Fairfield programs prepare students for further study, but many also allow students to earn college credit or enter college with advanced standing. Students can earn college credits in selected programs, graduating with a college transcript that can be taken nearly anywhere!

### FIREFIGHTING

Eastland-Fairfield is launching a one-year, senior-only Firefighting satellite at Canal Winchester High School during the 2021-2022 school year. You will learn the skills necessary to put you in a position to begin work in this competitive and rigorous career field or be prepared to further your education and training after high school.

*Are you interested in serving the public and ensuring people's safety?  
Have you always dreamed of becoming a firefighter since you were a kid?  
Now you have the opportunity to pursue that dream while doing good in the world and serving others.*

Firefighting isn't for the faint of heart. It is a high calling and a physically demanding, rigorous career field. As such, students interested in this program should have a commitment to fitness as well as a strong work ethic. The program will prepare students for a field of work that values teamwork, workplace etiquette, pride, and ownership.

Gain valuable, real-world, hands-on experiences while studying in this one-year program. Areas of study may include: First aid and CPR, Emergency vehicle drivers training, Fire suppression, rescue, and emergency medicine, Hazardous materials training, General operation of required tools and equipment, CPR and basic care for the ill and injured Scene safety

provide students with opportunities to acquire the competencies required in today's workplace—such as critical thinking, collaboration, problem solving, innovation, teamwork, and communication—and to learn about different careers by experiencing work and workplaces. CTE is no longer just about teaching students a narrow set of skills sufficient for entry-level jobs; it is about preparing students for careers.

-American Institutes for Research, March 2013

CTE courses are labeled as such and provide a certificate to the student upon successful completion. CTE courses are available at CWHS and Eastland-Fairfield Career Center.



### Agricultural & Environmental Systems

- Animal Management (FCC)
- Environmental Science (New Albany High School)
- Landscape Design & Management (ECC)

### Arts & Communication

- Graphic Design (ECC)
- Performing Arts (Reynoldsburg H.S. - Livingston Campus)

### Finance/Business & Administrative Services/Marketing

- Marketing & Logistics Management (Groveport Madison HS)
- Medical Office (ECC)

### Construction Technologies

- Architecture /Construction Management (Gahanna Lincoln HS)
- Construction (FCC)
- Electrical (ECC)
- Heating, Ventilation, Air Conditioning & Refrigeration (FCC)

### Education & Training

- Teaching Professions (Gahanna Lincoln H.S. - Clark Hall)

### Health Science

- Bioscience(Gahanna Lincoln H.S. - Clark Hall)
- Dental Assisting (ECC & FCC)
- Exercise Science (FCC)
- Pharmacy (FCC)
- Pre-Nursing (FCC)

### Hospitality & Tourism

- Culinary Arts (ECC)

### Human Services

- Cosmetology (ECC & FCC)
- Employability Prep (Offsite)
- Nail Services (FCC) (Senior Only)
- Project SEARCH (Offsite)

### Information Technology

- Cyber Security (FCC)
- Interactive Media (ECC)
- Multimedia (Pickerington High School North)
- Programming & Software Development (ECC)

### Law & Public Safety

- Criminal Justice (ECC & FCC)

### Manufacturing Technologies

- Pre-Engineering (ECC)
- Welding (ECC)

### Transportation Systems

- Agriculture & Heavy Equipment (ECC)
- Automotive (ECC & FCC)
- Auto Body & Paint (ECC) (Senior Only)
- Aviation (ECC)

# English/Language Arts

CRS #	Course	Offered	Cr.	Length	Format
059	CP English 9	9	1	Y	B,O
058	Pre AP English 9	9	1	Y	B
062	CP English 10	10	1	Y	B,O
061	Pre AP English 10	10	1	Y	B
066	CP English 11	11	1	Y	B,O
065	AP English (Language)	11 12	1	Y	B
074	CP Eng 12 :Portfolio	12	1	Y	B,O
073	CP Eng 12 :World Lit.	12	1	Y	B,O
072	AP English (Literature)	11 12	1	Y	B
070	English 1100	11 12	1	S	S,B
071	English 2367	11 12	1	S	S,B
	<b>ELECTIVES</b>				
044	Public Speaking	9 10 11 12	0.5	S	S,B
046	Journalism	9 10 11 12	1	Y	S,B
048	Holocaust Studies	9 10 11 12	0.5	S	S,B
045	Yearbook	10 11 12	1	Y	B

## \*Format -Single, Block or Online

- 4 credits of English are required for graduation
- Electives do not count as REQUIRED English courses
- Pre AP and AP courses require a teacher signature on scheduling sheet from current English teacher

## CP ENGLISH 10

credits:1/year

062

grade offered: 10

**Prerequisites:** none

College Preparatory English 10 is designed to reinforce skills which are aligned with Ohio's Learning Standards. It is structured to develop skills in reading comprehension, literary analysis, and writing. The literary genres will be studied in detail, and an emphasis will be placed upon the technical characteristics of fiction, nonfiction, and poetry. All work will reinforce those skills learned in CP English 9 and expand student knowledge in the areas of critical thinking, grammar, writing, and analysis. This course is appropriate for students who plan to follow any of the 3Es: enrollment, enlistment, or employment after high school.

## PRE-AP ENGLISH 10

credits:1/year

061

grade offered 10

**Prerequisites:** teacher signature on scheduling sheet

Pre-AP 10 is a year-long course offered to students who have been identified in ninth grade as independent and self-motivated learners who are prepared for an accelerated pace that is not available through the CP English curriculum. The course demands that students manage difficult course material and engage in higher-level critical thinking and analysis. Academic focuses of the course include argumentative, informative, narrative, and analytical writing; reading and analyzing both fiction and non-fiction literature; research-driven projects and presentations; collegial discussion; and more. Students enrolling in Pre-AP 10 should expect to be held accountable for these assessments and for preparation and participation in the coursework

## CP ENGLISH 11

credits:1/year

066

grade offered: 11

**Prerequisites:** none

College Preparatory English 11 is designed around the Ohio State Learning Standards. The class examines American literature, writing, grammar, speaking and listening, and vocabulary skills. Through a variety of genres, students explore American time periods ranging from the Puritan era up through the contemporary United States. Students will learn proper formatting technique for an APA paper and practice a range of writing modes including analysis, argumentative, and expository. An emphasis will be placed on test taking skills necessary for a variety of tests, such as the ACT. This course is appropriate for students who plan to follow any of the 3Es: enrollment, enlistment, or employment after high school.

## AP ENGLISH (LANGUAGE and COMPOSITION) 065

credits:1/year

grade offered: 11-12

**Prerequisites:** AP contract completed

Students in this introductory college-level course become more aware of the influence of rhetoric in the world around them, and they develop their own style of writing and speaking as their understanding of the power of language evolves. Composition is the core of the course, with students writing extensively in a variety of forms. In addition, the course is designed around fundamental concepts and readings that require in depth analysis and discussion, both written and verbal. Entering students should enjoy reading and analyzing prose; should have already mastered the fundamentals of grammar and usage; and should have the ability to write essays that reflect critical thinking, are fully developed, and are well organized. The workload is demanding, making time management an essential skill. Students are expected to take the AP exam (approx \$94) in May. Students will have the opportunity to earn college credit.

## CP ENGLISH 9

credits:1/year

059

grade offered: 9

**Prerequisites:** none

College Preparatory English 9 is designed around Ohio's Learning Standards. It is structured to enhance student proficiency levels in the area of reading comprehension and critical thinking through the close reading, discussion, and analysis of fiction and nonfiction works. An emphasis is also placed on the refinement of students' written expression with units on grammar/usage and organization and development techniques. This course is appropriate for students who plan to follow any of the 3Es: enrollment, enlistment, or employment after high school.

## PRE-AP ENGLISH 9

credits:1/year

058

grade offered: 9

**Prerequisites:** none

Pre-AP 9 is offered to those students who have been identified in eighth grade as independent, self-motivated, and driven to pursue English at an accelerated rate. It is designed around the Ohio Learning Standards and delves deeper into some areas of study, such as the mechanics of good writing as developed through the writing process of prewriting, drafting, revising, and editing than the College Preparatory English course. A specific skill stressed is the ability to organize a short paper that has both focus and depth in relation to the topic covered. Students will also analyze literature, both fiction and nonfiction, at a deeper level. Beyond what is written, students will analyze the how and why a piece is written so as to begin learning how to synthesize a written work.

**CP ENGLISH 12: Portfolio****074**

credits: 1/year

grade offered: 12

**Prerequisites:** none

College Preparatory English 12: Portfolio centers on building a portfolio to showcase each students' mastery of Canal Winchester's Portrait of a Graduate competencies. We will focus on real-world writing, research based on students' future career choice and passions, as well as speech, grammar, vocabulary, and other topics and skills articulated in Ohio's Learning Standards. The reading will pair classic British literature with both informational texts and current fiction. This course is suitable for students who plan to follow any of the 3Es: enrollment, enlistment, or employment.

**CP ENGLISH 12: World Literature****073**

credits: 1/year

grade offered: 12

**Prerequisites:** none

College Preparatory English 12; World Literature will look at literary works from across the globe as we focus on developing students into responsible citizens in an ever-interconnected world. Units will focus on literature, music, poetry, drama, and film from around the world, and recognizing worldly perspectives on identity, culture, socioeconomic status, politics, and ideology. We'll continue to build on the 12th grade Ohio's Learning Standards, with emphasis on speech, grammar, vocabulary, and analysis skills. This course is geared toward students who are pursuing enrollment after high school, but would also be suitable for those planning on enlistment or employment.

**AP ENGLISH (LITERATURE & COMPOSITION) 072**

credits: 1/year

grade offered: 11-12

**Prerequisites:** AP contract completed

*Current Eng. teacher signature on scheduling sheet* AP Literature and Composition is a course designed to engage students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students will deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students will be required to consider a work's structure, style, and theme as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. Students in AP Literature and Composition will do extensive reading and writing daily, and they should be willing to develop self-discipline, initiative, a strong work ethic, planning and organizational skills, perseverance, and the ability to think logically, critically, metaphorically, and independently. Students are expected to take the AP exam (approximately \$94.00) in May. Students will have the opportunity to earn college English credit.

**ENGLISH 1100****070**

credits: 1/sem. (3 college credit hours)

grade offered: 11-12

**DC Prerequisites:** Qualifying score on Accuplacer Test or ACT.

*Must also follow admission procedures for Columbus State and CCP* English 1100 is a beginning composition course which develops processes for critically reading, writing, and responding to a variety of texts in order to compose clear, concise, expository essays. The course facilitates an awareness of purpose, audience, content, structure and style, while also introducing research and documentation methods. Course reading and writing assignments may be thematically organized. Sections of this course are S-designated Service-Learning classes. Sections of this course are H-designated Honors classes.

**ENGLISH 2367****071**

credits: 1/sem. (3 college credit hours)

grade offered: 11-12

**DC Prerequisites:** English 1100 with minimum grade of C. Must also follow admission procedures for Columbus State and CCP

English 2367 is an intermediate composition course that extends and refines skills in expository and argumentative writing, critical reading, and critical thinking. This course also refines skills in researching a topic, documenting resources, and working collaboratively. Course reading and writing assignments are organized around the diversity of those who comprise the identities. Sections of this course are S-designated Service-Learning classes. Sections of this course are H-designated Honors classes.

**PUBLIC SPEAKING (elective)****044**

credits: .50/sem.

grade offered: 9-12

**Prerequisites:** none (9th grade with teacher signature)

Public Speaking is an elective course that will provide students with the basic skills that are needed to be successful in a variety of public and daily interactions. Students will learn the essentials of speech and develop an understanding of both delivery and proper skills in evaluating public speaking. In addition, students will develop good listening and skills of a focused audience, understand fundamental speech skills, and create a sense of confidence in the delivery of both themselves and the topic in which they are presenting.

**JOURNALISM (elective)****046**

credits: 1/year.

grade offered 9-12

**Prerequisites:** none Suggested Prerequisites: Previously taken or taking concurrently: Digital Design 1, and/or Photography.

In this class, students will learn and improve their research skills. They will also learn how to write newspaper articles using short, concise sentences with carefully selected words. Four editions of the newspaper will be written, published, and delivered to the student body throughout the year. This is a writing course which will require students to work on the processes of pre-writing, editing, and rewriting.

**HOLOCAUST STUDIES (elective)****048**

credits: .50/sem.

grade offered: 9-12

**Prerequisites:** none

This is an English elective course that will provide students with an in-depth look at many aspects of the Holocaust. We will build upon knowledge gained from the CWMS Holocaust Unit and the United States Holocaust Memorial Museum trip, with many museum-aligned activities. Students will read first-hand accounts from victims, perpetrators, and bystanders while learning key historical events that led up to the "final solution." Students will focus on why and how the Holocaust occurred through discussions, readings, projects, and activities.

**YEARBOOK (elective)****045**

credits: 1/year

grade offered: 10-12

**Prerequisites:** None (students who have taken or will concurrently take Digital Design, Photography, or Journalism will be given priority as well as former members of the Yearbook Club) This course is designed to teach the basics of yearbook journalism, including theme, coverage, copy writing, graphic design, photography, finance, advertising, and emerging technologies. Students will design and produce an affordable school yearbook within a budget – a memory book, a history book, and a publication to be produced for CWHS and its students. Students will learn the importance of working as a team to complete tasks successfully and on time. Students interested in Yearbook will be required to go through an application process.

# Social Studies

#	Course	Offered	Cr.	Length	Format
102*	U.S. Studies 1877 to Pres.	9	1	Y	S,O
108*	World Studies 1750 to Pres.	10	1	Y	S,O
110	AP US History	10 11 12	1	Y	S
106	Current Events	10 11 12	.50	S	O
112	Financial Literacy	10 11	.50	S	S,B,O
113*	American Government*	11	1	Y	S,O
107	Psychology	11 12	.50	S	S,B
109	Economics	11 12	.50	S	O
111	AP American Gov't & Politics	11 12	1	Y	S,B
114	African American Studies	11 12	.50	S	S,B
047	CW Historical Research	12	.50	S	B

## \*Format -Single, Block or Online

- Required Courses
  - \*102 US Studies (9th grade)
  - \*108 World Studies (10th grade)
  - \*113 American Government (11th grade)
- 3 Social Studies Credits are required to graduate (4 credits to earn an Honors Diploma)
- Financial Literacy REQUIRED for graduation (cannot be counted as Soc. Stu. elective towards Honors diploma)

## U.S. STUDIES (1877 to the present) (REQ.) 102

credits:1/year grade offered: 9

Prerequisites: none

This course covers the development of the United States from the time of Reconstruction, through Industrialization, Imperialism, Foreign Involvement, World War I, the Twenties, the Depression, the New Deal, World War II, the Cold War, Korea, Vietnam, the Civil Rights era, Watergate, and Reaganomics, and concludes with a study of the U.S. as a present day power. These events will be tied to events worldwide, and the cause/effect relationships that exist will be investigated.

## WORLD STUDIES (1750 to present) (REQ.) 108

credits:1/year grade offered: 10

Prerequisites: none

This course is a continuation of the study of world history, covering the period from the Enlightenment and Age of Revolution (American Revolution, French Revolution) to the present. Historic eras and global developments are studied with consideration given to the influence of geographic settings, cultural perspectives, economic systems, and various forms of government.

## AP U.S. HISTORY 110

credits:1/year grade offered: 10-12

Prerequisites: teacher signature on scheduling sheet and AP contract completed

AP United States History is a challenging course that is meant to be the equivalent of a freshman college course and can earn students college credit. It is a two-semester survey of United States history from the colonial period to the present. Solid reading and writing skills, along with a willingness to devote considerable time to homework and study, are necessary to succeed. Emphasis is placed on critical and evaluative thinking skills, essay writing, and interpretation of original documents. A college textbook is used in the course and an average assignment consists of 10 to 12 pages. Throughout the year, students will be introduced to typical questions used on the AP Exam which is administered in May. Several weeks are spent in intensive review preparing students to take the exam. Students are expected to take the AP exam (approximately \$94.00) in May. Students will have the opportunity to earn college credit. Even if a student fails to achieve a passing score on the AP Exam, the experience of taking a college level course is immeasurable.

## CURRENT EVENTS 106

credits:.50/sem. grade offered: 10-12

Prerequisites: none

This course will help the student to analyze and discuss with understanding current local, state, national, and international problems and issues. This class can only be taken one semester per year.

## FINANCIAL LITERACY (REQ.) 112

credits:.50/sem. grade offered: 10-11

Prerequisites: none

This course explores the world of Financial Literacy, defined as the ability to read, analyze, manage and communicate about the personal financial conditions that affect material well-being. It includes the ability to discern financial choices, discuss money and financial issues without (or despite) discomfort, plan for the future and respond competently to life events that affect every day financial decisions, including events in the general economy. This course also gives students a practical, down-to-earth introduction to sound money management. It explores the real-life problems that students will face, and trains them to solve those problems. Students will develop the skills needed to deal with housing, insurance, investments, budgeting, the workplace, retirement, smart shopping, borrowing and more. **Students electing to take the completely online version will NOT be scheduled into a class period, but will complete the course independently and outside of the normal school day. Students should consider time management skills and ability to work without supervision before signing up for this course. This will allow students to take additional courses they may not originally have been able to fit into their schedule. Students must still have a full regular class schedule. Taught through Canvas Learning platform.**

**AMERICAN GOVERNMENT (REQ.) 113**credits:1/year grade offered 11**Prerequisites:** none

This course will concentrate on Ohio's 24 new content standards. The subjects fall within eight broad topics that will be the focus of this year-long course, while keeping a close eye on current events, as they relate to the specific topics, and how they affect us each and every day. The eight topics are: Civic Involvement; Civic Participation & Skills; Basic Principles of the U.S. Constitution; Structure and Functions of the Federal Government; Role of the People; Ohio's State & Local Governments; Public Policy; and the Government and the Economy.

**PSYCHOLOGY 107**credits:.50/sem. grade offered: 11-12**Prerequisites:** none

Psychology is a semester course offered to juniors and seniors. This is an introductory course that stresses psychological theories and self-understanding. Concepts to be studied are learning, perception, memory, stress, personality theories, and abnormal behavior. Class activities include discussion, lecture, and experiments. It is a great introduction to a subject that is required for most college majors.

**ECONOMICS 109**credits:.50/sem. grade offered:11-12**Prerequisites:** none

This course explores the fundamentals that guide individuals and nations as they make choices about how to use limited resources to satisfy their wants. More specifically, it examines the ability of individuals to use knowledge and skills to manage limited financial resources effectively. Students will explore the process of economic decision-making and how the decision-making process relies on the analysis of data. Students will use economic data to explain trends and decide among economic alternatives. Students will explore the fact that productive resources are limited and allocated in a variety of different ways. Students will look at many efficient ways to allocate productive resources, one of those being markets. Students will discover that the health of a nation's economy is influenced by governmental policy. Fiscal policy can be used to spur economic growth. Monetary policy can be used to moderate fluctuations in the business cycle. Finally, students will investigate many global issues and events that influence economic activities.

**AP AMERICAN GOVERNMENT & POLITICS 111**credits:1/year grade offered: 11-12**PREREQUISITE:** *teacher signature on scheduling sheet and AP contract completed*

AP U.S. Government & Politics is designed to provide students an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret political institutions and the analysis of specific case studies. Students will acquire knowledge about various U.S. political institutions, organizations, beliefs, and ideas that constitute U.S. political theory and their practical applications. The course requires critical thinking and analytical skills relative to political concepts. The course involves extensive outside class readings, in-class lectures, out-of-class essay assignments, and various assessments. Summer reading assignments and assignments over winter and spring breaks should be expected by students. The course follows the curriculum outlined by the AP College Board for U.S. Government and Politics, and therefore prepares students for the AP exam in May. Students are expected to take the AP exam (approximately \$94.00) in May. Students will have the opportunity to earn college credit.

**AFRICAN AMERICAN STUDIES 114**credits:.50/sem. grade offered: 11-12**Prerequisites:** *Completion of U.S. Studies 1877 or AP U.S. History.*

This semester-long class is designed to study several eras of Africans and their descendants' experiences in the New World and make connections with current issues in the African American community. Through the critical analysis of primary documents, arguing different points of view through debates, and presenting research, students will cover topics from the History of Africa, to Slavery, to the Jim Crow Era, to African American history in Ohio, to current-day issues. Students will enhance their problem solving and critical thinking skills through reading, writing, and questioning techniques.

**CW HISTORICAL RESEARCH 047SS**credits:.50/sem grade offered:12**Prerequisites:** *Completion of U.S. Studies or AP U.S History.*

Available for SENIORS only. Students will engage in studying local history with the goal of creating and submitting a successful application for a permanent Ohio Historical Marker that will commemorate a significant person, site, or event in local history. Students will engage in field experiences of sites around Canal Winchester and collaborate with the Canal Winchester Historical Society to conduct research.

# Science

#	Course	Offered	Cr.	Len.	Format
200	Physical Science	9	1	Y	B,O
202	Biology Honors	9 10	1	Y	S
208	Biology	10	1	Y	B,O
204	Chemistry*	10 11 12	1	Y	B
214	AP Biology*	10 11 12	1	Y	B
216	Human Body Systems*	10 11 12	1	Y	B
201	Zoology*	11 12	.50	S	B
205	Physics*	11 12	1	Y	B
206	Anatomy & Physiology*	11 12	.50	S	B
210	AP Chemistry*	11 12	1	Y	B
212	Introduction to Astronomy*	11 12	.50	S	O
213	Forensic Science*	11 12	.50	S	B
215	Environmental Science*	11 12	1	Y	B,O
220	Medical Intervention*	11 12	1	Y	B
222	Biomedical Innovations*	11 12	1	Y	S

## \*Format -Single, Block or Online

3 years of Science to graduate (1 physical credit, 1 life credit; those listed below are only courses that fulfill this requirement)

- **Physical** :Physical Science, Chemistry (any), Physics, Astronomy
- **Life**: Biology (any), Zoology, Anatomy & Physiology
- Honors Diploma requires 4 credits including 2 advanced level sciences\* (see table left)

## PHYSICAL SCIENCE 200

credits:1/year grade offered: 9

**Prerequisites:** *This course is part of a 2-year sequence of Physical Science and Biology*

This course will explore issues related to chemistry, physics, and astronomy. Topics include the solar system and universe, atomic structure, periodic table of elements, chemical properties, force and motion, energy, electricity and magnetism, and sound and light. This course is designed for most 9th grade students (those not recommended for Honors Biology). This course will be very interactive and will require active student exploration and problem solving. The course will meet the physical science credit required for graduation.

## HONORS BIOLOGY (Prin. of Biomedical Sciences) 202

credits:1/year grade offered: 9-10

**Prerequisites:** *9th with 8th grade teacher signature on scheduling sheet; Grade 10 with an A in Physical Science and teacher signature on scheduling sheet*

This course explores concepts of human medicine, and introduces students to modern biological concepts including biochemistry, cellular biology, genetics, homeostasis, feedback systems, and metabolism through investigation of the human body. Students will participate in individual and group research and experimentation and proceed at a fast pace. A required part of this course is completion of homework and at-home modules during school breaks to facilitate independent learning. The course provides an overview of the Biomedical Sciences Pathway offered at CWHS and lays the scientific foundation necessary for student success in the subsequent courses. ➤ **Pathway-1**

## BIOLOGY 208

credits:1/year grade offered: 10

**Prerequisites:** *This course is part of a 2-year sequence of Physical Science and Biology.*

This course will be taken by all sophomores who have previously taken Physical Science. Students will gain knowledge of biology by using the scientific method, critical thinking, and problem solving. This is a hands-on course, emphasizing labs, activities, and projects; encouraging all students to be challenged and to succeed. Topics will include: cells, genetics, biodiversity and evolution, ecology, and the diversity of life.

## CHEMISTRY

**204**

credits:1/year grade offered: 10-12

**Prerequisites:** *Completion of Biology, or Honors Biology and completion of Algebra I with a "B" or better*

Topics covered include historical development of atomic structure, classification of substances, chemical reactions, stoichiometry, chemical bonding, gas laws, solutions, acid/bases, experimental methods, and design, and methods of communicating experimental results. Covers the basic topics of entry level college chemistry.

## AP BIOLOGY

**214**

credits:1/year grade offered: 11-12

**Prerequisites:** *Completion of Honors Biology with at least a "B" average and AP contract completed*

This is a college-level biology course, covering in-depth the areas of molecules and cells; genetics and evolutionary theory; and organisms and populations. The emphasis is on developing an understanding of concepts and applications of biological knowledge to environmental and social concerns. Students are expected to take the AP exam (approximately \$94.00) in May and students will have the opportunity to earn college credit.

## HUMAN BODY SYSTEMS

**216**

credits:1/year grade offered: 10-12

**Prerequisites:** 202

Students examine the processes, structures, and interactions of the human body systems to learn how they work together to maintain homeostasis (internal balance) and good health. Using real-world cases, students take the role of biomedical professionals and work together to solve medical mysteries. Hands-on projects include designing experiments, investigating the structures and functions of body systems, and using data acquisition software to monitor body functions such as muscle movement, reflex and voluntary actions, and respiratory operation. Important concepts covered in the course are communication, transport of substances, locomotion, metabolic processes, defense, and protection. **Pathway-2**

## ZOOLOGY

**201**

credits:.50/sem. grade offered: 11-12

**Prerequisites:** *Completion of Honors Biology or Biology (recommended "C" or better)*

This course is designed for students who have an interest in the Animal Kingdom. Students will learn about all animal phyla, including invertebrate and vertebrate animals. Dissection of invertebrate and small vertebrate animals will be included. Students will be expected to learn anatomy of the animals and describe their functions and participate in all laboratory experiments and dissections.

**PHYSICS** **205**  
credits:1/year grade offered: 11-12

**Prerequisites:** Successful completion of two college prep science courses and CP or Honors Algebra II all with a "B" AND concurrent enrollment in Pre-Calculus or AP Calculus.

Most of the basic concepts covered in an introductory college physics course are covered. Topics include mechanics, Newton's laws of motion, work, energy, power, linear momentum, circular motion, rotation, gravitation, and projectile motion. Selected topics will be supplemented with various demonstrations and lab investigations.

**ANATOMY AND PHYSIOLOGY** **206**  
credits:.50/sem. grade offered: 11-12

**Prerequisites:** Completion of Honors Bio or Bio with a "C" or better.

This course is a basic study of the anatomy and physiology of the human body. The emphasis is on understanding the functions of several organ systems and how disease can affect those systems. Students will learn medical terminology as it relates to human body structures, systems, and pathologies. Dissection is an important part of learning in this course. This course is designed for upperclassmen who are interested in learning how the human body is affected when disease occurs. Basic study of the human body and disease intended for students who may be interested in a medical technology career.

**AP CHEMISTRY** **210**  
credits:1/year grade offered: 11-12

**Prerequisites:** "B" or higher in Chemistry and teacher signature on scheduling sheet and AP contract completed

This is a college level chemistry class recommended for science or health majors. The class will cover atomic structure and periodicity, bonding, properties of gases, solution properties, kinetics, equilibrium, acid/base, redox reactions, thermochemistry, electrochemistry, and basic organic nomenclature and reactions. Students are expected to take the AP exam (approximately \$94.00) in May and will have the opportunity to earn college credit.

**INTRODUCTION TO ASTRONOMY** **212**  
credits:.50/sem. grade offered: 11-12

**Prerequisites:** Successful completion of two science courses and have passed or be enrolled in Algebra I.

Astronomy is a course that investigates the universe in an inside-out manner. Students will begin the course learning about the Sun-Earth-Moon system, the most basic understanding of our universe originating back to the beginning of humanity. Study into our solar system including the planets, moons, asteroids, comets, and other objects such as Pluto. Lastly, students will study the other stars in our galaxy and other galaxies. Other topics investigated include the Big Bang Theory, Theory of the Multi-verse, and other related, modern theories.

**FORENSIC SCIENCE** **213**  
credits: .50/sem. grade offered: 11-12

**Prerequisites:** Successful completion of two science classes

This course will introduce and reinforce some of the traditional concepts briefly taught/mentioned in our CWHs physical science, biology, honors biology and chemistry courses. Many practical methods will be used to reveal what chemical changes occurred during various incidents and scenarios, which will help reconstruct the sequence of events. In this course, students will have the opportunity to be hands-on as if they were investigating a variety of different crime scenes, while using their scientific method and critical thinking skills. In this course, students will approach challenges, methods and analyses of forensic science from a fundamental, chemical perspective.

**ENVIRONMENTAL SCIENCE** **215**  
credits:1/year grade offered: 11-12

**Prerequisites:** Successful completion of two science classes

This course is the study of the environment and human impact. Topics explored include ecosystems, species depletion, human population growth, land, air, and water, waste management, natural resources, alternative energy, climate change, sustainability, and conservation. Emphasis will be placed on independent learning, individual and group projects, current issues, and some outdoor activities during the warmer months. This course fulfills a life science requirement, and is designed for students who are interested in the environment, conservation, and sustainability.

**MEDICAL INTERVENTION** **220**  
credits: 1/year grade offered: 11-12

**Prerequisites:** 202 and 216

Student projects investigate various medical interventions that extend and improve quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care.

The course explores the design and development of various medical interventions, including vascular stents, cochlear implants, and prosthetic limbs. In addition, students review the history of organ transplants and gene therapy, and stay updated on cutting-edge developments via current scientific literature. Using 3D imaging, data acquisition software, and current scientific research, students design a product that can be used as a medical intervention. ► **Pathway-3**

**BIOMEDICAL INNOVATIONS** **222**  
credits:1/year grade offered: 11-12

**Prerequisites:** 202, 216 and 220

In this capstone course, students apply their knowledge and skills to answer questions or solve problems related to the biomedical sciences. Students design innovative solutions for the health challenges of the 21st century as they work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. They have the opportunity to work on an independent project and may work with a mentor or advisor from a university, hospital, physician's office, or industry. Throughout the course, students are expected to present their work to an adult audience that may include representatives from the local business and healthcare community. An example project students will complete include designing an effective emergency room. In this problem students apply their knowledge of emergency medical careers, diagnostic testing and patient evaluation, human body systems, and medical interventions to analyze the workings of an emergency room and discuss inefficiencies that may hinder appropriate clinical care. This course will be offered off campus at Ohio Health's Pickerington Campus. The district does not provide transportation.

► **Pathway-4**

# Math

#	Course	Offered	Cr.	Len.	Format
301	Algebra I	9	1	Y	S,O
304H	Honors Geometry	9 10	1	Y	S,O
304	CP Geometry	10	1	Y	S,O
303H	Honors Algebra II	10 11	1	Y	S,O
303	CP Algebra II	11 12	1	Y	S,O
303A	Applications Algebra II	11 12	1	Y	S
305	Pre-Calculus	11 12	1	Y	S
309	AP Statistics	11 12	1	Y	S
311	Math 1148 College Alg.	11 12	1	S	S
312	Math 1149 Trigonometry	11 12	1	S	S
300	CP Math	12	1	Y	S,O
307	AP Calculus AB	12	1	Y	S
313	AP Calculus BC	12	1	Y	S

*\*Format -Single, Block or Online*

**A TI-84 calculator is REQUIRED for ALL math courses Algebra II and up**

Please be prepared to purchase the calculator as soon as classes start. (the retail cost is around \$110).

- 4 Math credits required for graduation & Honors diploma

**ALGEBRA I** **301**  
 credits:1/year grade offered: 9

**Prerequisites:** This course is required for all freshmen except those who completed it in 8th grade.

This course is a traditional Algebra I course that focuses on the topics of integers, linear equations and functions, linear inequalities, quadratic equations and functions, radical expressions and functions, and exponential expressions and functions.

**HONORS GEOMETRY** **304H**  
 credits:1/year grade offered: 9-10

**Prerequisites:** Teacher signature on scheduling sheet.

This course is the study of geometric figures and their properties. Elementary trigonometry will be covered, in addition to the topics that are covered in Geometry.

**CP GEOMETRY** **304**  
 credits:1/year grade offered: 10

**Prerequisites:** This course is for sophomores only who earned below an A in their freshmen Algebra I course.

This course is the study of geometric figures and their properties. Logical reasoning is introduced and developed throughout the course.

**HONORS ALGEBRA II** **303H**  
 credits:1/year grade offered: 10-11

**Prerequisites:** The prerequisite for this course is completion of Honors Geometry or teacher signature on scheduling sheet.

This course is a traditional Algebra II course intended for highly successful mathematics students. Students in this course should be highly motivated and be willing to work at an accelerated pace. Students should be able to synthesize, analyze, and evaluate both independently and in groups. The topics of linear, absolute value, quadratic, rational, radical, and exponential functions and their related equations will be presented as well as systems of equations, matrices, basic trigonometry, and logarithms.

**CP ALGEBRA II** **303**  
 credits:1/year grade offered: 11-12

**Prerequisites:** This course is for any student who has completed Geometry.

This is a traditional Algebra II course that focuses on the topics of linear, absolute value, quadratic, rational, radical, and exponential functions and their related equations. Also presented are systems of equations, matrices, and basic trigonometry.

**APPLICATIONS ALGEBRA II** **303A**  
 credits:1/year grade offered: 11-12

**Prerequisites:** Successful completion of Algebra I and Geometry

Algebra II Applications is a one-year course designed primarily as an alternative to Algebra II and will meet the Algebra II requirement for graduation. This course is an applications-based learning approach incorporating Algebra I and Algebra II topics while connecting math to the real world and encouraging students to be actively involved in applying mathematical ideas to their everyday lives. Content will integrate the following Algebraic topics into real world experiences: linear and quadratic equations, rational equations, complex numbers, inverse, polynomial, exponential, trigonometric and logarithmic functions. Students are required to have a graphing calculator for this course.

**PRE-CALCULUS** **305**  
 credits: 1/year grade offered: 11-12

**Prerequisites:** completion of Algebra II

This is an exciting course that provides an opportunity for students to apply their study of functions to the real world. Included also is the study of trigonometry. The first semester focuses on seven functions: linear, quadratic, power, rational, radical, exponential, and logarithmic. The second semester focuses on trigonometric functions, analytic trigonometry, and conic sections.

**AP STATISTICS** **309**  
 credits:1/year grade offered: 11-12

**Prerequisites:** The prerequisite for this course is the successful completion of Honors Algebra II and teacher signature on scheduling sheet and AP contract completed

This Advanced Placement Statistics course is comparable to a semester Statistics course offered in college. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, planning a study, anticipating patterns, and statistical inference. Students are expected to take the AP exam (approximately \$94.00) in May and will have the opportunity to earn college credit. A passing score on this exam earns the student college credit for Statistics at most colleges and universities.

**Math 1148 – COLLEGE ALGEBRA** **311**  
credits: 1/sem. (4 college credit hours) grade offered: 11-12

**DC** **Prerequisites:** *Students must have completed College Prep Algebra II or Honors Algebra II and must score high enough on the Accuplacer and ALEKS placement test or qualifying score on the ACT. Apply for admission to Columbus State*

This course is a dual enrollment semester course in which students will earn college credit through Columbus State Community College. This college credit can be transferred to most state schools. This course covers topics that are traditionally covered in the first semester of a high school Pre-Calculus course.

**Math 1149 – TRIGONOMETRY** **312**  
credits: 1/sem. (4 college credit hours) grade offered: 11-12

**DC** **Prerequisites:** *Students must have completed Math 1148.*  
This course is a dual enrollment semester course which will earn college credit through Columbus State Community College. This college credit can be transferred to most state schools. This course is a study of the trigonometric functions, vectors, and related applications.

**COLLEGE PREP MATH** **300**  
credits: 1/year grade offered: 12

**Prerequisites:** *Only seniors who have completed Algebra II are eligible for this course. This course does not grant college credit, but students who elect to attend CSCC are permitted to continue in their current course of study.*

Canal Winchester High School is partnering with Columbus State Community College to assist students in mastering basic mathematics skills. This course is computer based. Once students are tested and placed at their level, they move through computer topics at their own pace. It is possible to complete up to 3 Columbus State courses (Dev0114, Math 1050, and Math 1075) during the school year.

**AP CALCULUS AB** **307**  
credits: 1/year grade offered: 12

**Prerequisites:** *The prerequisite for this course is the completion of Precalculus with an A or high B average and teacher signature on scheduling sheet and AP contract completed*

This Advanced Placement Calculus course is comparable to a semester Calculus I course offered in college. The course emphasizes both algebraic and graphical solutions to problems. Topics covered include limits and continuity, derivatives, application of derivatives, integrals, and application of integrals. Students are expected to take the AP exam (approximately \$94.00) in May and will have the opportunity to earn college credit. A passing score on this exam earns the student college credit for Calculus I at most colleges and universities.

**AP CALCULUS BC** **313**  
credits: 1/year grade offered: 12

**Prerequisites:** *The prerequisite for this course is the successful completion of Math 1148 and Math 1149, teacher signature on scheduling sheet and AP contract completed*

AP Calculus BC is a full-year course that covers all of the topics covered in AP Calculus AB plus approximately 10 additional topics. Half of the questions asked on the Calculus BC exam are also included on the Calculus AB exam. These questions provide an AB sub score in addition to a BC score. A passing score on the BC exam could qualify the student to earn credit for 2 semesters of college calculus. This course is challenging and demanding. It is recommended for an extremely talented mathematics student who is planning on entering a field which will require an extensive amount of mathematics. Students are expected to take the AP exam (approximately \$94.00) in May and will have the opportunity to earn college credit. A passing score on this exam earns the student college credit for Calculus I at most colleges and universities.

# World Languages

#	Course	Offered	Cr.	Length	Format
401	French 1	9 10 11 12	1	Y	S
411	Spanish 1	9 10 11 12	1	Y	S
412	Spanish 2	9 10 11 12	1	Y	S
413	Spanish 3	9 10 11 12	1	Y	S,B
402	French 2	10 11 12	1	Y	S
403	French 3	11 12	1	Y	S,B
414H	Spanish 4 Honors	10 11 12	1	Y	S,B
404H	French 4 Honors	12	1	Y	S,B
415	AP Spanish	11 12	1	Y	S,B

## \*Format -Single, Block or Online

- World Language is NOT required for high school graduation
- 2 credits/years of world language IS required for college admission (If college is an option in your future be sure to complete this requirement)
- 3 credits of one world language, or no less than 2 credits of each of two different languages is required for an Honors Diploma

### FRENCH 1

**401**

credits:1/year grade offered: 9-12

**Prerequisites:** C (70%) or better in previous year's English class

French I is an introduction to the language and culture of the French-speaking world. Emphasis is placed on developing strong foundations in the areas of reading, writing, speaking, listening, and cultural awareness. Students will learn to hold basic conversations and write about themselves, their daily routines, and their likes and dislikes in the present tense. Cultural information about France and Francophone countries, including their people, history, geography, and economy are incorporated into lessons. Proficiency goal on the ACTFL scale: Novice Mid. Class will be taught in French with coursework in French.

### FRENCH 2

**402**

credits:1/year grade offered: 10-12

**Prerequisites:** C (70%) or better in French 1

Students who have not achieved at least a "C" average in a previous year of the same foreign language experience considerable difficulty the following year with a high probability of failure at the next level.

Therefore, in order to proceed to the next level, a student who has received a final grade of lower than "C" must do both of the following:

\*Obtain a recommendation from his/her foreign language teacher.

\*Present a note from his/her parent requesting that he/she be considered for the next level.

This course continues the development of essential skills and structures (writing, reading, listening, speaking) with increasing cultural and literary competence. Students will learn to discuss topics of a personal nature in present and past tenses and will express opinions on a limited range of topics. Knowledge of French history and culture is also extended. Proficiency goal on the ACTFL scale: Novice High. Class will be taught in French with coursework in French.

### FRENCH 3

**403**

credits:1/year grade offered: 11-12

**Prerequisites:** C average (70%) or better in French 2

Students who have not achieved at least a "C" average in a previous year of the same foreign language experience considerable difficulty the following year with a high probability of failure at the next level.

Therefore, in order to proceed to the next level, a student who has received a final grade of lower than "C" must do both of the following:

\*Obtain a recommendation from his/her foreign language teacher.

\*Present a note from his/her parent requesting that he/she be considered for the next level.

This course is for students who have completed French level I and II and provides intensive development of all language skills. The more complex activities and exercises used at this level lead to a more

conscious control of the language system. Increased emphasis is given to reading strategies and composition, as well as speaking and listening proficiency. Students will be able to describe experiences in multiple tenses, including past, present, future, and the conditional. They will continue the study of French-speaking countries and their products and practices as compared to our own. All readings are culturally based. ACTFL scale: Intermediate Low. Class will be taught in French with coursework in French.

### FRENCH 4 HONORS

**404H**

credits:1/year grade offered: 12

**Prerequisites:** Must have a B (80%) in French 3 and teacher signature

on scheduling sheet. This course continues with language sequence and consolidates skills attained in previous levels, further developing them through study of contemporary cultural and literary topics. The course reviews the complex grammatical structures introduced in previous levels, develops the students' conversational skills and prepares students for the transition to university World Language classes. This will include the areas of art, literature, theater, history, and current events in France and French-speaking countries. Students will work with supplementary course materials and will be expected to do extensive research-based projects. Proficiency goal on the ACTFL scale: Intermediate Mid. Class will be taught in French with coursework in French.

### SPANISH 1

**411**

credits:1/year grade offered: 9-12

**Prerequisites:** Must have a "C" grade (70%) or better in previous year's English class.

Spanish I is an introduction to the Spanish language and culture. Special emphasis is placed on developing strong foundations in the areas of reading, writing, speaking, listening and cultural awareness. Students will learn to converse and write about themselves, their daily routines, likes and dislikes using the present tense. Factual information about the nature of daily life and routines in Hispanic cultures and simple literary selections will also be introduced. Proficiency goal on the ACTFL scale: Novice Mid. Class will be taught in Spanish with coursework in Spanish.

**SPANISH 2****412**

credits:1/year

grade offered: 9-12

**Prerequisites:** *C (70%) or better in Spanish 1**Students who have not achieved at least a "C" average in a previous year of the same foreign language experience considerable difficulty the following year with a high probability of failure at the next level.**Therefore, in order to proceed to the next level, a student who has received a final grade of lower than "C" must do both of the following:**\*Obtain a recommendation from his/her foreign language teacher.**\*Present a note from his/her parent requesting that he/she be considered for the next level.*

This course continues the development of skills and basic structures within increasing cultural and literacy competence. Special emphasis continues to be placed on development of reading, writing, listening, and speaking skills. Students will learn to discuss topics of a personal nature in present, and past tenses and to express opinions on a limited range of topics. Knowledge of Hispanic history and cultures is also extended. Proficiency goal on the ACTFL scale: Novice High. Class will be taught in Spanish with coursework in Spanish.

**SPANISH 3****413**

credits:1/year

grade offered: 9-12

**Prerequisites:** *C (70%) or better in Spanish 2**Students who have not achieved at least a "C" average in a previous year of the same foreign language experience considerable difficulty the following year with a high probability of failure at the next level.**Therefore, in order to proceed to the next level, a student who has received a final grade of lower than "C" must do both of the following:**\*Obtain a recommendation from his/her foreign language teacher.**\*Present a note from his/her parent requesting that he/she be considered for the next level.*

This course, for students who have completed Spanish Level I and Spanish Level II, provides intensive development of all language skills. Increased emphasis is given to reading strategies and composition, as well as speaking and listening proficiency. Students will be able to describe past experiences using the preterit tense and imperfect tense. They will be introduced to the subjunctive tenses. They will continue the study of Spanish-speaking countries and their similarities and differences from the United States. Proficiency goal on the ACTFL scale: Intermediate Low. Class will be taught in Spanish with coursework in Spanish.

**SPANISH 4 HONORS****414H**

credits:1/year

grade offered: 10-12

**Prerequisites:** *Must have a B (80%) average in Spanish 3 and teacher signature on scheduling sheet.*

This course continues with language sequence and consolidates skills attained in previous levels, further developing them through study of contemporary, cultural, and literary topics. The course reviews the complex grammatical structures introduced in previous levels, develops the students' conversational skills and prepares students for the transition to university World Language classes. Proficiency goal on the ACTFL scale: Intermediate Mid. Class will be taught in Spanish with coursework in Spanish.

**AP SPANISH LANGUAGE & CULTURE****415**

credits:1/year

grade offered: 11-12

**Prerequisites:** *completed Honors Spanish 4, teacher signature on scheduling sheet and AP contract completed*

The AP Spanish Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish. The AP Spanish Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions). *Students are highly encouraged to continue the study of the language as well as the exposure of the culture during the summer months in order to be successful in this course. Students could take the AP exam in May for the opportunity to earn college English credit.*

# Visual Arts

#	Course	Offered	Cr.	Len.	Format
730	Art Foundations	9 10 11 12	.50	S	S
700	Drawing 1	9 10 11 12	.50	S	S
712	Drawing 2	9 10 11 12	.50	S	S
702	Ceramics 1	9 10 11 12	.50	S	S,B
710	Ceramics 2	9 10 11 12	.50	S	B
707	Photography 1	9 10 11 12	.50	S	S
706	Photography 2	9 10 11 12	.50	S	S
719	Painting	9 10 11 12	.50	S	S
723	Digital Design 1	9 10 11 12	.50	S	S
725	Digital Design 2	9 10 11 12	.50	S	S
726	Sculpture/Metalsmithing	9 10 11 12	.50	S	S,B
728	Mixed Media	9 10 11 12	.50	S	S,B
713	Ceramics 3	11 12	1	Y	B
718	Photography 3	11 12	1	Y	S,B
721	Art Portfolio	11 12	.50	S	S,B
722	Art Portfolio	11 12	1	Y	S,B
729	AP Studio Art	11 12	1	Y	S,B

*\*Format -Single, Block or Online*

## ART COURSE REQUIREMENTS:

- Art Foundations is a prerequisite to any other art course
- Daily classroom work and additional out-of-class assignments are part of the art curriculum.
- All art classes have fees for consumable supplies.
- 1 credit of Visual or Performing Arts is required for high school graduation

## ART FOUNDATIONS

**730**

credits:.50/sem. grade offered: 9-12

**Prerequisites:** none

This course is designed to provide students with an introduction to the ideas and processes that are basic to making and understanding art. You will learn about materials and methods for making art, the history of art, and techniques for looking at and interpreting artworks. A variety of art projects will be explored including drawing, ceramics, design, painting, applied arts, and sculpture. Students must earn a C or better to continue taking advanced art classes.

## DRAWING 1

**700**

credits:.50/sem. grade offered: 9-12

**Prerequisites:** Successful completion of Art Foundations

This studio course is designed for students to develop and improve their drawing skills in realistic and conceptual art forms. It includes basic drawing techniques using a variety of materials and papers. Emphasis in this course is on composition through utilizing the principles and elements of design. Students will experiment with such subject matter as still life, landscape, portraiture, perspective, and figure drawing. Students are required to keep a sketchbook (provided) for out-of-class assignments.

## DRAWING 2

**712**

credits:1/year grade offered: 9-12

**Prerequisites:** C- or better in Drawing 1

This course is designed to continue building on student's knowledge acquired from Drawing 1. Students will have a more in-depth exploration of composition, presentation and a variety of drawing techniques. The course focuses on developing the student's individuality and conceptual ideas. Portfolio development is emphasized. A sketchbook is required for progressive out-of-class assignments.

## CERAMICS 1

**702**

credits:.50/sem. grade offered: 9-12

**Prerequisites:** Successful completion of Art Foundations

This studio art course provides an opportunity for students to explore basic hand building techniques in clay. Students will produce pinch, coil, and slab pots, as well as explore sculpture using clay. Emphasis will be on skill in craftsmanship and design of projects. Student must achieve a C or better to continue in Ceramics 2.

## CERAMICS 2

**710**

credits:.50/sem. grade offered: 9-12

**Prerequisites:** C- or better in Ceramics 1

This is an introduction to wheel throwing. Students will explore techniques using the potter's wheel and advanced hand-building techniques. Students will have the opportunity to explore various glazing and finishing techniques

## CERAMICS 3

**713**

credits:1/year grade offered: 11-12

**Prerequisites:** Ceramics 1 & 2 and teacher approval

This course is designed for students who have a desire to advance their skills and techniques in hand-building or on the potter's wheel as an in-depth study. Topics covered include autobiographical sculpture, teapots, and signature artist's series, as well as independent explorations.

## PHOTOGRAPHY 1

**707**

credits:.50/sem. grade offered: 9-12

**Prerequisites:** Successful completion of Art Foundations

Students will be introduced to traditional 35mm black and white film photography. Emphasis will be on composition skills, creating a successful photograph, developing film, processing a final print, and final presentation techniques. Careers in photography, photographic history, and photographers will be studied. Students will be expected to complete work outside of class and will need to provide their own 35mm SLR film camera. Students must achieve a C or better to continue in Photography 2.

## PHOTOGRAPHY 2

**706**

credits:.50/sem. grade offered: 9-12

**Prerequisites:** C- or better in Photography 1

Students in Photography 2 will continue to explore and experiment with the techniques learned in Photography 1. Emphasis is placed on artistic expression, composition, and experimental photography techniques in order to create a working portfolio. Students will be introduced to basic digital media, expected to complete work outside of class and will need to provide their own 35mm SLR film camera.

**PHOTOGRAPHY 3** **718**  
credits: 1/year grade offered: 11-12  
**Prerequisites:** *Photo 1 and Photo 2 and teacher approval*  
Advanced-level course designed for students who have a desire to extend their photography skills and techniques as an in-depth course of study. Students will focus on portfolio development using experimental techniques, digital photography, photography as fine art, and profession. Students will be expected to complete work outside of class. Students can take the course for a semester or a full year.

**PAINTING** **719**  
credits: 50/sem. grade offered: 9-12  
**Prerequisites:** *C- or better in Art Foundations*  
In this studio course, students will be introduced to painting techniques using acrylic and watercolor. Master works, styles, art movements, and world cultures will be studied. Students will create sketches and paintings of original concepts, as well as observational studies.

**DIGITAL DESIGN 1** **723**  
credits: 50/sem. grade offered: 9-12  
**Prerequisites:** *Successful completion of Art Foundations*  
Introductory course focusing on the way art is created and displayed using technology as the tool. This course uses "industry standard" software such as Adobe Photoshop and Adobe Illustrator to introduce basic techniques and methods used in such careers as Multimedia, Illustration, Animation and Photography. Emphasis will be on both technical skills and creative art-making.

**DIGITAL DESIGN 2** **725**  
credits: 50/sem. grade offered: 9-12  
**Prerequisites:** *C- or better in Digital Design 1*  
Comprehensive course focusing on developing and advancing the techniques learned in Digital Design 1. Students will take their projects to a higher level, creating a working portfolio of computer-generated digital images and animation. "Industry standard" software such as the Adobe Creative Suite CS6 program will be used. Emphasis on advanced creative art-making, technical skills, and production used in digital media professions such as Animation, Graphic Design, and Photography.

**SCULPTURE / METALSMITHING** **726**  
credits: 50/sem. grade offered: 9-12  
**Prerequisites:** *C- or better in Art Foundations*  
Students will have the opportunity to discover various methods of creating sculpture. A variety of tools, techniques, and materials will be explored. Materials such as clay, wire, plastics, plaster, or wood may be used. Metalsmithing techniques will be utilized in working with pewter including, casting processes and the creation of hollow 3-dimensional forms. Studies of master artists and sculptors will be studied to enhance learning. This class is designed for students who have a desire to work hands-on with various materials and tools.

**MIXED MEDIA** **728**  
credits: 50/sem. grade offered: 9-12  
**Prerequisites:** *C- or better in Art Foundations*  
This studio course is designed for students who enjoy working with a variety of 2-dimensional and 3-dimensional materials. Students will create unique works of art by integrating a wide variety of materials & supplies, images, words, or surfaces into a collage, print, fiber piece, book, or sculpture as a single piece or an installation.

**ART PORTFOLIO** Semester **721**  
Year **722**  
credits: 50/sem. OR 1/year grade offered: 11-12  
**Prerequisites:** *2 credits in art and teacher recommendation*  
Students will develop a portfolio of works in aligned mediums that may include; ceramics, photography, digital design, drawing, painting, collage, printmaking, and mixed media. Students will solve challenging visual arts problems using critical analysis, and evaluation. Experimentation and self-direction will be emphasized as the student continues to develop technical mastery and sophistication. Students will make connections to artists and culture through the study of current and historical trends in art. Disciplined homework completion and sketchbook maintenance is expected. Students will prepare and display their work for public exhibit. This course is for advanced art students who want to create a portfolio but do not want to take the AP exam.

**AP STUDIO ART: 2D Design & AP Drawing** **729**  
credits: 1/year grade offered: 11-12  
**Prerequisites:** *2 credits in art and teacher signature on scheduling sheet and AP contract completed*  
The Advanced Placement art course is for highly motivated juniors and seniors who wish to do college-level art work. The guidelines for this course will follow those of the Advanced Placement Program of the College Board. The course focuses on portfolio development using a variety of art media in 2-dimensional design or Drawing. High quality skill and a strong understanding of the principles and elements of design must be displayed in artworks. Emphasis is also placed on group and individual student critiques with the teacher. This enables the student to analyze and discuss their own artworks and those of their peers. A portfolio and written thesis will be presented for review at the conclusion of the course. The portfolio consists of 3 parts: Quality, 5 works; Concentration, 12 works focused on a single theme; Breadth, 12 works displaying variety of skill and purposeful Design concepts.  
**COURSE REQUIREMENTS:**  
Sketchbook assignments  
Weekly portfolio projects  
Daily studio work and Homework  
Weekly class critiques/self-reflections  
The exam consists of a 3 part portfolio including 24-29 art pieces

# Performing Arts

#	Course	Offered	Cr.	Len.	Format
814	Performing Arts Class 1	9 10	.50	S	S
804	Performing Arts Class 1	9 10	1	Y	S
800	Symphonic Choir	9 10 11 12	.50	S	S
801	Symphonic Choir	9 10 11 12	1	Y	S
802	Women's Chorale	9 10 11 12	.50	S	S
803	Women's Chorale	9 10 11 12	1	Y	S
805	Steel Band & World Drum.	9 10 11 12	.50	S	S
808	Music Theory/Song Writing 1	9 10 11 12	.50	S	S
809	Music Theory/Song Writing 2	9 10 11 12	.50	S	S
810	Marching/Wind Ensemble	9 10 11 12	1	Y	S
813	Marching/Symphonic Band	9 10 11 12	1	Y	S
811	Beginning Guitar	10 11 12	.50	S	S
812	Advanced Guitar	10 11 12	.50	S	S
807	Performing Arts Class 2	11 12	.50	S	S
806	Performing Arts Class 2	11 12	1	Y	S

## \*Format -Single, Block or Online

- Please be aware of prerequisites
- An audition maybe required for participation in select performing arts courses
- 1 credit of Visual or Performing Arts is required for high school graduation

**PERFORMING ARTS CLASS 1** Semester **814**  
Year **804**  
credits:.50/sem. or 1/year grade offered: 9-10

**Prerequisites:** none

Performing Arts class approaches the world of performing arts from all different angles. Using scripted material and improvisation, the students will learn to develop characters and understand human behaviors in different situations. During the course, all students will learn to write, act in, direct, and design short plays. No previous theater experience is required.

**SYMPHONIC CHOIR** Semester **800**  
Year **801**  
credits:.50/sem. or 1/year grade offered: 9-12

**Prerequisites:** none-Boys-Grades 9-12, Girls-Grades 10-12

Symphonic Choir is a large mixed gender choir. A strong emphasis is placed on improving the student's vocal techniques and music reading abilities using a variety of literature for Pop to Classical music.

**WOMEN'S CHORALE** Semester **802**  
Year **803**  
credits:.50/sem. or 1/year grade offered: 9-12

**Prerequisites:** none-Girls-Grades 9-12

Women's Chorale is a single gender choir designed for girls with little or no experience singing in a choir. A strong emphasis is placed on improving the student's vocal techniques and music reading abilities using a variety of literature for Pop to Classical music.

**STEEL BAND AND WORLD DRUMMING** **805**  
credits:.50/sem. grade offered: 9-12  
**Prerequisites:** none

Steel Band/World Drumming is a multi-cultural class introducing the students to Non-Western music traditions. The students use hand drumming and steel pans to learn the rhythms and cultures of the Caribbean, South America, and Africa. A strong emphasis is placed on improving the student's playing techniques and music reading abilities using a variety of literature. No previous music experience is required.

**MUSIC THEORY/SONG WRITING 1** **808**  
credits:.50/sem. grade offered: 9-12

**Prerequisites:** none

Music Theory/SONG Writing is the study of music composition techniques. This class focus is on learning the properties of good Melody, Rhythm and Chord structure. Using various software programs, the students learn how to create songs using both traditional and non-traditional compositional techniques. No experience in the traditional Band or Choir classes is required.

**MUSIC THEORY/SONG WRITING 2** **809**  
credits:.50/sem. grade offered: 9-12

**Prerequisites:** Music Theory /Song Writing 1 or teacher approval

Music Theory/Song Writing is a continuation of the first class. During this class you will learn the concepts behind Minor Keys, Key Changes and Extended Chords. Using various software programs, the students learn how to create songs using both traditional and non-traditional compositional techniques. No experience in the traditional Band or Choir classes is required.

**MARCHING BAND/WIND ENSEMBLE** **810**  
credits:1/year grade offered: 9-12

**Prerequisites:** Auditions for this ensemble will take place in March/April of the previous school year.

Wind Ensemble is an audition group and is open to students in grades 9-12. Students selected for this ensemble are required to perform at concerts outside the school day such as our Winter Concert, Spring Concert, Large Group Contest, and various community activities. As part of this class, all members also perform at 5 basketball games during the basketball season. Members of this ensemble are eligible to participate in Jazz Band and Solo and Ensemble Contest. This course is a requirement for all Marching Band members.

**MARCHING BAND / SYMPHONIC BAND** **813**  
credits:1/year grade offered: 9-12

**Prerequisites:** All members of this ensemble must either audition and/or complete band their 8th grade year.

Symphonic Band is open to any student who plays a musical instrument in grades 9-12. Members of this ensemble are required to perform at concerts outside the school day such as our Winter Concert, Spring Concert, Large Group Contest, and various community activities. As part of this class, all members also perform at 5 basketball games during the basketball season. Members of this ensemble are eligible to participate in Jazz Band and Solo and Ensemble Contest. This course is a requirement for all Marching Band members.

**PERFORMING ARTS CLASS 2**Semester **807**Year **806**

credits:50/sem. or 1/year

grade offered: 11-12

**Prerequisites:** *none*

Performing Arts class approaches the world of performing arts from all different angles. Using scripted material and improvisation, the students will learn to develop characters and understand human behaviors in different situations. During the course, all students will learn to write, act in, direct, and design short plays. No previous theater experience is required.

**BEGINNING GUITAR****811**

credits:.50/sem.

grade offered: 10-12

**Prerequisites:** *none*

Using the three most popular approaches to the instrument, (Chording, Tablature and Note Reading), the students are introduced to the world's most popular instrument. A strong emphasis is placed on improving the student's playing techniques and music reading abilities using a variety of literature for pop to classical music. No previous music experience is required.

**ADVANCED GUITAR****812**

credits:.50/sem.

grade offered: 10-12

**Prerequisites:** *Beginning Guitar*

Using the three most popular approaches to the instrument, (Chording, Tablature and Note Reading), the students are introduced to the world's most popular instrument. A strong emphasis is placed on improving the student's playing techniques and music reading abilities using a variety of literature for pop to classical music. No previous music experience is required.

# Technology

#	Course	Offered	Cr.	Len.	Format
355	Intro To Computer Science	9 10 11 12	.50	S	S,B,O
356	Computer Science Principles	9 10 11 12	1	Y	S,B
420	CCNAv7-Intro to Networking	9 10 11 12	1	Y	S
455	Media Production 1	9 10 11 12	.50	S	S
456	Media Production 2	9 10 11 12	.50	S	S
440	Technician Internship	10 11 12	.50/1	S/Y	S,B
464	CCNAv7 SRWE	10 11 12	1	Y	S
465	CCNAv7 ENSA	11 12	1	Y	S
466	Networking Management	11 12	1	Y	S

*\*Format -Single, Block or Online*

## **INTRO to COMPUTER SCIENCE** **355**

credits: .50/sem. grade offered: 9-12

**Prerequisites:** None

This course will expose students to a diverse set of computational thinking concepts, fundamentals, and tools, allowing them to gain understanding and build confidence. Students use visual, block-based programming in the course to create mobile apps and program a self-driving vehicle (SDV). Students will apply computational thinking practices, build their vocabulary, and collaborate just as computing professionals do to create products that address topics and problems important to them.

## **COMPUTER SCIENCE PRINCIPLES** **356**

credits: 1/year grade offered: 9-12

**Prerequisites:** Successful completion of Algebra I with B or higher  
Students will develop computational thinking and use computational tools that foster creativity. They will practice problem solving with structured activities and progress to open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills. Students will use a variety of tools for programming, with Python being the predominant language. The course exposes students to object-oriented programming, database management, spreadsheet programming and more. Students will consider issues raised by the present and future societal impact of computing and explore career pathways related to computational computer science. *\*Students who have previously taken Introduction to Programming and Advanced Programming may still enroll in this new course. Students will learn different tools and languages. Students who have no familiarity with coding, or who did not take Computer Science Discoveries in middle school should enroll in 355 first.*

## **CCNAv7:INTRODUCTION TO NETWORKING(ITN) 420**

credits: 1/year grade offered: 9-12

**Prerequisites:** Complete Algebra 1 with at least a B

The first course in the CCNA curriculum introduces the architectures, models, protocols, and networking elements that connect users, devices, applications and data through the Internet and across modern computer networks - including IP addressing and Ethernet fundamentals. By the end of the course, students can build simple local area networks (LAN) that integrate IP addressing schemes, foundational network security, and perform basic configurations for routers and switches. This is the first of three courses needed to prepare for the Cisco Certified Network Associate (CCNA) exam.

► **CISCO Pathway-1**

## **MEDIA PRODUCTION 1** **455**

credits: .50/sem. grade offered: 9-12

**Prerequisites:** None

Do you enjoy watching fun videos on YouTube? Would you like to learn how to create engaging videos of your own? Then Media Production 1 is for you. In this course students learn to shoot and edit videos using the latest digital technology. We use what we learn to produce the school's morning announcements, and we also create commercials, music videos, and much more. Students who complete this course will be skilled in basic video production techniques that can be used in numerous vocational areas. The completed projects will compete with each other at the year-end Indie Awards.\*counts as half Vis/Perf Arts credit

## **MEDIA PRODUCTION 2** **456**

credits: .50/sem. grade offered: 9-12

**Prerequisites:** Media Production 1

Students who mastered the skills of Media Production 1 will build upon them to develop and produce longer and more intricate projects. Students will learn the history of situation comedies and will be introduced to the fundamentals of developing a story bible, writing a screenplay, storyboarding, shooting, and editing a pilot episode for their own situation comedy. The completed projects will compete with each other at the year-end Indie Awards.. \*counts as half Vis/Perf Arts credit

## **TECHNICIAN INTERNSHIP** **440**

credits: .50/sem. OR 1/year (pass/fail) grade offered: 10-12

**Prerequisites:** none

The Technology Internship requires students to assess technology needs throughout the day and define the best approach to addressing or solving the problem in the District Chrome Depot or classrooms. In addition to assisting students and teachers with technology needs, interns will be required to complete and maintain several running projects that address problems or solutions in educational technology integration. The course also asks students to have a prior understanding of the Chrome OS. In addition to skills and knowledge related to educational technology, Chrome Depot students should possess strong communication and critical thinking skills needed for this customer service related position. Students are expected to be self-motivated, independent learners. Students interested in this course should add it to their scheduling sheet and will be given access to the formal application after course requests are complete. The course will only be available to a limited number of students. Chosen applicants will go through an interview process before the end of the current school year and will be notified of placement. For eligible students, summer job opportunities may be available. Opportunity to work at the CWMS Chrome Depot may also be possible.

## **CCNAv7: SWITCHING, ROUTING & WIRELESS ESSENTIALS (SRWE)** **464**

credits: 1/year grade offered: 10-12

**Prerequisites:** Complete Introduction to Networking with at least a B

The second course in the CCNA curriculum focuses on switching technologies and router operations that support small-to-medium business networks and includes wireless local area networks (WLAN) and security concepts. Students learn key switching and routing concepts. They can perform basic network configuration and troubleshooting, identify and mitigate LAN security threats, and configure and secure a basic WLAN. This is the second of three courses needed to prepare for the Cisco Certified Network Associate (CCNA) exam. ► **CISCO Pathway-2**

## **CCNAv7: ENTERPRISE NETWORKING, SECURING & AUTOMATION (ENSA) 465**

credits: 1/year grade offered: 11-12

**Prerequisites:** Complete SRWE with at least a B

The third course in the CCNA curriculum describes the architectures and considerations related to designing, securing, operating, and troubleshooting enterprise networks. This course covers wide area network (WAN) technologies and quality of service (QoS) mechanisms used for secure remote access along with the introduction of software-defined networking, virtualization, and automation concepts that support the digitalization of networks. Students gain skills to configure and troubleshoot enterprise networks, and learn to identify and protect against cybersecurity threats. They are introduced to network management tools and learn key concepts of software-defined networking, including controller-based architectures and how application programming interfaces (APIs) enable network automation. This is the final course needed to prepare for the Cisco Certified Network Associate (CCNA) exam. To learn more about the benefits of earning a CCNA certification, visit <https://learningnetwork.cisco.com/docs/DOC-30659>. ➤ **CISCO Pathway-3**

## **NETWORKING MANAGEMENT 466**

credits: 1/year grade offered: 11-12

**Prerequisites:** Complete ENSA with at least a B

This is the fourth course in the pathway that will focus on the hands-on application of networking concepts and skills applied to real equipment. ➤ **CISCO Pathway-4**

## **APPLYING CREDIT FROM AN ADVANCED COMPUTER SCIENCE COURSE (COMPUTER SCIENCE PRINCIPLES 356 AT CWHS) TO SATISFY CREDIT FOR ALGEBRA 2/MATH 3 OR EQUIVALENT**

A student may choose to apply one credit of advanced computer science to satisfy one unit of Algebra 2 or equivalent. Only credit in an advanced computer science course can be used to satisfy the Algebra 2 or equivalent graduation requirement in mathematics. An advanced computer science course must address standards in the grades 9-12 advanced section of Ohio's Learning Standards for Computer Science and must be recorded as advanced in the EMIS Course Level Element field (CN080).

Students should consider their career goals and the requirements of postsecondary institutions admission and program requirements when choosing to use computer science courses to satisfy graduation requirements.

Students who choose to take advanced computer science in lieu of Algebra 2/Math 3, or the equivalent, need to be aware that some institutions of higher education may require Algebra 2/Math 3 or equivalent for the purpose of college admission. Also, the parent, guardian or legal custodian of any student who chooses to take advanced computer science in lieu of Algebra 2/Math 3 or equivalent must sign and submit to the school a document that contains a statement acknowledging that not taking Algebra 2 may have an adverse effect on college admission decisions ([ORC 3313.603](#)).

**NOTE:** A single credit in advanced computer science may only be used to satisfy one Algebra 2/Math 3 or equivalent, or an advanced science (excluding Biology or Life Sciences) credit.

**Note:** Ohio high school graduates who choose to participate in intercollegiate athletics should refer to the [NCAA](#) rules for details on how using credit in advanced computer science to satisfy algebra 2/math 3 may affect their eligibility.

# Business

#	Course	Offered	Cr.	Len.	Format
350	Spreadsh/Word Proc. Appl.	9 10 11 12	.50	S	S
375	Strategic Entrepreneurship	10 11 12	.50	S	S
459	Business Foundations	9 10 11 12	.50	S	S,O
460	Fund. of Business & Admin.	9 10 11 12	.50	S	S,O
461	Business Management	11 12	.66	S	S,O
463	Marketing Principles	11 12	1	S	S,O
480	Financial Accounting	10 11 12	.50	S	S

*\*Format -Single, Block or Online*

business operations, business relationships, resource management, process management, and financial principles. Students will use technological tools and applications to develop business insights, including the use of fundamental and advanced features of word processing, presentation design, and desktop publishing using Google Apps for Education and Microsoft Office Suite. ➤ **Pathway-2**

## Business Management 461

credits: .66/sem. +2 college credit hours grade offered: 11-12

**DC** **Prerequisites:** *Highly encourage completion of 459 Business Foundations. Must apply to Columbus State CC, qualifying score on Accuplacer or ACT and complete CCP requirements.*

This is a combination Columbus State BMGT 1008 and a career tech pathway course. 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. Students learn 21st century workplace skills needed to gain entry to and thrive in a rapidly changing workplace environment. ➤ **Pathway-3/4**

## Marketing Principles 463

credits: 1/sem.+3 college credit hours grade offered: 11-12

**DC** **Prerequisites:** *Highly encourage completion of 459 Business Foundations. Must apply to Columbus State CC, qualifying score on Accuplacer or ACT and complete CCP requirements.*

This is a combination Columbus State MKT 1230 and a career tech pathway course. Students will obtain an introduction to the sales process and the key role that sales activities play in any consumer or commercial business endeavor. The course deals with the basic components of selling including understanding customer psychology and building customer relationships. This course also emphasizes the important issues facing customer service providers and customer service managers in business. Special emphasis is placed on the mastery of specific skills and analyzing customer attitudes and behaviors to determine the tasks required to deliver excellent customer service. They will acquire knowledge of marketing strategies, market identification techniques, employability skills, business ethics and law, economic principles and international business. Technology, leadership and communications will be incorporated in classroom activities.

➤ **Pathway-3/4**

## FINANCIAL ACCOUNTING 480

credits: .50/sem. grade offered: 10-12

**Prerequisites:** *Completion of 459 and 460*

Financial Accounting is a course designed to help students learn how to 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.

## Spreadsheet/Word Processing Applications 350

credits: .50/sem. grade offered: 9-12

**Prerequisites:** *none*

Spreadsheet and Word Processing Applications is a course designed to help students learn essential skills for personal, academic, and professional success. Students will learn to use technology to develop and strengthen written communication skills. Students will learn how to use Microsoft Excel to solve mathematical and financial problems in business and will learn to create and edit charts and graphs to interpret spreadsheet data. Students will also learn how to use Microsoft Word to create, edit, manipulate, format, print, and store common personal and professional documents.

## Strategic Entrepreneurship 375

credits: .50/sem. grade offered: 10-12

**Prerequisites:** *459 and 460*

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

## Business Foundations 459

credits: .50/sem. grade offered: 9-12

**Prerequisites:** *none*

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.

➤ **Pathway-1**

## Fundamentals of Business & Administration 460

credits: .50/sem. grade offered: 9-12

**Prerequisites:** *Highly encourage completion of 459*

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

# Pre-Engineering

#	Course	Offered	Cr.	Length	Format
475	Intro to Engineering Design	9 10 11 12	1	Y	B
477	Principles of Engineering	10 11 12	1	Y	B
478	Digital Electronics	11 12	1	Y	B
479	Computer Integrated Mfg. (CIM)	11 12	1	Y	B

\*Format -Single, Block or Online

## Engineering Articulated Path:

The Certificate of Completion is a communication tool between the high school Project Lead the Way program and colleges and universities. It is used to verify the student's success in the PLTW courses for the purpose of articulation. Students should present the Certificate of Completion to the college/university when applying for admission. A list of Ohio colleges and universities participating in statewide articulation can be found on this website: [http://www.pltwohio.org/college\\_options\\_certificate.php](http://www.pltwohio.org/college_options_certificate.php)

**Intro to Engineering Design** **475**  
 credits: 1/year grade offered: 9-12

**Prerequisites:** *Completed Algebra I*

The major focus of the IED course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation. Students use 3D solid modeling design software to create solutions to solve proposed problems. They learn how to document their work and communicate about their solutions to solve proposed problems. They also present solutions to peers and members of the professional community, enhancing the development of oral skills. ➤ **Pathway-1**

**Principles of Engineering** **477**  
 credits: 1/year grade offered: 10-12

**Prerequisites:** *Completion of 475*

This survey course exposes students to major concepts they'll encounter in a post-secondary engineering course of study. Topics include mechanisms, energy, statics, materials and kinematics. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, document their work and communicate solutions. This is the second of the Engineering pathway foundation courses. ➤ **Pathway-2**

**DIGITAL ELECTRONICS** **478**  
 credits: 1/year grade offered: 11-12

**Prerequisites:** *Completion of 475 and 477*

Digital Electronics is the study of electronic circuits that are used to process and control digital signals. In contrast to analog electronics, where information is represented by a continuously varying voltage, digital signals are represented by two discrete voltages or logic levels. Digital electronics is the foundation of all modern electronic devices such as cellular phones, MP3 players, laptop computers, digital cameras, high definition televisions, etc.

The major focus of the DE course is to expose students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation. Utilizing the activity-project-problem-based teaching and learning pedagogy, students will analyze, design and build digital electronic circuits. While implementing these designs students will continually hone their interpersonal skills, creative abilities and understanding of the design process. ➤ **Pathway**

**COMPUTER INTEGRATED MANUFACTURING (CIM)** **479**  
 credits: 1/year grade offered: 11-12

**Prerequisites:** *Completion of 475 and 477*

Computer Integrated Manufacturing (CIM) is the study of manufacturing planning, integration, and implementation of automation. The course explores manufacturing history, individual processes, systems, and careers. In addition to technical concepts, the course incorporates finance, ethics, and engineering design. This reflects an integrated approach that leading manufacturers have adopted to improve safety, quality, and efficiency. Utilizing the activity-project-problem-based (APPB) teaching and learning pedagogy, students will analyze, design, and build manufacturing systems. While implementing these designs, students will continually hone their interpersonal skills, creative abilities, and understanding of the design process. Students apply knowledge gained throughout the course in a final open-ended problem to build a factory system ➤ **Pathway**

# Family & Consumer Sciences

## FOOD SCIENCE

505

credits: .50/sem.

grade offered: 11-12

**Prerequisites:** none

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 situation. Food safety and sanitation techniques will align to industry-recognized certifications.

#	Course	Offered	Credit	Length	Format
500	Exploring Careers*	9	.50	S	S
503	Principles of Food	9 10	.50	S	S,B
504	Global Gourmet	10 11 12	.50	S	S,B
505	Food Science	11 12	.50	S	S,B

\*Format -Single, Block or Online

Students are encouraged to participate in Family, Career and Community Leaders of America or FCCLA, the student organization that focuses on families and leadership skills.

## Explore Education

### EDUC Skills in the Teaching Profession

credits: 1/sem. + 3 college credit hours grade offered: 11-12

**Prerequisites:** Must follow below scheduling process

**Students electing to take this completely online course will NOT be scheduled into a class period, but will have a CW teacher assigned to them for questions and scheduling field observations in the district. Student will complete the course independently and outside of the normal school day.** This online Otterbein course

provides students the opportunity to explore and practice essential skills in the teaching profession as a mechanism to build capacity for introductory to education courses in teacher preparation programs. Students will practice the 'art of observation,' which includes paying attention, when in classroom settings to both teaching practice and learning behaviors. Likewise, students will engage in reflective writing and learn descriptive writing skills to enhance the quality of reflections of their observations. Students will also acquire technical writing skills in explanatory writing, as they apply concepts to field observations and explain their positions on classroom learning with reasons and evidence (concepts include child development, classroom routines and management, introductions of lessons, closure to lessons, analyzing assessment data, and others); Students will read academic research articles and know ways of annotating academic articles and will practice writing college-level annotations that attend to both a summary of the article and their interpretations. All aforementioned skills are practices in the contexts of P-12 classrooms and/or curated video content of teaching practice.

**Also, the requirements to apply to CCP at Otterbein are:**

- Apply online at [www.otterbein.edu/apply](http://www.otterbein.edu/apply) (select OCI/CCP app)
- Submit official high school transcript
- Submit official test scores from ACT or SAT (from testing agency or on official transcript)
- Submit [High School Information Form](#)

More information can be found at [www.otterbein.edu/oci](http://www.otterbein.edu/oci)

### EXPLORING CAREERS (REQ.)

500

credits: .50/sem.

grade offered: 9

**Prerequisites:** none

Designed to assist students with exploring careers and developing skills necessary to make meaningful decisions about their career choice. Students will use the College and Career Readiness platform, Naviance, to help connect their academic achievement to their post-secondary goals. Students will build a portfolio through Naviance as they complete valuable career exploration and planning activities, saving each in their portfolio which they may build upon throughout their high school career. Topics of study include, but are not limited to: conducting a personal analysis, choosing courses, setting goals, identifying career pathways, employment trends, career clusters, beginning the college search, preparing for job interviews and more. This course will aid the student in developing strategies and learning basic knowledge to make an effective transition from high school to college or career.

### PRINCIPLES OF FOOD

503

credits: .50/sem.

grade offered: 9-10

**Prerequisites:** none

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.

### GLOBAL GOURMET

504

credits: .50/sem.

grade offered: 10-12

**Prerequisites:** Principles of Food

A focus on foods from around the world, students will learn about many countries, the people, their traditions, and their culture. Presentations, guest speakers, projects, cooking labs, technology activities, and food samplings will be the highlights of this class. Students are encouraged to participate in FCCLA, the student organization that focuses on families and leadership skills.

# Health/Physical Education

#	Course	Offered	CR	Length	Format
903	Physical Education 1	9 10 11 12	.25	S	S
904	Physical Education 2	9 10 11 12	.25	S	S
900	Health	9 10 11 12	.50	S	S,O
	<b>ELECTIVES</b>				
908	Fitness & Nutrition	10 11 12	.50	S	S
902	Advanced Health	12	.50	S	S

*\*Format -Single, Block or Online*

**Graduation requirements include students complete .50 credit (two semesters) of Physical Education during the 9th or 10th grade OR Students may exempt this requirement by successfully completing two seasons of marching band or a school-sanctioned sport.**

This may be a combination of two seasons of the same sport/band or one season each of two different sports/band. Students may NOT exempt this requirement by taking .25 PE credit and then completing one sports/band season.

**Each student must take one semester of Health to meet graduation requirements.**

**PHYSICAL EDUCATION 1 (REQ.)** **903**  
 credits: .25/sem. grade offered: 9-12

**Prerequisites:** none

This course is designed to educate the student in skills and activities that can be incorporated into a lifetime fitness program. Students will be taught health-related fitness, leisure time activities, and lifetime sport activities. These activities may include tennis, Frisbee golf, softball, personal fitness, weight training, soccer, flag football, aerobics, and volleyball. Students will also complete a personal fitness assessment and learn how to develop an individual exercise/sport program.

Students will be able to measure both their physical activity levels and intensity levels for each corresponding physical activity. Students are required to change their clothes for participation in class activities.

Activity will take place both indoors and outdoors.

*\*If you are in 11th or 12th grade and need this course for graduation requirement, see counselor.*

**PHYSICAL EDUCATION 2 (REQ.)** **904**  
 credits: .25/sem. grade offered: 9-12

**Prerequisites:** Physical Education 1

This course is designed to educate the student in skills and activities that can be incorporated into a lifetime fitness program. Students will be taught health-related fitness, leisure time activities, and lifetime sport activities. These activities may include indoor soccer, table tennis, floor hockey, weight training, badminton, aerobics, basketball, and team handball. Students will also complete a personal fitness assessment and learn how to develop an individual exercise/sport program. Students will be able to measure both their physical activity levels and intensity levels for each corresponding physical activity.

Students are required to change their clothes for participation in class activities. Activity will take place both indoors and outdoors

*\*If you are in 11th or 12th grade and need this course for graduation requirement, see counselor.*

**HEALTH** **900**  
 credits: .50/sem. grade offered: 9-12

**Prerequisites:** none; Recommended Sophomore Year

Health is a semester course required for graduation and is usually scheduled for the sophomore year. The course will consist of a variety of lectures, speakers, projects, and audiovisual aids to introduce and discuss virtually all aspects of health. In general, a course outline would include topics such as anatomy, diseases, body systems, mental and emotional health, stress management, and nutrition. It will also cover other topics such as, drugs, bullying, relationships, abstinence, birth control, and STI's. **Students electing to take this completely online version will NOT be scheduled into a class period, but will complete the course independently and outside of**

**the normal school day. Students should consider time management skills and ability to work without supervision before signing up for this course. This will allow students to take additional courses they may not originally have been able to fit into their schedule. Students must still have a full regular class schedule. Taught through Canvas Learning platform by CWHS teacher. See HEALTH 900 description**

**FITNESS & NUTRITION** **908**  
 credits: .50/sem. grade offered: 10-12

**Prerequisites:** none

This course is designed to give students the opportunity to learn fitness and weight training concepts, as well as learn about basic nutrition and how to incorporate nutritional strategies into a personal fitness plan. Students will learn about healthy food choices as well as Pre and Post workout meals and snacks. Students will learn how to evaluate the nutritional value of their food choices. They will also learn and practice proper weight training techniques and be able to individualize their routines based off of their goals. Fitness activities may include weightlifting in the field house, walking/jogging on the track, fitness circuits in the gym, stretching, yoga etc. The class will meet daily in the weight room as well as the classroom and gym, to cover the nutritional component of the class. There may also be an opportunity to visit a local grocery store to evaluate and practice finding the best nutritional food choices.

**ADVANCED HEALTH** **902**  
 credits: .50/sem. grade offered: 12

**Prerequisites:** Health with a C or higher, or permission of the instructor

Advanced Health is a semester course designed for those seniors interested in exploring health issues. The course will consist of a variety of lectures, discussions, speakers, projects, and class activities. Many topics will be discussed in class such as drugs, bullying, relationships, sexual assault, college issues, HIV/AIDS, stress management, mental disorders, birth control, STI's and community service projects. Advanced health is more activity-directed and discussion-oriented. It is a time for refreshing prior knowledge and dealing with present day issues. It is a great course for applicable life skills.

# Work-Based Learning

## INTERNSHIP

credits: see below

## Flex Credit

grade offered: 11-12

**Prerequisites:** None -Graded as pass/fail; Typically .25 credits awarded for 30-45 hours of work, or .50 for 60-90 hours. Students will check with internship coordinator and guidance counselor to find out if this is a good option for them. Student will submit an internship application prior to approval. Application is located on the last page of this handbook as well as the guidance webpage.

This flex credit opportunity provides students with investigation and experience in career fields of interest. Individual programs are designed in cooperation between the student and CWSHS Internship Coordinator. Students participate in planning, goal setting, and experiences that will help to develop critical thinking and problem-solving skills. Students will complete up to 10 hours per week, for 8 weeks at an assigned internship site based on their individual career interests and goals. This experience can take place anytime throughout the school year, depending on student and business availability. Hours of internship vary and may be during school hours or evenings and weekends, if appropriate.

## WORK-BASED LEARNING

580/581

credits: 1-4 Based on schedule

check w/ counselor

**Prerequisites:** In order to participate in the WBL program, students must be at least 16 years old and be able to provide their own transportation to and from school and work. Students must have counselor approval to participate.

**Requirements:** In order to receive academic credit, all students who participate in Work-Based Learning course will be required to complete the requirements for the Ohio Means Jobs-Readiness Seal (OMJ) and earn a Bronze-level or higher NCRC (National Career Readiness Certificate) by scoring a minimum of a three (3) on each of the following WorkKeys Tests: Applied Mathematics, Graphic Literacy and Workplace Documents. These requirements align with the new graduation requirements for the class of 2021 and beyond. The [OhioMeansJobsReadiness Seal](#) will provide one of the two diploma seals required for graduation.

The Work Based Learning class is an opportunity for students to participate in structured educational experiences that integrate classroom learning and productive work experiences. The classroom portion of this class is worth one (1) elective credit and work experience is worth up to three (3) elective credits, with every 150 documented hours equaling one (1) elective credit. Work experiences should be related to a student's career goals, program of study and/or employability skills. Students will be required to apply for and attain a teacher-approved job in an environment that aligns with their future goals. One goal of the class is to align employment experiences with earning an industry credential tied to the student's post-secondary goals. A student in the WBL Program may earn the opportunity to have early release on their daily schedule during his/her junior and/or senior years, if other grade-level course requirements are met. This decision will be made on a student-by-student basis, with input from the student's academic team (teacher, counselor and administrator). Early release requests must be approved by the high school administration. Students who earn early release may leave as early as 10:30 or as late as 2:15 in order to attend work for the remainder of the day/evening.

## LEAN SIX SIGMA

credits: .50/sem. (Block)

582

grade

offered: 11-12

**Prerequisites:** (juniors and seniors who need this course for graduation purposes will be given priority enrollment)

Lean Six Sigma (LSS) is a team-based problem-solving methodology used by businesses and organizations worldwide. By equipping students with this skill set and certification, they have a distinct advantage in the workplace. Students learn a structured problem-solving methodology that can be applied personally, academically and professionally. This curriculum has been developed specifically for high school students. The Yellow and Green Belt Industry Credential/Certification counts as 9 points of the 12 needed for the Industry Credential pathway toward graduation.

# Pathways

High school courses can give you a head start on a career pathway or provide you with a certificate after the successful completion of courses to give you an advantage when applying for jobs after high school. Please carefully review the pathways and course requirements below before signing up.

- Per College Credit Plus, an orientation meeting may be required before course work can begin.
- Courses may be taken as single electives and not as

part of the complete pathway

- Dual credit courses are marked by this symbol in our handbook. 
- Any student entering dual enrollment courses will take the Accuplacer or use ACT/SAT scores.
- Student must apply for admission to college or university to enroll in dual credit courses

## STEM Pathway / Pre-Engineering

### Engineering Articulated Path:

The Certificate of Completion is a communication tool between the high school Project Lead the Way program and colleges and universities. It is used to verify the student's success in the PLTW courses for the purpose of articulation. Students should present the Certificate of Completion to the college/university when applying for admission. A list of Ohio colleges and universities participating in statewide articulation can be found on this website: [http://www.pltwhio.org/college\\_options\\_certificate.php](http://www.pltwhio.org/college_options_certificate.php)

### DIGITAL ELECTRONICS

478

credits:1/year grade offered:11-12

**Prerequisites:** *Completion of Intro to Engineering*

Digital Electronics is the study of electronic circuits that are used to process and control digital signals. In contrast to analog electronics, where information is represented by a continuously varying voltage, digital signals are represented by two discrete voltages or logic levels. Digital electronics is the foundation of all modern electronic devices such as cellular phones, MP3 players, laptop computers, digital cameras, high definition televisions, etc.

The major focus of the DE course is to expose students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation. Utilizing the activity-project-problem-based teaching and learning pedagogy, students will analyze, design and build digital electronic circuits. While implementing these designs students will continually hone their interpersonal skills, creative abilities and understanding of the design process. **Pathway-3**

### COMPUTER INTEGRATED MANUFACTURING (CIM)

479

credits:1/year grade offered:11-12

**Prerequisites:** *Completion of 475 and 477*

Computer Integrated Manufacturing (CIM) is the study of manufacturing planning, integration, and implementation of automation. The course explores manufacturing history, individual processes, systems, and careers. In addition to technical concepts, the course incorporates finance, ethics, and engineering design. This reflects an integrated approach that leading manufacturers have adopted to improve safety, quality, and efficiency. Utilizing the activity-project-problem-based (APPB) teaching and learning pedagogy, students will analyze, design, and build manufacturing systems. While implementing these designs, students will continually hone their interpersonal skills, creative abilities, and understanding of the design process. Students apply knowledge gained throughout the course in a final open-ended problem to build a factory system **Pathway-4**

### Intro to Engineering Design

475

credits: 1/year grade offered: 9-12

**Prerequisites:** *Completed Algebra I*

The major focus of the IED course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation. Students use 3D solid modeling design software to create solutions to solve proposed problems. They learn how to document their work and communicate about their solutions to solve proposed problems. They also present solutions to peers and members of the professional community, enhancing the development of oral skills.

**Pathway-1**

### Principles of Engineering

477

credits:1/year grade offered:10-12

**Prerequisites:** *Completion of Intro to Engineering*

This survey course exposes students to major concepts they'll encounter in a post-secondary engineering course of study. Topics include mechanisms, energy, statics, materials and kinematics. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, document their work and communicate solutions. This is the second of the Engineering pathway foundation courses. **Pathway-2**

# STEM Pathway / Business

## Business Pathway

- If you continue your education at Columbus State after high school, articulated courses: college credit can be given for the successful completion courses 459 and 460
- Courses 461 and 463 are dual credit courses, Student must apply for admission to college or university to enroll in dual credit courses

Our Business Pathway is designed to expose students to real-world business challenges, dilemmas, and successes, while developing the skills needed to transition to new and emerging careers throughout their lifetime. In addition to studying a quality curriculum, the Pathway prepares students to work independently, thinking critically, collaborate with cross-functional teams, and communicate ideas clearly and constructively.

Learners apply principles of economics, business management, marketing and employability in a variety of roles, while analyzing business enterprises related to the career field.

Students can plan on fully participating in Business Professionals of America, the Career-Tech Student Organization that reinforces the skills in a competitive environment. Students can also look forward to the strategic, tactical, and operational planning of a school store, as well as growing partnership with area business owners.

## Business Management

461

credits: .66/sem. +2 college credit hours grade offered: 11-12



**Prerequisites:** *Highly encourage completion of 459 Business Foundations. Must apply to Columbus State CC, qualifying score on Accuplacer or ACT and complete CCP requirements.*

*This is a combination Columbus State BMGT 1008 and a career tech pathway course. 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. Students learn 21st century workplace skills needed to gain entry to and thrive in a rapidly changing workplace environment. **Pathway-3***

## Marketing Principles

463

credits: 1/sem.+3 college credit hours grade offered: 11-12



**Prerequisites:** *Highly encourage completion of 459 Business Foundations. Must apply to Columbus State CC, qualifying score on Accuplacer or ACT and complete CCP requirements.*

*This is a combination Columbus State MKT 1230 and a career tech pathway course. Students will obtain an introduction to the sales process and the key role that sales activities play in any consumer or commercial business endeavor. The course deals with the basic components of selling including understanding customer psychology and building customer relationships. This course also emphasizes the important issues facing customer service providers and customer service managers in business. Special emphasis is placed on the mastery of specific skills and analyzing customer attitudes and behaviors to determine the tasks required to deliver excellent customer service. They will acquire knowledge of marketing strategies, market identification techniques, employability skills, business ethics and law, economic principles and international business. Technology, leadership and communications will be incorporated in classroom activities.*

**Pathway-4**

## Business Foundations

459

credits: .50/sem. grade offered: 9-12

**Prerequisites:** *none*

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.

**Pathway-1**

## Fundamentals of Business & Administration 460

credits: .50/sem. grade offered: 9-12

**Prerequisites:** *Highly encourage completion of 459*

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, including the use of fundamental and advanced features of word processing, presentation design, and desktop publishing using Google Apps for Education and Microsoft Office Suite. **Pathway-2**

# STEM Pathway / CISCO

## CISCO Networking Academy Pathway

### CISCO CCNA Certificate

Students completing the first three courses successfully will be prepared to sit for the CCNA exam.

#### Networking CTAG info:

Students completing CISCO networking courses may be eligible to receive college credit through Career-Technical Credit Transfer upon successful completion of each course and passing applicable exams:

<http://goo.gl/4m0WID>

### CCNAv7:INTRODUCTION TO NETWORKING 420

credits: 1/year grade offered: 9-12

**Prerequisites:** Complete Algebra 1 with at least a B

The first course in the CCNA curriculum introduces the architectures, models, protocols, and networking elements that connect users, devices, applications and data through the Internet and across modern computer networks - including IP addressing and Ethernet fundamentals. By the end of the course, students can build simple local area networks (LAN) that integrate IP addressing schemes, foundational network security, and perform basic configurations for routers and switches. This is the first of three courses needed to prepare for the Cisco Certified Network Associate (CCNA) exam. **Pathway-1**

### CCNAv7: SWITCHING, ROUTING & WIRELESS ESSENTIALS (SRWE) 464

credits: 1/year grade offered: 10-12

**Prerequisites:** Complete Introduction to Networking with at least a B

The second course in the CCNA curriculum focuses on switching technologies and router operations that support small-to-medium business networks and includes wireless local area networks (WLAN) and security concepts. Students learn key switching and routing concepts. They can perform basic network configuration and troubleshooting, identify and mitigate LAN security threats, and configure and secure a basic WLAN. This is the second of three courses needed to prepare for the Cisco Certified Network Associate (CCNA) exam. **Pathway-2**

### CCNAv7: ENTERPRISE NETWORKING, SECURING & AUTOMATION (ENSA) 465

credits: 1/year grade offered: 11-12

**Prerequisites:** Complete SRWE with at least a B

The third course in the CCNA curriculum describes the architectures and considerations related to designing, securing, operating, and troubleshooting enterprise networks. This course covers wide area network (WAN) technologies and quality of service (QoS) mechanisms used for secure remote access along with the introduction of software-defined networking, virtualization, and automation concepts that support the digitalization of networks. Students gain skills to configure and troubleshoot enterprise networks, and learn to identify and protect against cybersecurity threats. They are introduced to network management tools and learn key concepts of software-defined networking, including controller-based architectures and how application programming interfaces (APIs) enable network automation. This is the final course needed to prepare for the Cisco Certified Network Associate (CCNA) exam. To learn more about the benefits of earning a CCNA certification, visit <https://learningnetwork.cisco.com/docs/DOC-30659>.

**Pathway-3**

### NETWORKING MANAGEMENT 466

credits: 1/year grade offered: 11-12

**Prerequisites:** Complete ENSA with at least a B

This is the fourth course in the pathway that will focus on the hands-on application of networking concepts and skills applied to real equipment. **Pathway-4**

# STEM Pathway / Medical

## Medical Pathway

- Building a foundation for students interested in pursuing a career in a science field.
- This is NOT a dual credit pathway.
- College credit may be earned with successful completion of all four courses.

Transcripted college credit from Sinclair Community College can be obtained for successful completion of Human Body Systems (3 credits) and Medical Interventions (3 credits). In order to receive credit, a student must achieve a B in the class, and receive a stanine score of 6 or above on the PLTW college credit exam.

## HONORS BIOLOGY

**202** (*Principles of Biomedical Sciences*)

credits:1/year grade offered: 9-10

**Prerequisites:** 9th with 8th grade teacher signature on scheduling sheet; Grade 10 with an A in Physical Science and teacher signature on scheduling sheet

This course explores concepts of human medicine, and introduces students to modern biological concepts including biochemistry, cellular biology, genetics, homeostasis, feedback systems, and metabolism through investigation of the human body. Students will participate in individual and group research and experimentation and proceed at a fast pace. A required part of this course is completion of homework and at-home modules during school breaks to facilitate independent learning. The course provides an overview of all the Biomedical Sciences Pathway offered at CWHS and lays the scientific foundation necessary for student success in the subsequent courses. **Pathway-1**

## HUMAN BODY SYSTEMS

**216**

credits:1/year grade offered: 10-12

**Prerequisites:** *Honors Biology*

Students examine the processes, structures, and interactions of the human body systems to learn how they work together to maintain homeostasis (internal balance) and good health. Using real-world cases, students take the role of biomedical professionals and work together to solve medical mysteries. Hands-on projects include designing experiments, investigating the structures and functions of body systems, and using data acquisition software to monitor body functions such as muscle movement, reflex and voluntary actions, and respiratory operation. Important concepts covered in the course are communication, transport of substances, locomotion, metabolic processes, defense, and protection. **Pathway-2**

## MEDICAL INTERVENTION

**220**

credits:1/year grade offered: 11-12

**Prerequisites:** *PBS (Honors Bio) and Human Body Systems*

Student projects investigate various medical interventions that extend and improve quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care.

The course explores the design and development of various medical interventions, including vascular stents, cochlear implants, and prosthetic limbs. In addition, students review the history of organ transplants and gene therapy, and stay updated on cutting-edge developments via current scientific literature. Using 3D imaging, data acquisition software, and current scientific research, students design a product that can be used as a medical intervention. **Pathway-3**

## BIOMEDICAL INNOVATIONS

**222**

credits:1/year grade offered: 11-12

**Prerequisites:** *PBS (Honors Bio) and Human Body Systems*

In this capstone course, students apply their knowledge and skills to answer questions or solve problems related to the biomedical sciences. Students design innovative solutions for the health challenges of the 21st century as they work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. They have the opportunity to work on an independent project and may work with a mentor or advisor from a university, hospital, physician's office, or industry. Throughout the course, students are expected to present their work to an adult audience that may include representatives from the local business and healthcare community.

An example project students will complete include designing an effective emergency room. In this problem students apply their knowledge of emergency medical careers, diagnostic testing and patient evaluation, human body systems, and medical interventions to analyze the workings of an emergency room and discuss inefficiencies that may hinder appropriate clinical care. **Pathway-4**