Colerain High School
8801 Cheviot Road
Cincinnati, Ohio 45251
(513) 385-6424

Mr. Jack Fisher  Principal  jfisher@nwlsd.org
Ms. Erin Davis  Asst. Principal  edavis@nwlsd.org
Mr. Bob Reynolds  Asst. Principal  breynolds@nwlsd.org
Ms. Laura Bailey  Asst. Principal  lbailey@nwlsd.org
Mr. Joe Pollitt  Asst. Principal  jpollitt@nwlsd.org
Mr. Darren Braddix  Athletic Dir.  dbraddix@nwlds.org

Colerain High School Counselors
Ms. Kimberly Bunn  kbunn@nwlsd.org
Ms. Tiffany Hosley  thosley@nwlsd.org
Mr. Ronald Russo  rrusso@nwlsd.org
Ms. Heather Snyder  hsnyster@nwlsd.org
Ms. Meredith Tilow  mtto@nwlsd.org
Ms. Evelyn Gibfried  egibfried@nwlsd.org

Northwest High School
10761 Pippin Road
Cincinnati, Ohio 45231
(513) 851-7300

Mrs. Susan Smith  Principal  ssmith@nwlsd.org
Mr. Casey Scherz  Asst. Principal  cscherz@nwlsd.org
Mr. George Sturgeon  Asst. Principal  gsturgeon@nwlsd.org
Mr. Mark Zimmerly  Asst. Principal  mzimmy@nwlsd.org
Mr. Brad Watkins  Athletic Dir.  bwatkins@nwlsd.org

Northwest High School Counselors
Mrs. Emily Jones  ejones@nwlsd.org
Ms. Brittany Summers  bsummners@nwlsd.org
Mrs. Virginia Schueler  vschueler@nwlsd.org
FOREWORD

Northwest Local Schools have two public high schools, dedicated to the pursuit of academic excellence in a culturally diverse community. Academic ability, a respect for learning, and a will to achieve are tools for both students and faculty.

Analytical and creative thinking skills equip students to draw upon the knowledge of the past, weigh the questions of the present, and to envision the possibilities of the future.

Involvement in extra-curricular and co-curricular activities provides additional opportunities for pursuing academic, social, and athletic goals. We believe that academic achievement is intrinsically valuable in a democratic atmosphere of mutual respect, social equity, and personal responsibility.

Selecting courses will be one of the most important tasks you will perform during your school career. The coursework you choose to take in high school prepares you for further educational opportunities and life.

Select courses for yourself that are going to provide an appropriate challenge. Courses that are too easy or too difficult will not give you the preparation you need for success. Select courses that fit your career plans and if you are uncertain as to your future, select courses that allow you numerous options beyond high school.

Finally, make a tentative plan for the four years of high school so that you will know the sequence of course levels you will be required to take.

Mission
The Northwest Local School District will create a responsive learning community where all students are valued, challenged, and guided along a pathway to success.

Core Beliefs:

- We believe that it is our responsibility to respond to each student to ensure learning and growth.
- We believe that students and staff thrive in an environment that is trusting, safe, and provides hope on a daily basis.
- We believe that collaborative relationships and high expectations are paramount to our success.
- We believe that community engagement is essential for the success of our school district.
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DEFINITION OF TERMS

1. GRADES AND CREDITS
   • All students must have 21 credits to be eligible to graduate. Please see page 9 for more details.

Credits:
   • Credits are based on Carnegie units of credit. In most cases, a course that lasts one full school year will receive one (1) unit of credit. Courses that last for a semester will merit one-half (.5) unit of credit. The exceptions to this are:
     • Physical Education – The state of Ohio has mandated that one semester of Physical Education shall merit one-quarter (.25) unit of credit; therefore two semesters of Physical Education will be required to meet the graduation requirement of .50 credit in Physical Education

Grading:
   • Beginning in the 2017-18 school year, all high school students will follow the grading scale below.

<table>
<thead>
<tr>
<th>GRADE</th>
<th>SCALE</th>
<th>GENERAL/ADV.</th>
<th>HONORS</th>
<th>AP/CCP</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100% - 90%</td>
<td>4.0</td>
<td>4.5</td>
<td>5.0</td>
</tr>
<tr>
<td>B</td>
<td>89% - 80%</td>
<td>3.0</td>
<td>3.5</td>
<td>4.0</td>
</tr>
<tr>
<td>C</td>
<td>79% - 70%</td>
<td>2.0</td>
<td>2.5</td>
<td>3.0</td>
</tr>
<tr>
<td>D</td>
<td>69% - 60%</td>
<td>1.0</td>
<td>1.0*</td>
<td>1.0*</td>
</tr>
<tr>
<td>F</td>
<td>59% - 0%</td>
<td>0.0</td>
<td>0.0*</td>
<td>0.0*</td>
</tr>
</tbody>
</table>

Weighted Grades
   All Honors and Advanced Placement (AP) Courses:
   Add 0.5 (C or better) on the grade point average.
   *College Credit Plus courses must follow the grade scale of the university awarding credit.
   *For Honors and AP courses, no weighted values are awarded for the grades below a C.

Graduation Awards for the Class of:

<table>
<thead>
<tr>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summa Cum Laude</strong></td>
<td><strong>Summa Cum Laude</strong></td>
<td><strong>Summa Cum Laude</strong></td>
</tr>
<tr>
<td>✓ Minimum of 21 credits during high school</td>
<td>✓ Minimum of 21 credits during high school</td>
<td>✓ Minimum of 21 credits during high school</td>
</tr>
<tr>
<td>✓ Minimum weighted GPA of 4.95 or higher*</td>
<td>✓ Minimum weighted GPA of 4.65 or higher*</td>
<td>✓ Minimum weighted GPA of 4.40 or higher*</td>
</tr>
<tr>
<td>✓ No final grade below a C</td>
<td>✓ No final grade below a C</td>
<td>✓ No final grade below a C</td>
</tr>
<tr>
<td><strong>Magna Cum Laude</strong></td>
<td><strong>Magna Cum Laude</strong></td>
<td><strong>Magna Cum Laude</strong></td>
</tr>
<tr>
<td>✓ Minimum of 21 credits during high school</td>
<td>✓ Minimum of 21 credits during high school</td>
<td>✓ Minimum of 21 credits during high school</td>
</tr>
<tr>
<td>✓ Minimum weighted GPA of 4.65 or higher*</td>
<td>✓ Minimum weighted GPA of 4.35 or higher*</td>
<td>✓ Minimum weighted GPA of 4.16 or higher*</td>
</tr>
<tr>
<td><strong>Cum Laude</strong></td>
<td><strong>Cum Laude</strong></td>
<td><strong>Cum Laude</strong></td>
</tr>
<tr>
<td>✓ Minimum of 21 credits during high school</td>
<td>✓ Minimum of 21 credits during high school</td>
<td>✓ Minimum of 21 credits during high school</td>
</tr>
<tr>
<td>✓ Minimum weighted GPA of 4.0 or higher*</td>
<td>✓ Minimum weighted GPA of 3.75 or higher*</td>
<td>✓ Minimum weighted GPA of 3.57 or higher*</td>
</tr>
</tbody>
</table>

*Weighted GPA requirements have been adjusted to account for the phase in of the 5 point weighted GPA scale.

   a. Computation of Grade Point Average:
• Each percent grade is changed to the appropriate letter grade.
• Each letter grade is assigned a value (either regular or weighted).
• Each value is multiplied by the amount of credit the class is worth, resulting in a number of points.
• The total number of points is divided by the total number of credits attempted, arriving at the grade point average.
• Grade point averages are calculated at the end of each semester
• Cumulative grade point averages will be calculated using final grades

b. Grading System Procedures:
• Quarter and final grades are reported on a numerical basis as percentages.
• A passing numerical average of a minimum of 60% is required to pass and receive credit for a course.
• No grade of lower than 40% can be reported on quarter grades, however, progress reports and midterms can show averages lower than 40%.
• Quarter grades will comprise 90% of a student’s overall grade and summative assessments (Semester Exam) will comprise the additional 10% of a student’s overall grade. All students will receive credit by the semester for semester and yearlong courses.
• An incomplete (I) may be temporarily assigned to a student who, for good reason, has not completed the required work for a given grading period.
• After a reasonable length of time, and upon the satisfactory completion of the work, the incomplete (I) will be changed to the numerical grade earned. If the student does not complete the work successfully, the incomplete (I) becomes the numeric grade earned.
• A final grade of incomplete (I) will be given to a student who has not completed or attempted to complete the minimum requirements of the final grading period of the semester, and who provides no reasonable explanation for doing so.
• Parents are notified when there is a likelihood that a final incomplete (I) will be given. When the final incomplete (I) is given, the teacher gives the principal a general list of what work has been missed, and the reason for issuing the final incomplete (I).
• Final determination of incomplete status is at the determination of the building principal. This information is included in the student’s permanent record. No makeup privileges are allowed; the student loses semester credit in that course.
• Gradebook categories and weights should be aligned to the following criteria
  o 30-40% of a student’s quarter grade should be comprised of practice (homework, guided classwork, etc)
  o 60-70% of a student’s quarter grade should be comprised of summative assignments (tests, quizzes, projects, presentations, demonstrations, etc)
  o Teachers should develop procedures that allow students multiple attempts to demonstrate mastery (ie. retakes, corrections, resubmissions, etc)

c. Declared Courses:
• Students are permitted to DECLARE one credit per year as “no count” courses for the purposes of class rank computation. Grades for these courses will be issued, credits granted, and the record of the course will still appear on the official transcript.

The purpose of this plan is to permit students to take courses offered at a non-weighted level. Taking the non-weighted course would originally have been discouraged due to the impact on weighted GPA. Most elective courses are offered without weighted grading.

We encourage students to take elective courses in their fields of interest, and this provision allows this to occur without compromising a student’s class rank and GPA.

Declared courses will have a special code and the computer printout will not include the course in class rank computations. The course will appear on the report card and the official transcript of credits sent to colleges, employers, military services, etc…
Students do not have to declare any courses, but it is an option for all students that meet the criteria. The course(s) must be declared for both semesters of the 2017-18 school year by Friday, September 15, 2017 at 2 p.m.

The following rules apply in determining the courses to be declared:
1. A student must schedule seven credits in order to declare one credit per year.
2. Students may not accumulate unused "declared" courses from year to year.
3. No changes of declarations are permitted.
4. The course declared will carry a grade and appropriate credit. Declared courses will not be used in computing class rank or honor roll.
5. Students may not declare any Honors or Advanced Placement courses.
6. Students in grades nine through twelve are eligible to make such declarations.
7. Core courses cannot be declared until the graduation requirements have been met.
8. CORE courses required for graduation may not be declared as “no count” courses.
9. If a student has late arrival, early dismissal, or a study hall, he/she cannot declare a course.

The following courses may not be declared:
- Any level of English I, II, III, IV
- Foreign Language I, II, III, IV
- Health requirement
- Any level of Algebra I, Geometry, Algebra II, or 4th required math credit.
- Physical Education requirement
- Any level of Physical Science, Biology or third required science credit
- Any level of Modern World History, American History, American Government, or mandatory social studies elective
- First credit of fine arts

d. Pass – Fail Courses:
- Courses offered as pass/fail will be issued a final grade of “S” for satisfactory if the student meets or exceeds the criteria established or “U” for unsatisfactory if the student does not meet the minimum stated criteria for the course.

e. Progress Book:
- All teachers are required to maintain a grade book via Progress Book and follow the established guidelines:
  - Grades will be entered and teachers will update grades once per week
  - Teachers will use the student report from the online grading system to supplement parent/teacher conferences.
  - Teachers will report one to two grades per week on average.
  - Teachers will print the grade book and submit it to their building administrator at the end of the year.
    - Teachers name should be on the cover
    - Students’ first and last names must be indicated
    - A key should be included to explain codes, symbols, etc.
    - Attendance records should also be included
2. GRADUATION REQUIREMENTS:  

The Board desires that its standards for graduation meet or exceed the minimum standards of the Ohio Department of Education as well as State law and, further, that our high schools compares favorably with other high schools in the state that are recognized for excellence.

The requirements for graduation from high school are as follows.

<table>
<thead>
<tr>
<th>NWLSD Requirements with Math Opt Out</th>
<th>NWLSD Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Language Arts</td>
<td>4 units</td>
</tr>
<tr>
<td>History and government,</td>
<td>2 units</td>
</tr>
<tr>
<td>including one unit of American</td>
<td></td>
</tr>
<tr>
<td>History and government,</td>
<td></td>
</tr>
<tr>
<td>American History and one unit</td>
<td></td>
</tr>
<tr>
<td>of American History and one unit</td>
<td></td>
</tr>
<tr>
<td>of American History and one unit</td>
<td></td>
</tr>
<tr>
<td>of American Government</td>
<td></td>
</tr>
<tr>
<td>Social Studies</td>
<td>2 units</td>
</tr>
<tr>
<td>Science, including one unit each in</td>
<td>3 units</td>
</tr>
<tr>
<td>Physical Science and Biology</td>
<td></td>
</tr>
<tr>
<td>Math, including one unit of Algebra</td>
<td>3 units</td>
</tr>
<tr>
<td>II or its equivalent **</td>
<td></td>
</tr>
<tr>
<td>**</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>½ unit</td>
</tr>
<tr>
<td>Physical Education</td>
<td>½ unit</td>
</tr>
<tr>
<td>Electives *</td>
<td>6 units</td>
</tr>
</tbody>
</table>

The NWLSD graduation requirements also include:

1. student electives* of any one or combination of the following: foreign language, fine arts (must complete two semesters unless following a career-technical pathway), business, career-technical education, family and consumer sciences, technology, agricultural education or additional English language arts, math, science or social studies courses not otherwise required under the statutory graduation requirements;

2. **students entering ninth grade for the first time on or after July 1, 2015 who are pursuing a career-technical instructional track may complete a career-based pathway math course as an alternative to Algebra II.
3. units earned in social studies shall be integrated with economics and financial literacy and
4. passing all state-required examinations.

Summer School

Summer school credits are accepted toward graduation, provided that administrative approval has been
given prior to registration for the course.

Educational Options

High school credit is awarded to students who successfully complete Board-approved educational
options that count toward the graduation requirements and subject area requirements.

College Credit Plus and Postsecondary Enrollment Options

Credit is awarded for courses successfully completed at an accredited postsecondary institution. High
school credit awarded for a course successfully completed under College Credit Plus, or where
applicable the former Postsecondary Enrollment Options Program, counts toward the graduation
requirements and subject area requirements of the District. If a course comparable to the course
successfully completed is offered by the District, then comparable credit for the completed equivalent
course is awarded. If no comparable course is offered, the District grants to the student an appropriate
number of credits in a similar subject area.

Correspondence Courses

High school courses offered through correspondence courses are accepted for credit toward graduation
only when they meet the following criteria.

1. Credits earned in correspondence schools directly affiliated with state universities are
evaluated by the school administration for students who wish to qualify for graduation from
high school.
2. Credits earned from correspondence schools not directly affiliated with an accredited college
or university may not be applied toward graduation.
3. Credits earned from schools that have been established primarily for correspondence study,
rather than an institution primarily for residence study, are not accepted toward graduation.

Course Work Prior to Ninth Grade

Student work successfully completed prior to the ninth grade is applied towards graduation credit if the
course is taught by a teacher holding a license valid for teaching high school and is designated by the
Board as meeting the high school curriculum requirements.
Physical Education Exemption

A student who, during high school, has participated in interscholastic athletics, marching band or cheerleading for at least two full seasons is not required to complete any physical education courses as a condition to graduate. However, the student is required to complete one-half unit, consisting of at least 60 hours of instruction, in another course of study.

Graduation Requirements Opt Out

The District offers students entering the ninth grade on or after July 1, 2010, and before July 1, 2016, the ability to opt out of the graduation requirements in compliance with Board policy and regulations and all procedural requirements stipulated by the school. Only high school students on schedule to graduate in one of the following school years are eligible for this program: graduating classes of 2014-2017.

Eligible students may graduate without having completed the Ohio Core curriculum prescribed by State Law. Students wishing to participate in this program must have attended high school for two years. A student wishing to participate and his or her parent(s) or guardian(s) must sign and file written consent to the student’s graduating without completion of the Ohio Core curriculum and acknowledge that one consequence of failure to complete the Ohio Core curriculum is ineligibility to enroll in most state universities in Ohio without further coursework.

By electing the Math Opt-Out, students will be required to take one additional elective to graduate from NWLSD.
College Credit Plus:

What is It?
Eligible students can take courses and earn high school and college credit that appears on both their high school and college transcripts. Teachers who teach a College Credit Plus course in a high school must receive professional development and be an adjunct professor at a college or university. All courses offered through College Credit Plus – even courses offered at the high school – must be the same course that the college offers. The course must apply to a degree or professional certificate. College Credit Plus replaces Post-Secondary Education Option, also known as PSEO, and redefines “alternative dual enrollment” programs as advanced standing programs.

Why?
Ohio needs more students who graduate college-and career-ready. College Credit Plus increases access for students who have not taken full advantage of the opportunity to earn college credits while in high school.

Where?
The student enrolled in both high school and college and can attend the class in any setting arranged by the college.

Who?
Ohio public school districts and Ohio public colleges and universities must participate in College Credit Plus. Nonpublic high schools and colleges and 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.

How does a student get started?
All participating public and private schools, colleges, and universities must promote College Credit Plus opportunities on their websites. Additionally, an informational meeting will be held annually for students and parents.

Cost:
There is no cost for the student to participate in College Credit Plus when the student is enrolled in a public college or university. The high school and college or university will share the cost for the course. Students choosing to enroll in a participating college or university might incur costs. Students are responsible for tuition and book charges for failed courses where students earn a failing grade or if students withdraw past the college deadline for a full refund.

Additional Information:
- Student must be enrolled in both college and high school.
- Students must apply and be accepted by the corresponding college (which may include achieving qualifying scores on college entrance exams)
- Student to earn transcripted college and high school credit upon successful completion of the course.
- Schools who offer advanced standing courses that have the potential to enhance student grades or class rank must offer the same opportunity to enhance the grades or class ranking of students taking similar coursework under College Credit Plus.
- Annually (Institutes of Higher Education and High Schools) coordinate on College Credit Plus event for students and parents.
- Taught by an instructor who meets the Board of Regent academic credentialing requirements.
- April 1 is the deadline students must notify counselors of their intention to take College Credit Plus in the upcoming year.
- For high school athletes, the “clock” for NCAA eligibility begins after graduation.
University of Cincinnati Courses Offered at Colerain and/or Northwest High School: 2017-18

### Social Studies

<table>
<thead>
<tr>
<th>Course # &amp; Location</th>
<th>Semester Offered</th>
<th># of College Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCP POL 1010 Intro. to Am. Politics 6500</td>
<td>1st semester</td>
<td>3 semester hrs.</td>
</tr>
<tr>
<td>CCP POL 1060 Intro. Comp. Studies 6511</td>
<td>2nd semester</td>
<td>3 semester hrs.</td>
</tr>
</tbody>
</table>

- Enrollment and successful completion of both of the above courses will satisfy the American Government graduation requirement.

**Prerequisite:** Successful completion of U.S. History course.

### Science

<table>
<thead>
<tr>
<th>Course # &amp; Location</th>
<th>Semester Offered</th>
<th># of College Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCP CHEM I 1040 and 1040L 6501</td>
<td>1st semester</td>
<td>5 semester hours</td>
</tr>
<tr>
<td>CCP CHEM II 1041 and 1041L 6502</td>
<td>2nd semester</td>
<td>5 semester hours</td>
</tr>
</tbody>
</table>

**Prerequisite:**
A "B" average in Honors Chemistry, or an "A" average in Advanced Chemistry with a "B" average on tests and teacher recommendation or a "B" average or better in Algebra II.

<table>
<thead>
<tr>
<th>Course # &amp; Location</th>
<th>Semester Offered</th>
<th># of College Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCP BIOL 2001C – Anat. &amp; Physio.I 6503</td>
<td>1st semester</td>
<td>5 semester hours</td>
</tr>
<tr>
<td>CCP BIOL 2002C – Anat. &amp; Physio. II 6504</td>
<td>2nd semester</td>
<td>5 semester hours</td>
</tr>
</tbody>
</table>

**Prerequisite:**
A "B" average in Honors Biology, or an "A" average in Advanced Biology with a "B" average on tests and teacher recommendation.

### Foreign Language - French

<table>
<thead>
<tr>
<th>Course # &amp; Location</th>
<th>Semester Offered</th>
<th># of College Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCP FREN 2015 Comp. &amp; Conv. I 6505</td>
<td>1st semester</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>CCP FREN 2016 Comp &amp; Conv. II 6511</td>
<td>2nd semester</td>
<td>3 semester hours</td>
</tr>
</tbody>
</table>

**Prerequisite:**
A "B" average or better in French IV.

<table>
<thead>
<tr>
<th>Course # &amp; Location</th>
<th>Semester Offered</th>
<th># of College Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCP FREN 1002 Basic French II 6506</td>
<td>Year</td>
<td>5 semester hours</td>
</tr>
</tbody>
</table>

**Prerequisite:**
A "C" average or better in French III.

### Foreign Language - Spanish

<table>
<thead>
<tr>
<th>Course # &amp; Location</th>
<th>Semester Offered</th>
<th># of College Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCP SPAN 2015 Comp. &amp; Conv. I 6508</td>
<td>1st semester</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>CCP SPAN 2016 Comp. &amp; Conv. II 6509</td>
<td>2nd semester</td>
<td>3 semester hours</td>
</tr>
</tbody>
</table>

**Prerequisite:**
A "B" average or better in Spanish IV.

<table>
<thead>
<tr>
<th>Course # &amp; Location</th>
<th>Semester Offered</th>
<th># of College Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCP SPAN 1002 Basic Spanish II 6510</td>
<td>Year</td>
<td>5 semester hours</td>
</tr>
</tbody>
</table>

**Prerequisite:**
A "C" average or better in Spanish III.

### Butler Tech

<table>
<thead>
<tr>
<th>Course # &amp; Location</th>
<th>Semester Offered</th>
<th># of College Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCP ECED 1040 Intro. Pers. Fin. 6212CCP</td>
<td>1st semester</td>
<td>3 semester hrs.</td>
</tr>
</tbody>
</table>

- The above course is offered as part of the Honors Financial Services Tech Prep program.

<table>
<thead>
<tr>
<th>Course # &amp; Location</th>
<th>Semester Offered</th>
<th># of College Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCP IT 111 Web Design 6319CCP</td>
<td>Year</td>
<td>3 semester hrs.</td>
</tr>
</tbody>
</table>

- The above course is offered as part of the Programming and Software Tech Prep program.

<table>
<thead>
<tr>
<th>Course # &amp; Location</th>
<th>Semester Offered</th>
<th># of College Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCP IT 100 Programming 6320CCP</td>
<td>Year</td>
<td>3 semester hrs.</td>
</tr>
</tbody>
</table>

- The above course is offered as part of the Programming and Software Tech Prep program.

<table>
<thead>
<tr>
<th>Course # &amp; Location</th>
<th>Semester Offered</th>
<th># of College Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCP MET 111 Manufacturing Processes I 6335CCP</td>
<td>1st semester</td>
<td>3 semester hrs.</td>
</tr>
</tbody>
</table>

- The above course is offered as part of the Precision Machining Tech Prep program.
### SAMPLE Pathway for College Credit Plus:
**University of Cincinnati – Blue Ash and Clermont**

<table>
<thead>
<tr>
<th>15 semester hours</th>
<th>+15 – 30 semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 1001 (English Composition)</td>
<td>ENG 2089 (Topics in Literature)</td>
</tr>
<tr>
<td>MTH 1021 (Adv. Algebra III)</td>
<td>STAT 1034 (Elementary Statistics)</td>
</tr>
<tr>
<td>HST 1002 (U.S. History I)</td>
<td>HST 1002 (U.S. History II)</td>
</tr>
<tr>
<td>POL 1010 (Intro. to Political Science)</td>
<td>PSY 1001 (Intro. to Psychology)</td>
</tr>
<tr>
<td>BIO 1081 (Biology I)</td>
<td>EVST 1011 (Environmental Studies I)</td>
</tr>
<tr>
<td>BIOL 1081L (Biology I Lab)</td>
<td></td>
</tr>
</tbody>
</table>

**Cincinnati State**

<table>
<thead>
<tr>
<th>15 semester hours</th>
<th>+15 – 30 semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101 (English Composition)</td>
<td>ENG 103 (Composition &amp; Literature)</td>
</tr>
<tr>
<td>MAT 131 (Statistics I)</td>
<td>MAT 152 (Trigonometry)</td>
</tr>
<tr>
<td>PSC 105 (Astronomy)</td>
<td>BIO 111 (Biology: Unity of Life)</td>
</tr>
<tr>
<td>MUS 105 (African Am. Music)</td>
<td>LIT 255 (African American Literature)</td>
</tr>
</tbody>
</table>

**Sinclair College**

<table>
<thead>
<tr>
<th>15 semester hours</th>
<th>+15 – 30 semester hours</th>
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</thead>
<tbody>
<tr>
<td>ENG 1101 (English Composition I)</td>
<td>COM 2211 (Effective Public Speaking)</td>
</tr>
<tr>
<td>MAT 1440 (Excursions in Mathematics)</td>
<td>MAT 1470 (College Algebra)</td>
</tr>
<tr>
<td>HUM 1130 (Humanity &amp; the Challenge of Technology)</td>
<td>HUM 1135 (Environmental Ethics)</td>
</tr>
<tr>
<td>SOC 1101 (Intro. to Sociology)</td>
<td>SOC 2205 (Social Problems)</td>
</tr>
<tr>
<td>PHY 1100 (Intro. to Physics)</td>
<td>AST 1111 (The Solar System)</td>
</tr>
<tr>
<td>PHY 1110L (Physics Lab)</td>
<td>AST 1117L (The Solar System Lab)</td>
</tr>
</tbody>
</table>
STATE OF OHIO HONORS DIPLOMAS – Academic Honors
In order for a college prep student to receive a State of Ohio Honors diploma, he or she needs to meet all but one of the following criteria:

1. Earn four units of English.
2. Earn four units of mathematics which shall include Algebra I, Geometry, and Algebra II or equivalent and another higher level course or a four-year sequence of courses which contains equivalent content.
3. Earn four units of science including physics and chemistry.
4. Earn four units of social studies.
5. Earn either three units of one foreign language or two units each of two foreign languages.
6. Earn one unit of fine arts.
7. Maintain an overall high school grade point average of at least 3.5 on a four-point scale up to the last grading period of the senior year.
8. Obtain the score of 27 on the American College Testing programs (ACT) tests or a composite score of 1210 on the Scholastic Assessment Tests (SAT) (excluding scores from the writing sections). For students entering 9th grade on or after July 1, 2017, a composite score of 1280 on the Scholastic Assessment Test (SAT).

STATE OF OHIO HONORS DIPLOMA – Career Technical
In order for a career technical student to receive a State of Ohio Honors diploma, he or she needs to meet all but one of the following criteria:

1. Earn four units of English.
2. Earn four units of mathematics which shall include Algebra I, Geometry, and Algebra II or equivalent, and another higher level course or a four-year sequence of courses which contains equivalent content.
3. Earn four units of science including two advanced level courses.
4. Earn four units of social studies.
5. Earn a minimum of four units of Career Tech or Tech Prep. The program must lead to an industry recognized credential, an apprenticeship or be part of an articulated career pathway which can lead to post-secondary credit.
6. Maintain an overall high school grade point average of at least 3.5 on a four-point scale up to the last grading period of the senior year.
7. Obtain the score of 27 on the American College Testing program’s (ACT) tests or a composite score of 1210 on the Scholastic Assessment Tests (SAT) (excluding scores from the writing sections).
8. Achieve the proficiency benchmark established for the Ohio Career-Technical Competency Assessment or the equivalent.

For students entering 9th grade on or after July 1, 2017:
9. Obtain the score of 27 on the American College Testing program’s (ACT) tests or a composite score of 1280 on the Scholastic Assessment Tests (SAT) or a minimum score of a 6 on the math WorkKeys and a minimum score of a 6 on the Reading WorkKeys
10. Complete a field experience and document the experience in a portfolio specific to the student’s area of focus
11. Develop a comprehensive portfolio of work based on the student’s field experience or a topic related to the student’s area of focus that is reviewed and validated by external experts

Note- Diploma with Honors requirements pre-supposes completion of all high school diploma requirements from the State of Ohio, including: ½ unit of Phys. Ed., ½ unit of health, ½ unit of American History and ½ unit of government.
STATE OF OHIO HONORS DIPLOMAS – STEM Honors Diploma (NEW)
In order for a college prep student to receive a State of Ohio Honors diploma, he or she needs to meet all but one of the following criteria:

1. Earn four units of English.
2. Earn four units of mathematics which shall include Algebra I, Geometry, and Algebra II or equivalent and one other higher level course or a four-year sequence of courses which contains equivalent or higher content.
3. Earn five units of science including two units of advanced science.
4. Earn three units of social studies.
5. Earn either three units of one foreign language or two units each of two foreign languages.
6. Earn one unit of fine arts.
7. Earn two elective units with a focus in STEM courses
8. Maintain an overall high school grade point average of at least 3.5 on a four-point scale up to the last grading period of the senior year
9. Obtain the score of 27 on the American College Testing programs (ACT) tests or a composite score of 1280 on the Scholastic Assessment Tests (SAT)
10. Complete a field experience and document the experience in a portfolio specific to the student’s area of focus
11. Develop a comprehensive portfolio of work based on the student’s field experience or a topic related to the student’s area of focus that is reviewed and validated by external experts

STATE OF OHIO HONORS DIPLOMAS – Arts Honors Diploma (NEW)
In order for a college prep student to receive a State of Ohio Honors diploma, he or she needs to meet all but one of the following criteria:

1. Earn four units of English.
2. Earn four units of mathematics which shall include Algebra I, Geometry, and Algebra II or equivalent and one other higher level course or a four-year sequence of courses which contains equivalent or higher content.
3. Earn three units of science including one unit of advanced science.
4. Earn three units of social studies.
5. Earn either three units of one foreign language or two units each of two foreign languages.
6. Earn four units of fine arts.
7. Earn two elective units with a focus in the fine arts course work
8. Maintain an overall high school grade point average of at least 3.5 on a four-point scale up to the last grading period of the senior year
9. Obtain the score of 27 on the American College Testing programs (ACT) tests or a composite score of 1280 on the Scholastic Assessment Tests (SAT)
10. Complete a field experience and document the experience in a portfolio specific to the student’s area of focus
11. Develop a comprehensive portfolio of work based on the student’s field experience or a topic related to the student’s area of focus that is reviewed and validated by external experts

STATE OF OHIO HONORS DIPLOMAS – Social Science & Civic Engagement Honors Diploma (NEW)
In order for a college prep student to receive a State of Ohio Honors diploma, he or she needs to meet all but one of the following criteria:

1. Earn four units of English.
2. Earn four units of mathematics which shall include Algebra I, Geometry, and Algebra II or equivalent and one other higher level course or a four-year sequence of courses which contains equivalent or higher content.
3. Earn three units of science including one unit of advanced science.
4. Earn five units of social studies.
5. Earn either three units of one foreign language or two units each of two foreign languages.
6. Earn one unit of fine arts.
7. Earn three elective units with a focus in social science and/or civics.
8. Maintain an overall high school grade point average of at least 3.5 on a four-point scale up to the last grading period of the senior year.
9. Obtain the score of 27 on the American College Testing programs (ACT) tests or a composite score of 1280 on the Scholastic Assessment Tests (SAT).
10. Complete a field experience and document the experience in a portfolio specific to the student’s area of focus.
11. Develop a comprehensive portfolio of work based on the student’s field experience or a topic related to the student’s area of focus that is reviewed and validated by external experts.
3. TYPES OF COURSES

Elective Courses:
Elective courses are those, which are not specifically identified as graduation requirements. You will need to take some elective courses in order to have sufficient credits to graduate. All elective courses are designed to provide you with a marketable skill, make you a better-informed person, citizen, and consumer, and assist you in expanding your knowledge in areas that will become life-long hobbies or avocations.

Honors Courses:
Courses designated as Honors award weighted grades, meaning grades for these add the value of 0.5 (for grades of C and above) in this computation.

Prerequisite Courses:
A prerequisite is a condition that must be met before a student may enroll in a certain course. The prerequisites are listed at the end of each course description. Please check these requirements carefully before making selections. Prerequisites reflect the desire of each department to insure the success of students in selected courses.

Co-requisite Courses:
A course listed as a co-requisite must be taken prior to or at the same time as a certain course.

Recommended Course:
A recommended course is not necessarily one that must be taken to meet a requirement, however, it is a course that has been found highly valued by colleges and employers.

Required Courses:
A required course is one that must be successfully completed in order to meet NWLSD graduation requirements. For example, a student must successfully complete American Government in order to graduate. Graduation requirements are listed in this booklet on page 8.

Advanced Placement (AP) Courses:
These classes are College Board approved courses designed to prepare the student for taking college-level course work and exams while still in high school. Taking AP courses can result in student’s earning college credit or placement once the student enrolls in a college or university. Most colleges and universities accept AP courses. It is important the student be informed about the policies of their potential colleges. All students taking AP courses are expected to take the AP exam in the Spring.

4. CONDITIONAL / UNCONDITIONAL ACCEPTANCE BY COLLEGE / UNIVERSITY:
During the past several years, colleges and universities, including many in Ohio, have changed their entrance requirements.

If you are accepted CONDITIONALLY into a college or university, you may have to complete entrance requirements at your own expense of time and money before you may begin to take courses leading to your degree. This can greatly increase the cost of college and the time required to obtain a degree.

UNCONDITIONAL acceptance means that you can immediately begin taking courses leading to your degree.

Check with your counselor and your college of choice frequently to see that you do not neglect a requirement for admission.
5. GRADE PLACEMENT:
Grade placement is determined by years of attendance. General guidelines are considered to be:
- Freshman…………………………………………………………………. Successful completion of 8th grade
- Sophomore………………………………………………………………. 5.0 credits
- Junior……………………………………………………………………. 10.0 credits
- Senior……………………………………………………………………. 15.0 credits
- Graduate……………………………………………………………………. 21.0 or more credits

**Transfer students will be placed in 9th grade until an official transcript has been received from the previous school(s).**

Many required courses are “pre-arranged” in grades 9–11, due to state mandated graduation requirements. Students are encouraged, when the opportunity is presented, to select elective courses carefully with input from a parent, advisor, teacher and counselor.
- Schedule changes are to be finalized within the first two weeks of school

Schedule changes are permitted for the following reasons:
- To add or repeat a course required for graduation, college admission, or vocational school preparation.
- To correct a scheduling error
- To eliminate a study hall
- To adjust for appropriate placement
- Adjustments to accommodate special education/ELL students
- Replacement of summer school course(s) successfully completed

6. OHIO REGENTS COLLEGE CORE CURRICULUM:
Colleges and universities prefer certain courses to others to meet their entrance requirements. In the state of Ohio, the Ohio Board of Regents has developed the following college-prep (CORE) curriculum.

- 4 units of English (English I, II, III and IV)
- 3 units of Science ( 1 physical, 1 biological, 1 elective)
- 4 units of Social Studies
- 2-3 units of Foreign Language
- 1 unit of Fine Arts
  ➢ Each college is independent of others and may vary the above requirements according to its own standards.

7. CREDIT FLEXIBILITY
Students, under a board and state policy, have the opportunity to earn credits outside of the school day that can count for graduation requirements. Those students interested in earning credits in this manner are advised to see their counselor to complete the required paper work by April 1, of the school year prior to which they plan to earn credits. More information about credit flexibility can be found on the district website www.nwlsd.org.

Credit flexibility shifts the focus from “seat time” to performance. Students can earn units of high school credit based on an individually approved credit flexibility plan. The intent of credit flexibility is to meet increased expectations for high school graduation in response to globalization, technology and demographics, and to meet the demand for 21st century skills. Students can earn high school credit by:

1. Completing coursework;
2. Showing mastery of course content;
3. Pursuing an educational option and/or an individually approved option and/or
4. Any combination of the above.

All credit flexibility applications must be approved no later than April 1st the school year prior to actual participation.
8. BLENDED COURSES
Blended learning is defined as learning that combines online delivery of course content with the best features of classroom interaction and live instruction to personalize learning. Students taking blended courses will be able to master the content with teacher support. Students will be scheduled into a lab each day with their content teacher for support and enrichment.

9. NEXT GENERATION OF ASSESSMENTS
What are the New Generation of Assessments?
State tests measure student progress toward Ohio’s New Learning Standards. The results show whether students have the knowledge and skills necessary to move successfully to their next steps in education or a career.

**These represent state minimums and NWLSD requires 4 credits of social studies to meet graduation requirements**
Can a student retake an End of Course Exam for a higher score?
- Students who score below proficient on a test may retake it after they receive remediation supports on the material.
- Students who score proficient or higher on an end-of-course test can retake tests only if, after they’ve taken all the tests, they still have not met the minimum graduation points to graduate (18 points overall or content area minimums).
  - In this case, a student can retake any test after receiving remediation on the material. The same rules apply to substitute tests, which may be used interchangeably with approved tests. There is no subsequent need to score higher than the 18-point minimum (example: honors diploma, etc.).

What test does a student take in middle school this year if the student is in Algebra I? Is it the end-of-course test or the eighth grade math test?
- Students in an eighth grade Algebra I course will take the Algebra I end-of-course test ONLY. They will not be required to take the eighth grade State Assessment.

If a student wants to graduate using the college admissions test pathway, does the student need to take the end-of-course tests?
- All students must complete the course requirements and assessment requirements in the seven approved courses. This means that all students will take the end-of-course tests for the seven courses and the college admissions test. Students may choose which pathway to pursue after considering their educational goals and their performance on the tests. If a student chooses to use a pathway that doesn’t rely on end-of-course test scores (such as the college admissions test), the student must still take the end-of-course tests.

How do the new graduation requirements impact students with disabilities?
- All students, including students with disabilities, must participate in state assessments. The Individualized Education Program (IEP) team may exempt a student with disabilities from consequences of being proficient on end-of-course tests. When the IEP team determines a student is exempt from being proficient on an end-of-course test, the student may receive three points (equivalent to proficient) for each exempt test toward graduation. There is no alternate assessment for end-of-course tests.
- If a student is eligible to participate in an alternate assessment per the Alternate Assessment for students with Significant Cognitive Disabilities (AASCD) participation guidelines, a proficient score in each of the assessed content areas – English language arts, mathematics, science and social studies – may be used in lieu of attaining the required minimum composite score on the seven end-of-course tests for the graduation requirement.
**10. HIGH SCHOOL ATHLETIC ELIGIBILITY POLICY**

To be eligible, a student must be currently enrolled and have been enrolled in school during the immediately preceding 9-week grading period. During the preceding 9-week period, the student must have received passing grades in a **minimum of five (5) one-credit courses or the equivalent**, each of which counts toward graduation.

Any student with a total grade point average of less than 2.0 on the weighted scale but higher than a 1.0 will be placed on “Academic Watch.” Any student on ‘Academic Watch’ must have his/her teachers complete a weekly grade and effort report during that season and submit it to the head coach.

Athletic participation forms for high school athletes shall be signed by a physician, the athlete and by a parent or guardian. These completed forms must be on file with the athletic director before any candidate for a team may participate in a practice. These forms require that a doctor certifies the athlete’s physical fitness no less than once a year.

**11. NCAA INITIAL ELIGIBILITY**

Student-athletes who have the potential to play Division I or II college athletics must register with the NCAA Eligibility Center during their senior year at [www.eligibilitycenter.org](http://www.eligibilitycenter.org). Students must pass a rigorous high school curriculum with a set GPA and ACT/SAT score in order to establish eligibility.

Transcripts are not automatically sent to the Eligibility Center. It is the student’s responsibility to request that their transcript be sent at the time their applications are submitted online. Request for Transcript forms can be found in the Guidance Department.

All ACT and SAT scores must be reported directly to the NCAA Eligibility Center by the testing agency. When registering for the ACT or SAT, use the Eligibility Center code of “9999” to ensure that your scores are forwarded directly. Be sure to look at your high school’s list of NCAA-approved core courses on the Eligibility Center’s Web site and check with your guidance counselor to make certain that courses being taken have been approved as core courses.

**PLEASE NOTE:** All NCAA-approved core courses are indicated with “(NCAA √)” after the course description.

Apex core courses offerings have been approved for English, math, science and social studies.

For more information regarding the rules, please go to [www.NCAA.org](http://www.NCAA.org).

<table>
<thead>
<tr>
<th>DIVISION I</th>
<th>16 Core Courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 years of English</td>
<td></td>
</tr>
<tr>
<td>3 years of Mathematics (Algebra I or higher)</td>
<td></td>
</tr>
<tr>
<td>2 years of natural/physical science (1 year of lab if offered by HS)</td>
<td></td>
</tr>
<tr>
<td>1 year of additional English, Mathematics or Natural/ Physical Science</td>
<td></td>
</tr>
<tr>
<td>2 years of social science</td>
<td></td>
</tr>
<tr>
<td>4 years of additional courses (from any area above, foreign language or non-doctrinal religion/philosophy)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DIVISION II</th>
<th>16 Core Courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 years of English (Algebra I or higher)</td>
<td></td>
</tr>
<tr>
<td>2 years of natural/physical science (1 year of lab if offered by HS)</td>
<td></td>
</tr>
<tr>
<td>3 years of additional English, Mathematics or Natural/ Physical Science</td>
<td></td>
</tr>
<tr>
<td>2 years of social science</td>
<td></td>
</tr>
<tr>
<td>4 years of additional courses (from any area above, foreign language or non-doctrinal religion/philosophy)</td>
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</table>
## 12. NCAA APPROVED CORE COURSES

All approved NCAA courses will be indicated with the following: “NCAA √”

<table>
<thead>
<tr>
<th>English</th>
<th>Mathematics</th>
<th>Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honors English I</td>
<td>Adv. Geometry</td>
<td>Honors Physical Science</td>
</tr>
<tr>
<td>Honors English II</td>
<td>Algebra II</td>
<td>Honors Biology</td>
</tr>
<tr>
<td>Honors English III</td>
<td>Honors Algebra II</td>
<td>Adv. Chemistry</td>
</tr>
<tr>
<td>Adv. English IV</td>
<td>Adv. Pre-Calculus</td>
<td>Honors Chemistry</td>
</tr>
<tr>
<td>Honors English IV</td>
<td>Honors Pre-Calculus</td>
<td>AP Chemistry</td>
</tr>
<tr>
<td>AP Literature and Language</td>
<td>AP Statistics</td>
<td>Honors Anat/Phys.</td>
</tr>
<tr>
<td>Creative Writing/Publishing</td>
<td>AP Calculus</td>
<td>Adv. Ecology</td>
</tr>
<tr>
<td></td>
<td>Adv. Algebra II-B</td>
<td>Honors Genetics</td>
</tr>
<tr>
<td></td>
<td>Algebra III</td>
<td>Astronomy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Geology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adv. Physics</td>
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<td></td>
<td></td>
<td>Honors Physics</td>
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<tr>
<td></td>
<td></td>
<td>AP Physics I</td>
</tr>
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<td></td>
<td></td>
<td>Adv. Zoology</td>
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<td></td>
<td></td>
<td>Honors Zoology</td>
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</table>

<table>
<thead>
<tr>
<th>Social Studies</th>
<th>World Languages</th>
<th>APEX (Core)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honors Modern World Studies</td>
<td>French II</td>
<td>Algebra II</td>
</tr>
<tr>
<td>Adv. American History</td>
<td>French III</td>
<td>Geometry</td>
</tr>
<tr>
<td>Honors American History</td>
<td>French IV</td>
<td>Pre-Calculus</td>
</tr>
<tr>
<td>Women in Amer. History</td>
<td>AP French IV</td>
<td>English I</td>
</tr>
<tr>
<td>AP US Govt. &amp; Pol. Sci.</td>
<td>German I</td>
<td>English II</td>
</tr>
<tr>
<td>Adv. American Government</td>
<td>German II</td>
<td>English III</td>
</tr>
<tr>
<td>AP US History</td>
<td>German III</td>
<td>English IV</td>
</tr>
<tr>
<td>World Religions</td>
<td>German IV</td>
<td></td>
</tr>
<tr>
<td>African Amer. History</td>
<td>Spanish I</td>
<td>Modern World History</td>
</tr>
<tr>
<td>Contemporary Issues</td>
<td>Spanish II</td>
<td>American History</td>
</tr>
<tr>
<td>Psychology/Sociology</td>
<td>Spanish III</td>
<td>American Government</td>
</tr>
<tr>
<td>AP Psychology</td>
<td>Spanish IV</td>
<td></td>
</tr>
<tr>
<td>AP European History</td>
<td>AP Spanish IV</td>
<td>Physical Science</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Biology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chemistry</td>
</tr>
</tbody>
</table>
## Resources to Help You Explore and Prepare

<table>
<thead>
<tr>
<th>WHEN TO BEGIN</th>
<th>WHAT TO DO</th>
<th>HOW TO DO IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Freshman and Sophomore years</td>
<td>Become familiar with college entrance requirements and continue career exploration activities. Which courses in your high school curriculum satisfy college requirements? Do you have a plan for extracurricular involvement?</td>
<td>Work with parents, teachers, and counselors to create a four-year high school curriculum plan to satisfy your goals. Try job shadowing. Get involved at school and in your community.</td>
</tr>
<tr>
<td>☐ September – March of Junior year</td>
<td>Think about your reasons for going to college. What are your goals? What learning opportunities are most important? Do your college plans include career plans?</td>
<td>Talk with your parents, counselors, teachers, and friends. Investigate possible career options and degree level required.</td>
</tr>
<tr>
<td>☐ March–August of Junior year</td>
<td>List colleges you are considering and collect information. Have you included all possible choices? What information do you need? How can you get it?</td>
<td>Attend college fairs and college night programs. Prepare for and visit colleges. Take appropriate college admission test.</td>
</tr>
<tr>
<td>☐ August–December of Senior year</td>
<td>Compare the colleges on your list. Have you weighed pros and cons carefully? Which colleges will meet your needs?</td>
<td>Continue visiting colleges. Organize information into detailed, useful comparisons.</td>
</tr>
<tr>
<td>☐ September–December of Senior year</td>
<td>Apply to your “choice” colleges. Do you have all the necessary forms? Are you sure of the application deadlines?</td>
<td>Obtain application forms. Observe deadlines. Submit transcript and test scores (retest if necessary).</td>
</tr>
<tr>
<td>☐ November–May of Senior year</td>
<td>Make some final decisions. What additional preparation might be helpful? Should you consider summer school? Do you feel comfortable with your final choice?</td>
<td>Confer with parents and counselors. Confirm your decision, and decline other admission offers. Show initiative.</td>
</tr>
</tbody>
</table>

- Application:
- Log on to [www.collegegrazing.com](http://www.collegegrazing.com)
- Log on to [www.bigfuture.collegeboard.org](http://www.bigfuture.collegeboard.org)
13. PROPOSED HIGH SCHOOL FEES  2017-18
These fees represent the maximum amount for each course listed. Actual fees may be lower depending upon the cost of the materials purchased. Students are charged only for materials they receive or use during the school year. The fees will vary according to the courses in which the student enrolls. Lab record books, foreign language workbooks, and other required workbooks will be charged to the students at the list price plus shipping charge. Fees listed are based on the latest information provided by the appropriate supplier.

Graphing calculators will be necessary for Algebra II and other advanced math classes. The district will provide TI-83 Plus calculators for Algebra II students. Students taking other advanced math courses are expected to purchase a graphing calculator.

<table>
<thead>
<tr>
<th>Art Department</th>
<th>2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art I</td>
<td>$12.50</td>
</tr>
<tr>
<td>Art II</td>
<td>$30.00</td>
</tr>
<tr>
<td>Art III</td>
<td>$30.00</td>
</tr>
<tr>
<td>Adv. Art IV</td>
<td>$35.00</td>
</tr>
<tr>
<td>AP Art Studio</td>
<td>$35.00</td>
</tr>
<tr>
<td>Advanced Design</td>
<td>$35.00</td>
</tr>
<tr>
<td>3/D Design</td>
<td>$35.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Music Department</th>
<th>2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Band, Orchestra, Vocal Music Courses</td>
<td>$10.00</td>
</tr>
<tr>
<td>Instrument maintenance fee</td>
<td>$30.00 (if student is assigned a district instrument)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical Education/Health Department</th>
<th>2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basketball Officiating</td>
<td>$8.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>English Department</th>
<th>2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honors English I (Power Plus Workbook)</td>
<td>$12.00</td>
</tr>
<tr>
<td>Honors English II (Power Plus Workbook)</td>
<td>$12.00</td>
</tr>
<tr>
<td>Honors English III (Power Plus Workbook)</td>
<td>$12.00</td>
</tr>
<tr>
<td>Honors English IV (Power Plus Workbook)</td>
<td>$12.00</td>
</tr>
<tr>
<td>AP Language &amp; Composition (Power Plus Workbook, AP workbk)</td>
<td>$20.00</td>
</tr>
<tr>
<td>AP Literature &amp; Composition (Power Plus Wrkbk, AP workbk)</td>
<td>$20.00</td>
</tr>
<tr>
<td>ESL I</td>
<td>$12.00</td>
</tr>
<tr>
<td>ESL II</td>
<td>$12.00</td>
</tr>
<tr>
<td>ESL III</td>
<td>$12.00</td>
</tr>
<tr>
<td>ESL IV</td>
<td>$12.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Math Department</th>
<th>2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP Calculus (Workbook)</td>
<td>$21.99</td>
</tr>
<tr>
<td>AP Statistics (Workbook)</td>
<td>$21.95</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social Studies Department</th>
<th>2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP European History (Workbook)</td>
<td>$23.00</td>
</tr>
<tr>
<td>AP American History (Workbook)</td>
<td>$32.00</td>
</tr>
<tr>
<td>AP Psychology (Workbook)</td>
<td>$20.00</td>
</tr>
<tr>
<td>AP U.S. Government and Politics Workbook</td>
<td>$20.89</td>
</tr>
<tr>
<td>Economics</td>
<td>$5.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Science Department</th>
<th>2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gen. Animal Care and Conservation</td>
<td>$6.00</td>
</tr>
<tr>
<td>Adv. &amp; Honors Anatomy and Physiology</td>
<td>$15.00</td>
</tr>
<tr>
<td>AP Biology Workbook (Includes $30.00 lab fee)</td>
<td>$45.34</td>
</tr>
<tr>
<td>Adv. &amp; Honors Biology</td>
<td>$10.00</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Science Department - cont.</th>
<th>2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP Chemistry Workbook (Includes $30.00 lab fee)</td>
<td>$47.00</td>
</tr>
<tr>
<td>Adv. &amp; Honors Chemistry (includes safety goggles)</td>
<td>$17.00</td>
</tr>
<tr>
<td>Adv. &amp; Honors Genetics</td>
<td>$6.00</td>
</tr>
</tbody>
</table>
Adv. Physical Science (Includes $20.02 workbook) $23.00
Adv. Physics $8.00
AP Physics 1 (Workbook, Composition Book, & $10.00 lab fee) $32.00
Adv. & Honors Zoology $20.00

**Foreign Language Department**

<table>
<thead>
<tr>
<th>Course</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>French I (Includes Workbook)</td>
<td>$16.00</td>
</tr>
<tr>
<td>French II (Includes Workbook)</td>
<td>$16.00</td>
</tr>
<tr>
<td>French III (Includes Workbook)</td>
<td>$16.00</td>
</tr>
<tr>
<td>AP French (Includes Workbook)</td>
<td>$48.00</td>
</tr>
<tr>
<td>Spanish I (Includes Workbook)</td>
<td>$20.00</td>
</tr>
<tr>
<td>Spanish II (Includes Workbook)</td>
<td>$20.00</td>
</tr>
<tr>
<td>Spanish III (Includes Workbook)</td>
<td>$20.00</td>
</tr>
<tr>
<td>Spanish IV (Includes Workbook)</td>
<td>$22.00</td>
</tr>
<tr>
<td>AP Spanish (Includes Workbook)</td>
<td>$67.00</td>
</tr>
</tbody>
</table>

**Miscellaneous**

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework Planner</td>
<td>$5.00</td>
</tr>
<tr>
<td>ACT Prep Course</td>
<td>$22.00</td>
</tr>
</tbody>
</table>
14. OHIO MEANS JOBS K – 12
OhioMeansJobs.com is Ohio’s premier free, virtual employment and career planning center. The online hub serves all Ohioans – and it has a special section just for students in grades K – 12. For students, the journey begins by going to OhioMeansJobs.com and clicking on the K – 12 icon – the cardinal in the graduation cap. From there, they can register for an OhioMeansJobs K – 12 account.

OhioMeansJobs K – 12 can help even young students find careers that match their interests. They can learn what it takes to find a job they love, get help with their resumes, learn about internships and part-time jobs if they are old enough, and plan the kind of life they want to have. Best of all, OhioMeansJobs highlights Ohio’s in demand careers with a thumbs – up icon. In – demand careers pay well and have a promising future.

Students can store all their important information in an online backpack – things like their budget plans, career plans, information about education and training programs, resumes, and job search results. They can even take free college entrance or career preparation practice tests.

OhioMeansJobs K – 12 is a one-stop shop for students, and for parents, teachers, and counselors.

Students!
You have BIG dreams that you can reach!

Thanks to the OhioMeansJobs K – 12, all the information you need is in one free, convenient online place.

Just follow the following steps:
1. Go to OhioMeansJobs.com
2. Click on the image of the cardinal in the graduation cap.
3. Register and create your personal, online backpack
4. Take a short career interest survey to find occupations that match your interests.
5. Use a budget calculator to see what salary you will need to support the life you want to live.

You can also learn about in – demand occupations that pay well and have the most promising futures.

You can even take free college entrance or career preparation practice tests.

Save your results – and all the other information you find – in your online backpack.

Teachers, Counselors, and Parents
By 2018, 60 % of all jobs will require education and training beyond high school. You work every day to show your students what it takes to be successful. You help see the connection between what they are learning and their future careers.

An exciting, robust online tool - OhioMeansJobs K – 12 – can grab and Guide our students through job and career exploration based on their interests. Its no-cost career planning resource that focuses on opportunities available in Ohio.

Make sure students know about this outstanding resource! To help them, just go to OhioMeansJobs.com and click on the image in the graduation cap. To see everything the site has to offer, just click on the green “TAKE THE GUIDED TOUR” button.
A career pathway is a series of academic and technical career-focused coursework and other educational learning experiences leading to a career specialty and employment in a career field. Pathways facilitate a seamless transition from high school to postsecondary education (including apprenticeships, adult education, two- and four-year colleges and graduate school) and from postsecondary education to the workplace. For additional career planning, schedule a visit with your school counselor.

### Agricultural and Environmental Systems
Includes technical-and professional-level careers in animal and crop production, agricultural services and engineering, food processing, horticulture, natural resource management, environmental services, agricultural and environmental education, communications and research.

**Possible NWLSD Courses:**
Zoology, Biology, Ecology, Geology, Animal Care and Conservation, Genetics  
**Butler Tech Programs:**
Equine Science, Landscape Science, Veterinary Science, Firefighting Technology, Diesel/Commercial Truck

### Arts and Communication
Includes technical- and professional-level careers related to the humanities and the performing, visual, literary and media arts.

**Possible NWLSD Courses:**
Art Studio, Advanced Design, Music Theory, Show Choir, Concert Orchestra, Jazz Band, AP Art  
**Butler Tech Programs:**
Digital Media, Performing Arts: Dance, Music, Theatre, Visual Design, Commercial Arts

### Business and Administrative Services
Includes technical- and professional-level careers in business management, administrative support, human resources and business administration that encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations.

**Possible NWLSD Courses:**
Advanced Economics, Calculus  
**Butler Tech Programs:**
High School of Business

### Construction Technologies
Includes technical- and professional-level careers in designing, planning, managing and building and maintaining the built environment, including roadways and bridges and industrial, commercial and residential facilities and buildings.

**Possible NWLSD Courses:**
Geometry, pre-calculus  
**Butler Tech Programs:**
Construction Technology, Construction Management, Welding Technology, Precision Machining, Power Driven Equipment, Interior Remodeling
<table>
<thead>
<tr>
<th><strong>Education and Training</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes technical- and professional-level careers in planning, managing and providing education and training services and related learning support services.</td>
</tr>
<tr>
<td><strong>Possible NWLSD Courses:</strong></td>
</tr>
<tr>
<td>Psychology/Sociology, courses related to content area focus</td>
</tr>
<tr>
<td><strong>Butler Tech Programs:</strong></td>
</tr>
<tr>
<td>Early Childhood Education, Teacher Academy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Engineering and Science Technologies</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes technical- and professional-level careers in planning, managing, and providing scientific research and services such as laboratory and testing and research and development; and (b) design, process and development services such as electrical engineering, industrial engineering, materials science, nanofabrication, fuel cell technology and robotics.</td>
</tr>
<tr>
<td><strong>Possible NWLSD Courses:</strong></td>
</tr>
<tr>
<td>Chemistry, Physics, Calculus</td>
</tr>
<tr>
<td><strong>Butler Tech Programs:</strong></td>
</tr>
<tr>
<td>Engineering Design, Precision Machining</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Finance</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes technical- and professional-level careers in financial and investment planning, accounting, banking, insurance, real estate and business financial management.</td>
</tr>
<tr>
<td><strong>Possible NWLSD Courses:</strong></td>
</tr>
<tr>
<td>Economics, Calculus, Statistics</td>
</tr>
<tr>
<td><strong>Butler Tech Programs:</strong></td>
</tr>
<tr>
<td>Financial Services, High School of Business</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Government and Public Administration</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes technical- and professional-level careers in national defense, foreign service, governance, revenue and taxation, regulation and public administration at local, state and federal levels.</td>
</tr>
<tr>
<td><strong>Possible NWLSD Courses:</strong></td>
</tr>
<tr>
<td>Contemporary World Issues, Economics, A.P. European History, African American History, Women in Am. History,</td>
</tr>
<tr>
<td><strong>Butler Tech Programs:</strong></td>
</tr>
<tr>
<td>High School of Business, Criminal Justice, Firefighting Technology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Health Science</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes technical- and professional-level careers in planning, managing and providing therapeutic services, diagnostic services, health informatics, support services and biotechnology research and development.</td>
</tr>
<tr>
<td><strong>Possible NWLSD Courses:</strong></td>
</tr>
<tr>
<td>Genetics, Anatomy and Physiology, Physics, Chemistry, Zoology, AP Biology, Calculus</td>
</tr>
<tr>
<td><strong>Butler Tech Programs:</strong></td>
</tr>
<tr>
<td>Healthcare Services, Dental Assisting, Sports Medicine, Exercise Science, Health Technology, Biomedical Science</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Hospitality and Tourism</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes technical- and professional-level careers in the management, marketing and operations of restaurants and other food services, lodging, attractions, recreation events and travel-related services.</td>
</tr>
<tr>
<td><strong>Possible NWLSD Courses:</strong></td>
</tr>
<tr>
<td>Economics, Statistics</td>
</tr>
<tr>
<td><strong>Butler Tech Programs:</strong></td>
</tr>
<tr>
<td>High School of Business, Culinary Arts</td>
</tr>
<tr>
<td><strong>Human Services</strong></td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Includes technical- and professional-level careers related to families and human needs within economic, political and social systems such as social services, counseling and mental health services, consumer services and personal care services.</td>
</tr>
<tr>
<td><strong>Possible NWLSD Courses:</strong></td>
</tr>
<tr>
<td>A.P. Psychology, Psychology/Sociology,</td>
</tr>
<tr>
<td><strong>Butler Tech Programs:</strong></td>
</tr>
<tr>
<td>Sports Medicine, Cosmetology, Early Childhood Education, Teacher Academy, Health Technology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Information Technology</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes technical- and professional-level careers in the design, development, support and management of hardware, software, multimedia and systems integration services. The four IT pathways are Information Support and Services, Communication Network Services, Programming and Software Development/Applications and Interactive Multi-Media Development.</td>
</tr>
<tr>
<td><strong>Possible NWLSD Courses:</strong></td>
</tr>
<tr>
<td>Calculus, Statistics, Chemistry, Biology, Physics</td>
</tr>
<tr>
<td><strong>Butler Tech Programs:</strong></td>
</tr>
<tr>
<td>Information Technology, Programming and Software Development</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Law and Public Safety</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes technical- and professional-level careers in planning, managing, and providing judicial, legal, public administration, public safety and protective services and homeland security including professional and technical support services in public planning, emergency management planning, fire protection, emergency medical services and the criminal justice system.</td>
</tr>
<tr>
<td><strong>Possible NWLSD Courses:</strong></td>
</tr>
<tr>
<td>Contemporary World Issues, European History, African American History, Women in American History</td>
</tr>
<tr>
<td><strong>Butler Tech Programs:</strong></td>
</tr>
<tr>
<td>Criminal Justice, Firefighting Technology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Manufacturing Technologies</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes technical- and professional-level careers in planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering</td>
</tr>
<tr>
<td><strong>Possible NWLSD Courses:</strong></td>
</tr>
<tr>
<td>Geometry, Pre-calculus, Chemistry</td>
</tr>
<tr>
<td><strong>Butler Tech Programs:</strong></td>
</tr>
<tr>
<td>Construction Technology, Precision Machining, Construction Management, Welding Technology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Marketing</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes technical-and professional-level careers in planning, managing, and performing marketing activities such as distribution, promotion, pricing, selling, financing, information management and product/service management to reach organizational objectives.</td>
</tr>
<tr>
<td><strong>Possible NWLSD Courses:</strong></td>
</tr>
<tr>
<td>Economics, Statistics</td>
</tr>
<tr>
<td><strong>Butler Tech Programs:</strong></td>
</tr>
<tr>
<td>Financial Services, High School of Business, Commercial Arts, Digital Media, Visual Design</td>
</tr>
<tr>
<td>Transportation Systems</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>Includes technical- and professional-level careers in planning, management and movement of people, materials and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services and mobile equipment and facility maintenance.</td>
</tr>
</tbody>
</table>

**Possible NWLSD Courses:**
Geometry, Economics

**Butler Tech Programs:**
Automotive Technology, Auto Tech., Commercial Truck and Equipment Repair, Power Driven Equipment
# SAMPLE HONORS PROGRAM &
FOUR-YEAR COLLEGE READINESS PROGRAM

<table>
<thead>
<tr>
<th>Honors Program</th>
<th>9th Grade</th>
<th>10th Grade</th>
<th>11th Grade</th>
<th>12th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>Honors English I</td>
<td>Honors English II</td>
<td>Honors English III or AP Language &amp; Composition</td>
<td>Honors English IV or AP Literature &amp; Composition</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Honors Geometry</td>
<td>Honors Algebra II</td>
<td>Honors Pre-Calculus and/or AP Statistics</td>
<td>AP Calculus and/or AP Statistics</td>
</tr>
<tr>
<td>Science</td>
<td>Honors Biology</td>
<td>Honors Chemistry or Honors Physics</td>
<td>Honors Chemistry or other honors electives including AP Biology, AP Chemistry, AP Physics I</td>
<td>Honors Chemistry or AP Biology or AP Chemistry</td>
</tr>
<tr>
<td>Social Studies</td>
<td>Honors World History</td>
<td>Honors American History or AP US History</td>
<td>AP US Govt. &amp; Politics or Honors US Govt. &amp; Politics</td>
<td>AP Psychology or AP European History</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>Foreign Language**</td>
<td>Foreign Language**</td>
<td>Foreign Language**</td>
<td>Foreign Language**</td>
</tr>
<tr>
<td>Health/P.E.</td>
<td>Health*/PE*</td>
<td>Physical Education*</td>
<td>Electives</td>
<td>Electives</td>
</tr>
<tr>
<td>Additional Electives</td>
<td>Fine Arts**</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Four-Year College Program

<table>
<thead>
<tr>
<th>9th Grade</th>
<th>10th Grade</th>
<th>11th Grade</th>
<th>12th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Language</td>
<td>Foreign Language**</td>
<td>Foreign Language**</td>
<td>Foreign Language**</td>
</tr>
<tr>
<td>Health/P.E.</td>
<td>Health/PE*</td>
<td>Physical Education*</td>
<td>Electives</td>
</tr>
<tr>
<td>Additional Electives</td>
<td>Fine Arts**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* ½ credit of Health, and ½ credit of Physical Education (two semesters) are required by the state of Ohio.

**One credit of Fine Arts/Foreign Language is required and must be taken at some time during the four years of high school for students that do not pursue a Career Tech Pathway.
## TWO-YEAR COLLEGE READINESS PROGRAM & OFF-CAMPUS CAREER AND TECHNICAL PROGRAM

### Two-Year College Program

<table>
<thead>
<tr>
<th></th>
<th>9th Grade</th>
<th>10th Grade</th>
<th>11th Grade</th>
<th>12th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foreign Language</strong></td>
<td>Foreign Language**</td>
<td>Foreign Language**</td>
<td>Foreign Language**</td>
<td>Electives**</td>
</tr>
<tr>
<td><strong>Health/P.E.</strong></td>
<td>Health/PE*</td>
<td>Physical Education *</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Additional Electives</strong></td>
<td>Fine Arts*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Off-Campus Career Technical Education Program

<table>
<thead>
<tr>
<th></th>
<th>9th Grade</th>
<th>10th Grade</th>
<th>11th Grade</th>
<th>12th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong></td>
<td>Adv. English I</td>
<td>Adv. English II</td>
<td>academic courses taken off campus</td>
<td>academic courses taken off campus</td>
</tr>
<tr>
<td><strong>Mathematics</strong></td>
<td>Adv. Algebra I</td>
<td>Adv. Geometry</td>
<td>academic courses taken off campus</td>
<td>academic courses taken off campus</td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td>Adv. Physical Science</td>
<td>Adv. Biology</td>
<td>academic courses taken off campus</td>
<td>academic courses taken off campus</td>
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<tr>
<td><strong>Social Studies</strong></td>
<td>Adv. World History</td>
<td>Adv. American History</td>
<td>academic courses taken off campus</td>
<td>academic courses taken off campus</td>
</tr>
<tr>
<td><strong>Foreign Language</strong></td>
<td>Foreign Language**</td>
<td>Foreign Language**</td>
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<tr>
<td><strong>Health/P.E.</strong></td>
<td>Health/P.E.*</td>
<td>Physical Education*</td>
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<tr>
<td><strong>Additional Electives</strong></td>
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</tbody>
</table>

*½ credit of Health, and ½ credit of Physical Education (two semesters) are required by the state of Ohio.*

**One credit of Fine Arts/Foreign Language is required and must be taken at some time during the four years of high school for students that do not pursue a Career Tech Pathway.
Below is a guide to assist in understanding the course descriptions that follow:

**Prerequisite(s):** Previous courses or other requirements a student must meet to be enrolled in the class.

**Credits:** refers to the number of units a student can earn by passing course.

**Location** refers to where a specific Career and Technical Education course is offered including Colerain Career Center (CCTC), Northwest Career Center (NWCTC), D. Russell Lee (DRL), the Natural Science Center (NSC) or the School of the Arts.

**NCAA √** indicates that the course has been approved by the NCAA

**Fees:** The specific cost to take a Career and Technical Education course. Fees are also charged for academic and elective courses.

**Year:** Refers to the specific grade level during which the course may be taken.

**Course #** is the scheduling number for each class.

<table>
<thead>
<tr>
<th>Course Weight Codes:</th>
<th>Non-Core Elective Codes:</th>
<th>Core Academic &amp; Core Elective Codes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>General – Gen.</td>
<td>Art</td>
<td>English Language Arts</td>
</tr>
<tr>
<td>Honors – Honors</td>
<td>Foreign Language</td>
<td>Mathematics</td>
</tr>
<tr>
<td>CCP-College Credit Plus</td>
<td>Music (Instrumental and Vocal)</td>
<td>Science</td>
</tr>
<tr>
<td></td>
<td>PE/Health</td>
<td>Social Studies</td>
</tr>
<tr>
<td></td>
<td>College &amp; Career Readiness</td>
<td>Butler Tech Courses (@NWHS and CHS)</td>
</tr>
<tr>
<td></td>
<td>Academic Intervention</td>
<td>College Career Plus Courses (CCP)</td>
</tr>
<tr>
<td></td>
<td>Non Student Selected Electives</td>
<td>Credit Recovery</td>
</tr>
</tbody>
</table>

- General – Gen. 1000’s code
- Adv. – Advanced
- Honors – Honors
- AP – Advanced Placement

**Non-Core Elective Codes:**

- Art 1001 – 1199
- Foreign Language 1201 – 1299
- Music (Instrumental and Vocal) 1301 – 1399
- PE/Health 1401 – 1499
- College & Career Readiness 1501 – 1699
- Academic Intervention 1701 – 1799
- Non Student Selected Electives 1801 – 1899

**Core Academic & Core Elective Codes:**

- English Language Arts 2000 – 2999
- Mathematics 3000 – 3999
- Science 4000 – 4999
- Social Studies 5000 – 5999
- Butler Tech Courses (@NWHS and CHS) 6000 – 6499
- College Career Plus Courses (CCP) 6500 – 6599
- Credit Recovery 8000 – 8999

B = Blended
D = Declared

**Courses listed in the guide are for consideration and planning purposes. Actual offerings may vary depending on enrollment, etc.**
ART DEPARTMENT
All art classes are elective; however, most four-year colleges require at least one fine arts credit for admission. All of the classes listed in this section meet college admission requirements.

Gen. ART I
Course #1001
Art I is the foundation course for Art II, III, & IV. The student is introduced to studio skills, art history, art criticism and aesthetics. The student will discover, through creative/critical problem solving, how to make art, as well as, how to experience and appreciate art in preparation for his/her role as an informed member of the arts audience. Students will be required to supply some materials in addition to a lab fee.

Prerequisite: None
Credit: .5 credit
Year: 9th, 10th, 11th, 12th
Term: 1 semester
Fee: $12.50

Gen. ART II
Course #1002
Art II is for the student who desires a broader knowledge of art experiences; studio skills acquired in Art I are expanded and enriched to provide for personal fulfillment and self-motivation. Continued study in art history, art criticism and aesthetics will enable students to appreciate the multi-cultural diversity available in the arts, while also becoming an informed participant in the arts audience. Students will be required to supply some materials in addition to a lab fee.

Prerequisite: Art I & teacher recommendation
Credit: 1 credit
Year: 10th, 11th, 12th
Term: 2 semesters
Fee: $30.00

Gen. ART III
Course #1003
Art III is an upper level course for motivated and experienced students. Students are encouraged to form ideas and themes before becoming involved in the process of media. Participation in higher level creative problem solving, studio activities, as well as, critical inquiry into the creative process through further study of art history, art criticism and aesthetics, will prepare students to become an informed member of the art audience. Students will be required to supply some materials in addition to a lab fee.

Prerequisite: Art I, II & teacher recommendation
Credit: 1 credit
Year: 11th, 12th
Term: 2 semesters
Fee: $30.00
### Adv. Art IV

Course #1004

Art IV requires self-motivation and independent problem solving on behalf of the student. Originality of thought and techniques is encouraged through in-depth or breadth of art experiences depending upon the individual student. Students are primarily independent, using the teacher as a resource and critic. Aesthetic experiences, statements, and creative works of art are encouraged. Emphasis is on creative problem solving, perceptual awareness, and development of personal philosophy about art and its value to them. Continued experience with art history, criticism and aesthetics issues will prepare the students for their role as informed participants in the arts audience, as well as provide help in the development of portfolios for those interested in pursuing a career in Art. Students will be required to supply some materials in addition to a lab Fee for work on their portfolios.

**Prerequisite:** Art I, II, III, & teacher recommendation  
**Credit:** 1 credit  
**Year:** 12th  
**Term:** 2 semesters  
**Fee:** $35.00

**Enrollment Criteria:** Entrance of the course is based on samples of work and written statements regarding interest in pursuing art classes in high school.

### Adv. Advanced Design (CHS Only)

Course #1005

Advanced Design is an advanced level course for motivated and experienced art students. Students will explore additional art mediums such as clay, plaster, wire & metal, sculpture, enameling, batiking, etching and/or silk painting. Emphasis is on creative problem solving within a studio-based environment. These advanced art explorations will allow the student to develop artwork for portfolios for post-graduate art degrees. Students will be required to supply some materials in addition to the lab fee.

**Prerequisite:** Art I, II & teacher recommendation  
**Credit:** 1 credit  
**Year:** 11th, 12th  
**Term:** 2 semesters  
**Fee:** $35.00

### Gen. 3/D Design (CHS Only)

Course #1006

This course is designed as an introduction to three-dimensional art with a special emphasis on ceramics. The elements and principles of design and three dimensional forms will be explored, as well as, the history, techniques and artists that work in three dimensional media. Students will be required to supply some materials in addition to a lab fee.

**Prerequisite:** Art I, II & teacher recommendation  
**Credit:** 1 credit  
**Year:** 11th, 12th  
**Term:** 2 semesters  
**Fee:** $35.00

### AP Studio Art: Drawing Portfolio

Course #1007

AP Studio Art is a fast paced challenging course for the student interested in pursuing a career path in art. Students will focus on advanced visual problem solving and must be self-motivated with excellent art skills. Students will address all three sections of the portfolio: Breadth, Concentration, and Quality. Units in all four components of art: history, aesthetics, criticism and studio will be explored. Slides will be required for the portfolio submission, and then sent to the College Board for evaluation. Summer work is required.

**Prerequisite:** Art I, II, III & teacher recommendation  
**Credit:** 1 credit  
**Year:** 12th  
**Term:** 2 semesters  
**Fee:** $35.00 and $91.00 (AP Test)

**Enrollment Criteria:** Entrance of the course is based on samples of work and written statements regarding interest in pursuing art classes in high school.
ENGLISH DEPARTMENT

English I, II, III, and IV are required for graduation. Students will be scheduled for one required English class per school year.

Adv. English I
This required freshman English course offers students the opportunity to study a variety of literary genres to enrich and expand their reading, writing, listening and speaking skills through the study of language arts. This course is aligned with a required State End of Course Exam which counts toward a student’s cumulative graduation points.

Prerequisite: None
Credit: 1 credit
Year: 9th
Term: 2 semesters
NCAA √

Honors English I
This is the first required course in the Honors English Program. It is offered to selected academically advanced freshmen who will study various literary genres while integrating listening, speaking, viewing and writing skills. Summer readings and a completed writing portfolio are required components of the course curriculum. A variety of oral communication experiences are taught throughout the course. This course is aligned with a required State End of Course Exam which counts toward a student’s cumulative graduation points.

Prerequisite: 9th grade standing and selected criteria
Credit: 1 credit
Year: 9th
Term: 2 semesters
NCAA √

Adv. English II
This required course is designed to develop, in the college-prep student, a continuation in the understanding and appreciation of literature through the study of various genres. Here students will enrich and expand their reading, writing, listening, viewing and speaking skills. In addition to reading quality literature, applying new vocabulary and reviewing several topics in grammar, English usage and mechanics, students will write compositions that incorporate several forms of writing. A variety of oral communication experiences are taught throughout the course. This course is aligned with a required State End of Course Exam which counts toward a student’s cumulative graduation points.

Prerequisite: Adv. English I
Credit: 1 credit
Year: 10th
Term: 2 semesters
NCAA √

Honors English II
This course is offered as the second year of the Honors English Program for selected academically advanced sophomores who will study a variety of literary genres as they continue to enrich and expand their reading, writing, listening and speaking skills through the study of the language arts. Summer readings and a completed writing portfolio will be required components of the course. Depth of materials and the pace of the course instruction will be tailored to meet the increasing independence and sophistication of the academically advanced tenth grade student. A variety of oral communication experiences are taught throughout the course. This course is aligned with a required State End of Course Exam which counts toward a student’s cumulative graduation points.

Prerequisite: Honors English I and/or Teacher Recommendation
Credit: 1 credit
Year: 10th
Term: 2 semesters
NCAA √
Adv. English III  
Course #2301
This required course is offered to college-prep juniors as a continuation of their language arts skills development. These students will strive to improve their written and oral communication skills and their appreciation and understanding of American writers, past and current. Students will read plays, novels, and short stories as they employ higher-level critical thinking skills in evaluating literature. A major emphasis will be on expository and argumentative writing with a literary analysis paper on a major literary topic required of each student. A variety of oral communication experiences are taught throughout the course.

Prerequisite:  Adv. English I, II  
Credit: 1 credit
Year:  11th
Term:  2 semesters
NCAA √

Honors English III (CHS Only)  
Course #2302
This course is a continuation of the Honors English Program into the junior year for selected academically advanced students. They will strive to improve their written and oral communication skills and their appreciation and understanding of major American works and writers who have influenced their literary heritage. Course requirements will include summer readings and assignments, a personal narrative applicable for college entrance requirements, a successfully completed writing portfolio and compositions utilizing critical analysis. Depth of materials and pace of instruction will be tailored to meet the increasing independence and sophistication of the academically advanced junior student.

Prerequisite:  Honors English II, Teacher Recommendation  
Credit: 1 credit
Year:  11th
Term:  2 semesters
Fee:  $12.00
NCAA √

AP Language and Composition  
Course #2303
The course prepares students to write effectively and confidently in their college courses across the curriculum. Students will learn to read complex texts and analyze literature through intense essay writing assignments. They will learn the process of composing and revising expository, analytical, argumentative, and reflective essays; these assignments will make up the majority of the course work. The course will also focus on the study of a wide range of established authors to enable the students to better understand how these authors effectively employ writing conventions. This class builds on previously learned writing skills, and will prepare the students for AP Literature and Composition in 12th grade. All students who request acceptance in this class are expected to take the Advanced Placement exam in the spring.

Prerequisite:  Honors English II, Teacher Recommendation  
Credit: 1 credit
Year:  11th 12th
Term:  2 semesters
Fee:  $20.00
NCAA √
$91.00 (AP Test)
Adv. English IV
Course #2401
This required course will offer college-prep twelfth grade students the opportunities to examine significant British playwrights and authors as they continue to study and explore writers who have influenced their literary background. The focus on writing will be objective and analytical while students continue to acquire self-confidence and poise through the development of interpersonal communicative skills and oral communication abilities. Students are encouraged to develop their own thoughts, Feelings, and attitudes through their reading, writing, speaking, and listening instructional opportunities. There is emphasis on resume writing and cover letters.

Prerequisite: Adv. English I, II, III
Credit: 1 credit
Year: 12th
Term: 2 semesters
NCAA √

Honors English IV (CHS Only)
Course #2402
This course is the fourth Year of the Honors English Program for selected academically advanced students. Entrance into this course will require a successfully completed Showcase Writing Portfolio from the junior Year of instruction in either English IIIA or III Honors. Course content will be intensified study of significant works of literature from English literature with continued composition writing to prepare students for freshman college English. Depth of materials and the rigorous pace of the course instruction will provide the needed challenge, independence and sophistication of the academically advanced senior student. Summer readings will constitute a significant portion of the first period grade. Written resumes, along with a cover letter, are required components of the successfully completed Career Passport.

Prerequisite: Honors English III or Adv. English III
Credit: 1 credit
Year: 11th
Term: 2 semesters
NCAA √

AP Literature and Composition
Course #2403
This rigorous course is offered to academically advanced senior students who are seeking to test out of college freshman English and earn college Credits prior to entering college. Here will be an intensified study of significant works of literature from diverse periods of time treating all literary genres drawn from the recommended reading list by the College Board. The course will be structured like a seminar with an emphasis on student generated discussions, analysis of works under construction and timed writings.

The course instruction is driven by course curriculum designated by the College Board to lead to successful passage of the Advanced Placement Exam in English Literature. Depth of materials and the rigorous pace of the course instruction will provide the needed challenge, independence and sophistication of the academically advanced senior student. Summer readings will constitute a significant portion of the first period grade. All students who request acceptance in this class are expected to take the AP exam in the spring.

Prerequisite: Honors English III / AP Language & Composition
Credit: 1 credit
Year: 12th
Term: 2 semesters
NCAA √
Fee: $20.00
$91.00 (AP Test)
ENGLISH DEPARTMENT (cont.)

ESL I  
Course #2501
This course focuses on mastering listening, speaking, reading, and writing both vocabulary and sentence forms at the beginning and early levels of the English Language Proficiency Standards. This course emphasizes guided language practice and gradual release of responsibility (I do it, we do it, you do it) based on functions (a purpose of communication).

Prerequisite:  Teacher Recommendation  
Credit:  1 credit
Year:  9th, 10th, 11th, 12th  
Term:  2 semesters
Fee:  $12.00

ESL II  
Course #2502
This course focuses on mastering listening, speaking, reading, and writing both vocabulary and sentence forms at the early and intermediate levels of the English Language Proficiency Standards. This course emphasizes guided language practice and gradual release of responsibility (I do it, we do it, you do it) based on functions (a purpose of communication).

Prerequisite:  Teacher Recommendation  
Credit:  1 credit
Year:  9th, 10th, 11th, 12th  
Term:  2 semesters
Fee:  $12.00

ESL III  
Course #2503
This course focuses on mastering listening, speaking, reading, and writing both vocabulary and sentence forms at the intermediate and early advanced levels of the English Language Proficiency Standards. This course emphasizes guided language practice and gradual release of responsibility (I do it, we do it, you do it) based on functions (a purpose of communication).

Prerequisite:  Teacher Recommendation  
Credit:  1 credit
Year:  9th, 10th, 11th, 12th  
Term:  2 semesters
Fee:  $12.00

ESL IV  
Course #2504
This course focuses on mastering listening, speaking, reading, and writing both vocabulary and sentence forms at the early advanced and advanced levels of the English Language Proficiency Standards. This course emphasizes guided language practice and gradual release of responsibility (I do it, we do it, you do it) based on functions (a purpose of communication).

Prerequisite:  Teacher Recommendation  
Credit:  1 credit
Year:  9th, 10th, 11th, 12th  
Term:  2 semesters
Fee:  $12.00
### ENGLISH ELECTIVES

#### Gen. READ 180
This researched-based course is designed for any student who is not reading at grade level. Students will take this course for two bells one semester. They are placed into this course based on the students’ lexile scores. Direct instruction, independent reading, and computer-based lessons are part of the research-based curriculum. Continuous assessments, individual reading instruction, and a writing curriculum are the basis for this course of study. It is for an English elective Credit.

<table>
<thead>
<tr>
<th>Prerequisite:</th>
<th>None</th>
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<tbody>
<tr>
<td>Credit:</td>
<td>1 credit</td>
</tr>
<tr>
<td>Year:</td>
<td>9th, 10th, 11th, 12th</td>
</tr>
<tr>
<td>Term:</td>
<td>2 semesters</td>
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</tbody>
</table>

#### Adv. Drama I
This course provides students experiences in the study and practice of theater arts and literature. Students are introduced to the fundamentals of acting with an emphasis on vocal and physical techniques of performance. They will also learn the technical aspects of theater, including the basic concepts of set construction, lighting and costuming. Active participation in the oral interpretation of poetry, stories and original works is required for credit.

<table>
<thead>
<tr>
<th>Prerequisite:</th>
<th>None</th>
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<tbody>
<tr>
<td>Credit:</td>
<td>.5 credit</td>
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<tr>
<td>Year:</td>
<td>9th, 10th, 11th, 12th</td>
</tr>
<tr>
<td>Term:</td>
<td>1 semester</td>
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#### Adv. Oral Interpretation II (Drama II) (CHS Only)
This course is a continuation of Drama I with the additional emphasis on oral interpretation and presentation. Sophistication of materials read, written and presented will provide the foundation of the course work.

<table>
<thead>
<tr>
<th>Prerequisite:</th>
<th>Drama I, Audition, &amp; Teacher Recommendation</th>
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<tbody>
<tr>
<td>Credit:</td>
<td>.5 credit</td>
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<tr>
<td>Year:</td>
<td>9th, 10th, 11th, 12th</td>
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<tr>
<td>Term:</td>
<td>1 semester</td>
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#### Gen. Sports in Literature
The impact of sports on society as seen through literature, as well as written and visual media, will be explored as an elective English course for ninth through twelfth grade students. Here they will study a variety of literary genres of classical and contemporary writers, will learn sports journalistic writings for newspaper and media guides, and will further their language, research and oral communication skills through a variety of sports-related activities and assignments.

<table>
<thead>
<tr>
<th>Prerequisite:</th>
<th>None</th>
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<tbody>
<tr>
<td>Credit:</td>
<td>.5 credit</td>
</tr>
<tr>
<td>Year:</td>
<td>9th, 10th, 11th, 12th</td>
</tr>
<tr>
<td>Term:</td>
<td>1 semester</td>
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</table>

#### Adv. Creative Writing/Publishing I
This course offers students the opportunity to explore and enjoy creative writing as they read and compose various pieces of fiction, poetry and drama. Instruction will focus on strategies and techniques in fostering creativity, evaluating and revising works submitted. Much time will be spent in a workshop format giving and receiving feedback and revising.

<table>
<thead>
<tr>
<th>Prerequisite:</th>
<th>Advanced or Honors English I</th>
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</thead>
<tbody>
<tr>
<td>Credit:</td>
<td>.5 credit</td>
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<tr>
<td>Year:</td>
<td>9th, 10th, 11th, 12th</td>
</tr>
<tr>
<td>Term:</td>
<td>1 semester</td>
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<tr>
<td>NCAA:</td>
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</table>
ENGLISH ELECTIVES (cont.)

Adv. Minority Perspectives in Literature
Course # 2605
The focus of this course will be to study the diverse literature of minority writers. Short stories, essays, novels, autobiographies, and poetry will be explored from the point of view of minority groups and how these factors combine to shape the individual. The course will also explore current issues facing minority groups in our society. Included in this course will be a study of history and culture of the society that surrounds these groups. Formal and informal writing will occur as students stimulate their own personal growth through the understanding of minority writers and their life experiences.

Prerequisite: None
Year: 10th, 11th, 12th
Credit: .5 credit
Term: 1 semester
NCAA √

Adv. Written Media (Yearbook)
Course # 2606
This course will offer 11th and 12th grade students the opportunity to be a member of the team that designs the school's yearbook. Students will work to learn the basics of interviewing and article writing as well as layout design, graphic applications, picture dropping, advertising, marketing skills, etc.

Prerequisite: English I, English II, & Art or English Teacher Recommendation
Year: 11th, 12th
Credit: 1 credit
Term: 2 semesters
MATHEMATICS DEPARTMENT

Students will be scheduled for one required math class per school year. Most four-year colleges, including Ohio’s state supported institutions, require or prefer the Regents’ math core, found in the front of this guide. Most academic awards, including the state Honors Diploma and academic scholarships, have specific math requirements. Students who are considering a post-high school educational program or who are seeking scholarships should contact the appropriate institutions or people to ensure they are selecting the proper courses.

Adv. Algebra I
This required freshman course focuses attaining competencies in the areas of number sense and operations, measurement, patterns, functions and algebra, and data analysis and probability. Technology Integration is essential in this class and a graphing calculator will be recommended. This course is aligned with a required State End of Course Exam which counts toward a student’s cumulative graduation points.

Prerequisite: None
Credit: 1 credit
Year: 9th
Term: 2 semesters
NCAA √

Adv. Algebra I A
This course provides experiences in beginning algebra topics. Students will extend their knowledge and experience with linear equations and inequalities, systems of equations and inequalities, functions, exponential relationships, and sequences. Successful completion of this course and Algebra I B will prepare students for the Ohio State Assessment for Algebra I. Technology Integration is essential in this class and a graphing calculator will be recommended.

Prerequisite: None
Credit: 1 credit
Year: 9th
Term: 2 semesters

Adv. Algebra I B
This course provides experiences in beginning algebra topics. Students will continue the work started in Algebra I A, and have in depth experiences with quadratic functions, laws of exponents, and statistics. Successful completion of this course and Algebra IB will prepare students for the Ohio State Assessment for Algebra I. Technology Integration is essential in this class and a graphing calculator will be recommended. This course is aligned with a required State End of Course Exam which counts toward a student’s cumulative graduation points.

Prerequisite: Adv. Algebra I A
Credit: 1 credit
Year: 10th
Term: 2 semesters

Adv. Geometry
This course provides advanced level contextual math experiences in geometry. Through investigations of real-life contexts, students develop a rich understanding of the geometry that is present in everyday lives. Topics include geometry from an algebraic and synthetic viewpoint, statistics and probability, some trigonometric concepts, discrete mathematics, as well as the continuation and extension of algebra and functions. Technology Integration is essential in this class and a graphing calculator will be recommended. This course is aligned with a required State End of Course Exam which counts toward a student’s cumulative graduation points.

Prerequisite: Adv. Algebra I
Credit: 1 credit
Year: 10th
Term: 2 semesters
NCAA √
Honors Geometry  
Course #3202  
This course provides contextual math experiences in geometry while continuing and extending algebraic concepts focusing on the Academic Content Standards for tenth grade. Students participate in interesting investigations and proofs that can be tied to their everyday world. Topics include geometry from an algebraic and synthetic viewpoint, statistics, and discrete mathematics. Technology integration is essential in this class and a graphing calculator will be required. This course is aligned with a required State End of Course Exam which counts toward a student’s cumulative graduation points.

Prerequisite:  Adv. Algebra I & Teacher Recommendation  
Year:  9th, 10th  
Credit:  1 credit  
Term:  2 semesters  
NCAA √

Adv. Algebra II  
Course #3301  
This course provides contextual math experiences in advanced level algebraic concepts as well as extensions of the mathematics learned in the previous two courses. Topics include advanced algebra and functions, quadratics, rational and radical expressions and equations, laws of exponents, trigonometry, purpose and predictability in patterns, polynomials, logarithms, probability and data analysis. Technology integration is essential in this class and a graphing calculator will be required.

Prerequisite:  Adv. Geometry & Teacher Recommendation  
or Honors Geometry  
Year:  10th, 11th, 12th  
Credit:  1 credit  
Term:  2 semesters  
NCAA √

Adv. Algebra II-A  
Course #3302  
This course provides contextual math experiences in advanced level algebraic concepts as well as extensions of the mathematics learned in the previous two courses. Topics include advanced algebra and functions, quadratics, rational and radical expressions and equations, and laws of exponents. Technology integration is essential in this class and a graphing calculator will be recommended.

Prerequisite:  Adv. Geometry  
Year:  11th, 12th  
Credit:  1 credit  
Term:  2 semesters  
NCAA √

Adv. Algebra II-B  
Course #3303  
This course provides contextual math experiences in advanced level algebraic concepts as well as extensions of the mathematics learned in the previous three courses. Topics include the purpose and predictability in patterns, trigonometry, logarithms, probability and data analysis. Technology integration is essential in this class and a graphing calculator will be recommended.

Prerequisite:  Adv. Algebra II A  
Year:  11th, 12th  
Credit:  1 credit  
Term:  2 semesters  
NCAA √
MATHEMATICS DEPARTMENT (cont.)

Honors Algebra II  
Course #3304  
This course provides high-level emphasis on advanced algebraic concepts as they integrate with all other mathematical content. Students extend and enrich their understanding of mathematics from the previous two courses with real-life applications and problems. Topics include advanced algebra and functions, mathematical structure, extensions and integration with geometric ideas, trigonometry, probability and statistics, discrete mathematics, and the conceptual underpinnings of calculus. Technology integration is essential in this class and a graphing calculator will be required.

Prerequisite:  Grade of ‘C’ or higher in Honors Geometry & Teacher Recommendation  
Credit: 1 credit  
Year: 10th, 11th, 12th  
NCAA √

Course #3406  
Adv. Algebra III (formerly Intro. to College Algebra)  
This course is open to students who have passed Algebra II and are planning to continue their education beyond high school yet are not quite prepared for an Advanced Pre-Calculus class. Topics discussed in this class will be divided into three categories: Extension of Algebra II concepts, Trigonometry, and Probability & Statistics. Successful completion of this course prepares students for entry-level college mathematics courses.

Prerequisite:  Adv./ Honors Algebra II  
Credit: 1 credit  
Year: 11th, 12th  
Term: 2 semesters

Course #3401  
Adv. Pre-Calculus  
This course serves as a preparatory course for the study of calculus. It introduces new topics such as limits, conic sections, and matrices. The main focus is a review of topics from Algebra II Advanced, at a more in depth level and with a greater degree of abstraction. The study of functions is the underlying concept for most topics in the course as the students work with polynomial functions, logarithmic functions, exponential functions, trigonometric functions, and circular functions. Students will find the pace of this course to be slower than Pre-Calculus Honors due to the coverage of fewer topics. Technology integration is essential in this class and a graphing calculator will be required.

Prerequisite:  Grade of “C” or higher in Adv. Algebra II or Honors Algebra II  
Credit: 1 credit  
Year: 11th, 12th  
NCAA √

Course #3402  
Honors Pre-Calculus  
This course serves as a preparatory course for the study of Advanced Placement Calculus at the senior high level. The course begins with a rigorous review of Algebra II topics and progresses into an introduction to new topics such as limits, derivatives, integral, vectors, coordinates in space, curve sketching, polar coordinates and exponential and logarithmic functions. Technology integration is essential in this class and a graphing calculator will be required.

Prerequisite:  Grade of “C” or higher in Honors Algebra II & Teacher Recommendation  
Credit: 1 credit  
Year: 11th, 12th  
Term: 2 semesters  
NCAA √
MATHEMATICS DEPARTMENT (cont.)

Honors Calculus
Course #3403
This course serves as a basic introduction to the derivative, the integral, and the special techniques used to find each of them. The theory and the development of Calculus are not stressed; however, many business applications and economics are covered in this course. The pace of this class is less rigorous as compared to the Advanced Placement Calculus class. It is equivalent to a college freshman Business Calculus course. Technology integration is essential in this class and a graphing calculator will be required.

Prerequisite: Grade of “C” or higher in Adv. Pre-Cal or Honors Pre-Calculus
Credit: 1 credit
Year: 11th, 12th
Term: 2 semesters
NCAA √

AP Calculus
Course #3404
This course is a rigorous treatment of differential and integral calculus with analytic geometry. There is an introduction to the topics of intervals, functions and limits, infinite series, and differential equations. Theory as well as technique is emphasized. This course requires an extensive knowledge of algebra, geometry, and trigonometry. This course is equivalent to a college freshman Calculus course and follows the criteria set by the College Board Advanced Placement guidelines. All students who request acceptance in the class are expected to take the Advanced Placement exam in the spring. Technology integration is essential in this class and a graphing calculator will be required.

Prerequisite: Grade of “C” or higher in Honors Pre-Calculus & Teacher Recommendation
Credit: 1 credit
Year: 12th
Term: 2 semesters
NCAA √
Fee: $21.99
$91.00 (AP Test)

AP Statistics
Course #3405
This course is designed to introduce 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 in advance, and statistical inference. All students who request acceptance in the class are expected to take the Advanced Placement exam in the spring. Technology integration is essential in this class and a graphing calculator will be required.

Prerequisite: Honors Algebra II & Teacher Recommendation
Credit: 1 credit
Year: 11th, 12th
Term: 2 semesters
NCAA √
Fee: $21.95
$91.00 (AP Test)
SCIENCE DEPARTMENT

One credit of biological science, one credit of physical science and one elective credit in science are required for graduation. Each course in this section has a notation as to whether it is offered for biological or physical science credit. Many science classes have prerequisites; please pay careful attention to them when scheduling courses. In some cases, it may be necessary to take a specific math course in order to meet the prerequisite for a science course. Most two and four year post high school educational institutions have specific science requirements for admission to their programs. It is very important to verify that the courses you are selecting meet the requirements of the post high school programs that you are considering.

### Adv. Physical Science

Course #4101

This course introduces students to key concepts and theories that provide a foundation for further study in other sciences and advanced science disciplines. Physical science comprises the systematic study of the physical world as it relates to fundamental concepts about matter, energy and motion. A unified understanding of phenomena in physical and space systems is the culmination of all previously learned concepts related to chemistry, physics, and space science, along with historical perspective and mathematical reasoning.

<table>
<thead>
<tr>
<th>Prerequisite:</th>
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<tbody>
<tr>
<td>Credit:</td>
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<tr>
<td>Year:</td>
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### Adv. Biology

Course #4201

Advanced Biology is designed so that attention is given to important principles and concepts that form a basis for understanding and interpreting the characteristics of life. This course will satisfy the biological science requirements as set forth in the Ohio Academic Content Standards for 10th grade. Students study the structure and function of living organisms. This course is aligned with a required State End of Course Exam which counts toward a student’s cumulative graduation points.

<table>
<thead>
<tr>
<th>Prerequisite:</th>
<th>Adv. Physical Science</th>
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<tbody>
<tr>
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<td>Year:</td>
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<td>Fee:</td>
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### Honors Biology

Course #4202

Honors Biology is designed so that attention is given to important principles and concepts that form a basis for understanding and interpreting the characteristics of life. Students study the structure and function of living organisms. This course will satisfy the biological science requirements as set forth in the Ohio Academic Content Standards for 10th grade. This course is aligned with a required State End of Course Exam which counts toward a student’s cumulative graduation points.

<table>
<thead>
<tr>
<th>Prerequisite:</th>
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<tr>
<td>Credit:</td>
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<tr>
<td>Year:</td>
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<td>Term:</td>
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<td>Fee:</td>
<td>$10.00</td>
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### Adv. Ecology

Course #4300

This course is open to all students and designed to provide an in-depth introduction to basic ecological concepts. Important concepts include food webs, energy flow, nutrient cycles, biomes, and natural resources such as soil, water, air, energy resources, pollution, and population dynamics. Inquiry-based laboratory experiments are included in the instruction in this course.

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<tr>
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<td>Term:</td>
<td>1 semester</td>
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</table>
Adv. Chemistry  
Course #4301  
Chemistry is a full-term credit course designed to teach students the basic principles, concepts and theories of chemistry through experimentation, demonstration, problem-solving activities, lecture, and discussions. This course is designed for students planning to enter a four-year college.

Prerequisite: Completion with a C or higher of/or concurrent with Adv. Algebra II or IIB. Sophomores must have completed Adv. Physical Science and Adv. or Honors Biology with a “B” or better and teacher recommendation.

Credit: 1 credit
Term: 2 semesters
NCAA √

Year: 10th, 11th, 12th
Fee: $17.00

Honors Chemistry  
Course #4302  
Honors Chemistry is a full term course designed to teach students the basic principles, concepts and theories of chemistry through experimentation, demonstration, problem solving activities, lecture and discussion. This course is designed for students planning to enter a four-year college or university. Students in Honors Chemistry will study many of the same principles as students in Advanced Chemistry, but with more depth analysis of topics and assessment.

Prerequisite: Completion of/or concurrent with Honors Algebra II. Sophomores must have completed Honors Physical Science and be scheduled for Honors Biology with a “B” or better and teacher recommendation.

Credit: 1 credit
Term: 2 semesters
NCAA √

Year: 10th, 11th, 12th
Fee: $17.00

AP Chemistry  
Course #4303  
The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. Students in this course should attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. Laboratory experience will be equivalent to that of a typical college course. New topics include: redox reactions, chemistry kinetics, thermodynamics, and electrochemistry. All students who request acceptance in this class are expected to take the AP exam in the spring.

Prerequisite: Adv./Honors Chemistry, with a “B” or better & teacher recommendation and successful completion of Algebra II

Credit: 1 credit
Term: 2 semesters
NCAA √

Year: 11th, 12th
Fee: $47.00
$91.00 (AP Test)

Adv. Zoology  
Course #4304  
This course is for those students with an in-depth interest in the animal kingdom. Topics in the course include anatomical and physiological adaptations, evolutionary history of animals, and their life histories. Field trips may be included to offer students the chance to observe species unavailable in the lab.

Prerequisite: Advanced/Honors Biology & Advanced/Honors Alg. I with “B” or above & teacher recommendation

Credit: 1 credit
Term: 2 semesters
NCAA √

Year: 11th, 12th
Fee: $20.00
Honors Zoology
Course #4305
This course is for those students with an in-depth interest in the animal kingdom. Topics in the course include anatomical and physiological adaptations, evolutionary history of animals, and their life histories.

Prerequisite: Honors Biology & Advanced Alg. I with “B” or above & teacher recommendation
Credit: 1 credit
Year: 11th, 12th
Term: 2 semesters
NCAA √
Fee: $20.00

AP Biology
Course #4306
The Advanced Placement Biology program is designed for those students who wish to pursue a college-level biology program in order to secure college credit. Students will be preparing for the AP Biology exam in May. This accelerated class utilizes a college textbook; therefore, students must have good reading comprehension and study skills. Summer reading may be expected. The course will emphasize four broad areas: the cellular and molecular basis of life, the organization of living things, and populational biology. Labs will be performed enhancing these four areas. Since a thorough presentation of biology involves chemical concepts, students must have had a chemistry course. It is strongly recommended that students taking this class have first taken Anatomy & Physiology, Genetics and Zoology. All students who request acceptance in this class are expected to take the AP exam in the spring.

Prerequisite: Honors Biology, Honors Chemistry, and (Anatomy/Physiology, Genetics) Completion of a biology elective is recommended
Credit: 1 credit
Year: 11th, 12th
Term: 2 semesters
NCAA √
Fee: $45.34 $91.00 (AP Test)

Gen. Animal Care and Conservation
Course #4400
This class centers on a hands-on learning environment and provides students with information about the animals currently identified in the pet trade, their natural histories, and conservation efforts among other topics. Students who are taking or have passed Zoology are ineligible for this class.

Credit: 0.5 credit
Year: 11th, 12th
Term: 1 semester
Fee: $6.00

Adv. Astronomy
Course #4401
This course is open to all 11th and 12th graders. It is intended to offer students an opportunity to experience an introduction to Astronomy. Students will have the opportunity to observe and become familiar with the various constellations and the different types of stars which make up these constellations, the planets in our own solar system and our own moon.

Credit: 0.5 credit
Year: 11th, 12th
Term: 1 semester
NCAA √
SCIENCE DEPARTMENT (cont.)

Adv. Geology
Course #4402
This course is open to all 11th and 12th graders. It is intended to offer students an opportunity to experience an introduction to Geology. Students will study the earth through investigation of the changes that take place on, above, and in the earth. The study will include such topics as minerals, rocks, weathering, glaciers, caves, fossils, the geologic time periods, and map reading.

Credit: .5 credit
Year: 11th, 12th
Term: 1 semester
NCAA √

Adv. Physics
Course #4404
This course is designed to introduce the student to the physical concepts that provide the foundations for modern engineering and current technology. Topics include motion, forces, energy, machines, waves, sound, light and electricity. Students will learn to express the quantitative aspects of physics in mathematical equations. This course is strongly recommended for students interested in engineering, aerodynamics, density, pharmacy and research.

Prerequisite: Adv./Honors Algebra II (or co-requisite)
Credit: 1 credit
Year: 11th, 12th
Term: 2 semesters
NCAA √

AP Physics 1
Course #4405
This course provides students with an experience equivalent to a first-semester college course in algebra based physics. Topics include Newtonian mechanics, work, energy, power, mechanical waves, sound, and electric circuits. This class will be conducted primarily through inquiry based laboratory experiments and problem solving activities, reinforced with class discussion. AP Physics 1 requires a serious commitment from students and will require extensive work outside of class time.

Prerequisite: Adv./Honors Chemistry with a “B” or better
Credit: 1 credit
Adv. Pre-Calculus with a “B” or better or
Concurrent enrollment in Honors Pre-Calculus
with “B” or above & teacher recommendation
Term: 2 semesters
Year: 11th, 12th
NCAA √
Fee: $32.00
$91.00 (AP Test)

Adv. Anatomy & Physiology
Course #4406
This course is designed for the student interested in understanding the structure and function of organs and tissues of the human body. This course is recommended for students considering biological and health-related careers such as medical doctor, nurse, and physical therapist. Activities include microscope examinations of various types, analysis of various physiologic concepts, and a thorough study of the anatomical structures.

Prerequisite: Advanced/Honors Biology with “B” or above &
teacher recommendation
Credit: 1 credit
Year: 11th, 12th
Term: 2 semesters
NCAA √
Fee: $15.00

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Honors Anatomy and Physiology  
This course is designed for the student interested in understanding the structure and function of organs and tissues of the human body. This course is recommended for students considering biological and health-related careers such as medical doctor, nurse, and physical therapist. Activities include microscope examinations of various types, analysis of various physiologic concepts, and a thorough study of the anatomical structures.

Prerequisite:  Honors Biology with “B” or above & teacher recommendation
Credit: 1 credit
Term: 2 semesters
Year: 11th, 12th
NCAA √
Fee: $15.00

Adv. Genetics  
This course contains basic concepts of cell division, chromosomes, genes, and DNA structure. An emphasis will be placed on Mendelian genetics and problem solving. Mutations, populations, genetics and evolutionary genetics will also be discussed.

Prerequisite:  Advanced/Honors Biology with “B” or above & teacher recommendation
Credit: 1 credit
Term: 2 semesters
Year: 11th, 12th
NCAA √
Fee: $6.00

Honors Genetics  
This course contains basic concepts of cell division, chromosomes, genes, and DNA structure. An emphasis will be placed on Mendelian genetics and problem solving. Mutations, populations, genetics and evolutionary genetics will also be discussed. Students enrolled in Genetics for honors credit will be responsible for the same topics as Genetics (Advanced), along with additional related concepts in most sections and rigorous tests and projects.

Prerequisite:  Honors Biology with “B” or above & teacher recommendation
Credit: 1 credit
Term: 2 semesters
Year: 11th, 12th
NCAA √
Fee: $6.00
SOCIAL STUDIES DEPARTMENT
Students who are considering a four-year college program should check the admission requirements for their prospective institutions. Some colleges require additional social studies classes for certain programs.

Social Studies courses required for graduation include:
Modern World History (9th grade)    American Government (11th grade)
American History (10th grade)    One Required Social Studies Elective

**Adv. Modern World History**
Modern World History is a required course designed to prepare students for mastery of the ninth grade social studies Ohio Academic Content Standards. This course examines world events from 1600 to the present. It explores the impact of the democratic and industrial revolutions, the forces that led to world domination by European powers, the wars that changed empires, the ideas that led to independence movements and the effects of global interdependence. Students will use historical thinking skills introduced in earlier grades to analyze primary and secondary sources from multiple perspectives to draw conclusions. These skills will be important to the success on future Ohio End of the Course exams in U.S. History and U.S. Government.

**Course #5101**

**Prerequisite:** None
**Credit:** 1 credit
**Year:** 9th
**Term:** 2 semesters
**NCAA √

**Honors Modern World History**
Modern World History is a required course designed to prepare students for mastery of the Ohio Academic Content Standards for Modern World History. At the Honors level students will be expected to participate in discussions, analyze primary sources, construct essays and complete outside readings to increase the depth of knowledge of world events from 1600 to the present. It explores the impact of the democratic and industrial revolutions, the forces that led to world domination by European powers, the wars that changed empires, the ideas that led to independence movements and the effects of global interdependence. Students will use historical thinking skills introduced in earlier grades to analyze primary and secondary sources from multiple perspectives to draw conclusions. These skills will be important to the success on future Ohio End of the Course exams in U.S. History and U.S. Government.

**Course #5102**

**Prerequisite:** None
**Credit:** 1 credit
**Year:** 9th
**Term:** 2 semesters
**NCAA √

**Adv. American History**
American History is a required course designed to prepare students for mastery of the Ohio Academic Content Standards for American History. This course examines the history of the United States from 1877 to the present with an emphasis on historical documents. Topics covered will include industrialization, World Wars, the Great Depression, Cold War and Post-Cold War America. Students will examine how these events came to pass and their meaning for today’s citizens. Historical thinking skills introduced in earlier grades will be used to analyze primary and secondary sources from multiple perspectives to draw conclusions. These skills will be important to the success on the Ohio End of the Course exam in American History. This course is aligned with a required State End of Course Exam which counts toward a student’s cumulative graduation points.

**Course #5201**

**Prerequisite:** Adv. Modern World History
**Credit:** 1 credit
**Year:** 10th
**Term:** 2 semesters
**NCAA √
Honors American History
Course #5202
American History is a required course designed to prepare students for mastery of the Ohio Academic Content Standards for American History. At the Honors level students will be expected to participate in discussions, analyze primary/secondary sources, construct essays and complete outside readings to increase the depth of knowledge of events in the United States from 1877-present. This course examines the history of the United States from 1877 to the present with an emphasis on historical documents. Topics covered will include Industrialization, World Wars, the Great Depression, Cold War and Post-Cold War America. Students will examine how these events came to pass and their meaning for today’s citizens. Historical thinking skills introduced in earlier grades will be used to analyze primary and secondary sources from multiple perspectives to draw conclusions. These skills will be important to the success on the Ohio End of the Course exam in American History. This course is aligned with a required State End of Course Exam which counts toward a student’s cumulative graduation points.

Prerequisite: Adv./Honors Modern World History
Year: 10th
Credit: 1 credit
Term: 2 semesters
NCAA √

Adv. American Government
Course #5301
American Government is a required course designed to prepare students for mastery of the Ohio Academic Content Standards for American Government. This course provides an opportunity for students to learn how the U.S. Government system functions and the role of citizens in our interdependent world. Topics covered will include Constitution/Amendments, structure and function of the federal government, role of the people, state and local governments, public policy and the economy. Attention is given to developing student’s critical thinking skills including interpreting maps, charts and other statistical information. These skills will be important to the success on the Ohio End of the Course exam in American Government. This course is aligned with a required State End of Course Exam which counts toward a student’s cumulative graduation points.

Prerequisite: Adv./Honors U.S. History or AP U.S. History
Year: 11th
Credit: 1 credit
Term: 2 semesters
NCAA √

AP US History
Course #5409
AP U.S. History is designed to prepare students for the rigorous AP U.S. History exam. The students will explore American History from the Pre-Colonial Era (1491) to the present. The analysis of this time period will be largely expressed by students through their ability to create clear, concise, historical essays. Outside readings and research are extensive and are required. The emphasis of this course is for students to have curriculum and instructional experiences comparable to a college level course. All students who gain acceptance in this class are expected to take the AP exam in the spring. AP U.S. History can be taken to fulfill the American History requirement or it can be taken as an elective course to fulfill the one required Social Studies elective.

Prerequisite: Teacher Recommendation
Year: 10th, 11th, 12th
Credit: 1 credit
Fee: $32.00
$91.00 (AP Test)
SOCIAL STUDIES DEPARTMENT (cont.)

Honors American Government  
**Course #5302**
American Government is a required course designed to prepare students for mastery of the Ohio Academic Content Standards for American Government. At the Honors level students will be expected to participate in discussions, analyze primary/secondary sources, construct essays and complete outside readings to increase the depth of knowledge of events in the United States Government. This course provides an opportunity for students to learn how the U.S. Government system functions and the role of citizens in our interdependent world. Topics covered will include Constitution/Amendments, structure and function of the federal government, role of the people, state and local governments, public policy and the economy. Attention is given to developing student’s critical thinking skills including interpreting maps, charts and other statistical information. These skills will be important to the success on the Ohio End of the Course exam in American Government. This course is aligned with a required State End of Course Exam which counts toward a student’s cumulative graduation points.

**Prerequisite:**  Adv./Honors Modern World & U.S. History  
**Credit:** 1 credit  
**Year:** 11th  
**Term:** 2 semesters  
NCAA √

AP US Government & Political Science  
**Course # 5303**
AP U.S. Government and Politics is designed to prepare students for the rigorous AP U.S. Government and Politics exam. This course introduces students to key political ideas, policies, roles, and behaviors that characterize the United States governmental system. Students learn to apply disciplinary reasoning, assess causes and consequences of political events, and interpret data to develop evidence-based arguments. The emphasis of this course is for students to have curriculum and instructional experiences comparable to a college level course. All students who gain acceptance in this class are expected to take the AP exam in the spring. AP U.S. Government and Politics can be taken to fulfill the American Government requirement or it can be taken as an elective course to fulfill the one required Social Studies elective.

**Prerequisite:**  Teacher Recommendation  
**Credit:** 1 credit  
**Year:** 11th  
**Term:** 2 semesters  
NCAA √  
**Fee:**  $20.89  
$91.00 (AP Test)
SOCIAL STUDIES ELECTIVES

A full credit is required to complete the graduation requirement.

Adv. African American History
Course #5401
This elective course is designed to thoroughly examine a variety of aspects regarding African-American contributions to American society. The experiences of the African American people have been a critical component throughout American History and in today’s society. This course offers a rich examination of the people and history of African Americans throughout our nation’s history.

Prerequisite: None
Credit: 1 credit
Year: 11th, 12th
Term: 2 semesters
NCAA √

Adv. Contemporary World Issues
Course #5402
This elective course is designed to examine a wide variety of current events and contemporary issues and the way they impact our society. The focus of this course will be to analyze the effects of economics, politics, nature, and other topics that impact and inspire changes in society.

Prerequisite: None
Credit: .5 credit
Year: 11th, 12th
Term: 1 semester
NCAA √

Adv. Psychology/Sociology
Course #5404
This elective course combines the curriculum from sociology (the study of group behavior) and psychology (the study of individual behavior and mental processes.) The students will study individual and group behavior for the purpose of better understanding their own behavior and to increase their ability to relate well with others. Psychology topics include the study of the brain, abnormal behavior, intelligence, and personality. Sociology topics include socialization, cultural development, social change, and gender roles.

Prerequisite: Adv./Honors U.S. History
Credit: 1 credit
Year: 11th, 12th
Term: 2 semesters
NCAA √
SOCIAL STUDIES ELECTIVES (cont.)

A full credit is required to complete the graduation requirement.

**Adv. Economics**
This elective course provides students with the practical and theoretical knowledge that serves as a basis for economic decision-making. The students will study basic economic rules and micro-and macroeconomic concepts such as opportunity cost, economic systems, supply and demand, trade, and monetary and fiscal policy. Students will also learn about money, banking and investing, analyze the role of the United State government in the economy, and discuss the issues and challenges that face the American and global economies in the 21st century.

**Course #5405**

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<tr>
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<td>Year:</td>
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<td>Fee:</td>
<td>$5.00 (Stock Market Game)</td>
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<td>NCAA:</td>
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**Adv. Women in American History**
This course will focus on the social, political, and economic impact that women from all cultures have had on the growth, change, and development of the United States. The course will concentrate on the experiences of Caucasian, African American, and Native American women while acknowledging the lives of immigrant women who came to the U.S. looking for a better life. The course will be divided into units ranging from early and colonial experiences, to the role that women have played in American wars and conflicts, changes that women have brought to society, their contributions to our nation, and the evolution of the roles of females in the workplace.

**Course #5406**

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**AP European History**
This elective course is for students with a keen interest in European history. Students will demonstrate knowledge of basic chronology and of major events and trends from approximately 1450 to the Present. Students will develop an understanding of some of the principle themes in modern European history, an ability to analyze historical evidence and an ability to express historical understanding in writing. Outside research and readings are extensive and required. All students who request acceptance in this class are expected to take the AP exam in the spring.

**Course #5407**

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<td>Fee:</td>
<td>$23.00 (AP Test)</td>
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<td>$91.00 (AP Test)</td>
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**AP Psychology**
This elective course is designed to prepare students for the AP Psychology test. The course involves an in-depth examination of psychology, the study of individual behavior and mental processes. Theorists, scientists, and practitioners are examined, as well as the brain, abnormal behavior, intelligence and personality, etc. The emphasis is for students to have curriculum and instructional experience comparable to college level courses. All students who request acceptance in this class are expected to take the AP exam in the spring.

**Course #5408**

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<td>Fee:</td>
<td>$20.00 (AP Test)</td>
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<td>NCAA:</td>
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FOREIGN LANGUAGE DEPARTMENT
All foreign language courses are electives; however, four-year colleges, including the Ohio State college system, require a minimum of two or three years in the same language for admission. Many academic honors and award criteria require three years in the same language or two years in two languages.

**Adv. Spanish I**
Course #1201
Spanish I is designed to enable each student to attain and maintain proficiency in the language skills of listening, speaking, reading and writing within a minimum period of time. The language will be presented within the context of the Hispanic world and its culture. This course will make communication in Spanish relevant to the student's life.

**Prerequisite:** None  
**Credit:** 1 credit  
**Year:** 9th, 10th, 11th  
**Fee:** $20.00

**Course #1202**
This course enables the student to develop proficiency in the four skills of listening, speaking, reading and writing in a manner that makes language study a meaningful and enjoyable activity. It presents the language within the context of the contemporary Spanish speaking world and its cultures. The student will actively participate in the learning process through a variety of texts, audiotapes, workbooks and individualized activities and projects.

**Prerequisite:** Grade of C or higher in Adv. Spanish I  
**Credit:** 1 credit  
**Year:** 9th, 10th, 11th, 12th  
**Fee:** $20.00

**Adv. Spanish III**
Course #1203
This course will emphasize increased oral proficiency and aural comprehension. The student will continue to build upon the vocabulary, grammatical and linguistic skills studied in Spanish I and II. The student will also increase proficiency in reading comprehension. A variety of texts, audiotapes, workbooks, and individualized activities will be used.

**Prerequisite:** Grade of “C” or higher in Adv. Spanish II  
**Credit:** 1 credit  
**Year:** 10th, 11th, 12th  
**Fee:** $20.00

**Honors Spanish IV**
Course #1204
This course further develops the student's knowledge of the history, life and culture of the Spanish-speaking world through conversation, contemporary and literary readings, projects, field trips and cultural experiences. The course offers an extensive review of grammatical structures. The student will actively participate in the learning process through a variety of literature, grammar, audiovisual, workbooks, individualized activities, and projects.

**Prerequisite:** Grade of “C” or higher in Adv. Spanish III  
**Credit:** 1 credit  
**Year:** 11th, 12th  
**Fee:** $22.00
FOREIGN LANGUAGE DEPARTMENT (cont.)

AP Spanish

Course #1205
This course is open to selected academically advanced seniors who have excelled in their earlier Spanish preparation and who wish to take a course that is equivalent to third-year college Spanish. It encompasses the proficiency of advanced language skills in speaking, listening, reading and writing in the Spanish language. An intensive study of the Hispanic language and culture, and selected Hispanic literary works will drive the course content. Summer assignments will be required and comprise a portion of the first period assessment. All students who request acceptance in this class are expected to take the AP exam in the spring.

Prerequisite: Grade of “B” or higher in Spanish III or IV
Year: 11th, 12th
Fee: $67.00
Credit: 1 credit
Term: 2 semesters
NCAA √

$91.00 (AP Test)

Adv. French I

Course #1211
French I is designed to enable each student to develop proficiency in the language skills of listening, speaking, reading and writing within a minimum period of time. The language will be presented within the context of the contemporary French-speaking world and its culture. This course will make communication in French relevant to the student's life.

Prerequisite: None
Year: 9th, 10th, 11th
Fee: $16.00
Credit: 1 credit
Term: 2 semesters
NCAA √

Adv. French II

Course #1212
This course enables the student to attain proficiency in the four skills of listening, speaking, reading and writing in a manner that makes language study a meaningful and enjoyable activity. It presents the language within the context of the contemporary French-speaking world and its culture. The student will actively participate in the learning process through a variety of texts, audiovisual materials, workbooks and individualized activities and projects.

Prerequisite: Grade of “C” or higher in Adv. French I
Year: 9th, 10th, 11th, 12th
Fee: $16.00
Credit: 1 credit
Term: 2 semesters
NCAA √

Adv. French III

Course #1213
This course will introduce the student to French literature as well as further develop an appreciation of the French culture. The student will continue to build upon the vocabulary, grammatical and linguistic skills studied in French I and II. The student will increase proficiency in oral and written expression through a variety of texts, audiovisual materials, workbooks, and individualized activities and projects.

Prerequisite: Grade of “C” or higher in Adv. French II
Year: 10th, 11th, 12th
Fee: $16.00
Credit: 1 credit
Term: 2 semesters
NCAA √
Honors French IV  
Course #1214
This course further develops students’ knowledge of the history, life and culture of the French-speaking world through conversation, contemporary and literary readings, projects, fieldtrips and cultural experiences. The course offers an extensive review of grammatical structures. Students will actively participate in the learning process through a variety of texts, audiovisual materials, workbooks, and individualized activities and projects.

Prerequisite: Grade of “C” or higher in Adv. French III  
Credit: 1 credit
Year: 11th, 12th  
Term: 2 semesters  
NCAA √

AP French  
Course #1215
This course is open to selected academically advanced seniors who have excelled in their earlier French preparation and who wish to take a course that is equivalent to third-year college French. It encompasses the proficiency of advanced language skills in speaking, listening, reading and writing in the French language. An intensive study of the language, culture, and selected literary works will drive the course content based on the AP French themes. Summer assignments will be required and comprise a portion of the first period assessment. All students who request acceptance in this class are expected to take the Advanced Placement exam in the spring.

Prerequisite: Adv. French III or IV with a “B” or higher  
Credit: 1 credit
Year: 11th, 12th  
Fee: $48.00  
$91.00 (AP Test)  
Term: 2 semesters  
NCAA √

Adv. German III (CHS ONLY ONLINE ONLY)  
Course #1223
This online course will introduce the student to German literature, as well as, further develop an appreciation of the German culture. The student will continue to build upon the vocabulary, grammatical and linguistic skills studied in German I and II. The student will increase proficiency in oral and written expression through a variety of texts, audiovisual materials, workbooks and individualized activities and projects.

Prerequisite: Grade of “C” or higher in Adv. German II  
Credit: 1 credit
Year: 10th, 11th, 12th  
Term: 2 semesters  
NCAA √

Honors German IV (CHS ONLY ONLINE ONLY)  
Course #1224
This online course will introduce the student to German literature, as well as, further develop an appreciation of the German culture. The student will continue to build upon the vocabulary, grammatical and linguistic skills studied in German I, II and III. The student will increase proficiency in oral and written expression through a variety of texts, audiovisual materials, workbooks and individualized activities and projects.

Prerequisite: Grade of “C” or higher in Adv. German III  
Credit: 1 credit
Year: 11th, 12th  
Term: 2 semesters  
NCAA √

Adv. American Sign Language  
Course #1232
American Sign Language is a visual language with its own unique rules of grammar and composition. Students enrolled should feel comfortable communicating with gestures and facial expressions. At this level the student is introduced to basic sign vocabulary, fingerspelling, and non-manual grammatical signals (NMGS) including mouthing, shoulder raising and head tilting. The use of the target language, with no talking, can be expected. An understanding of culture and identity of both the global and local Deaf community will be incorporated into this course.

Prerequisite: None  
Credit: 1 credit
Year: 9th, 10th, 11th, 12th  
Term: 2 semesters  
NCAA: √

**Sign language will fulfill a foreign language requirement for honors diploma but may not fulfill admissions requirements for all colleges.
MUSIC DEPARTMENT

All music department courses are electives; however, most four-year colleges require at least one fine arts Credit for admission. All classes listed in this section will satisfy such a requirement. Most of the performing group programs require placement by the director. Students interested in these groups must contact the appropriate music director for an audition or placement. Taking one of these classes will satisfy the graduation requirements.

**INSTRUMENTAL MUSIC**

**Gen./Honors Concert Band**

Course #1301

This is a wind and percussion ensemble designed for performance of band literature. This course has an Honors Option and may be taken for Honors level credit. Students electing the Honors Option may do so for one music course once in their junior or senior year. This is a year-long course; performance participation outside of school hours is mandatory.

**Prerequisite:** Prior School Band Experience

**Year:** 9th, 10th, 11th, 12th

**Fee:** $10.00

**Gen./Honors Percussion Ensemble**

Course #1302

This is an ensemble open only to percussionists. All percussionists should sign up for this class. The ensemble will explore and perform a large variety of musical genres from around the world in groups of varying size. This course has an Honors Option and may be taken for Honors level credit. Students electing the Honors Option may do so for one music course once in their junior or senior year. This is a year-long course; performance participation outside of school hours is mandatory.

**Prerequisite:** Prior School Band Experience

**Year:** 9th, 10th, 11th, 12th

**Fee:** $10.00

**Gen./Honors Jazz Band**

Course #1303 – Gen. #1304 – Hon.

This instrumental music course is designed to allow students to explore and perform the unique American Jazz style. The students will study jazz idioms including big band, stage band and jazz combos. The students will learn about the development of improvisational techniques, the history of jazz, including Dixieland, and will perform as an integral part of the music department. This course has an Honors Option and may be taken for Honors level credit. Students electing the Honors Option may do so for one music course once in their junior or senior year. This is a year-long course; performance participation outside of school hours is mandatory.

**Prerequisite:** Audition or placement by Director

**Year:** 9th, 10th, 11th, 12th

**Fee:** $10.00

**Credit:** 1 credit

**Term:** 2 semesters

**Fee:** $10.00

****Students assigned a district owned instrument will be assigned a $30.00 maintenance fee
INSTRUMENTAL MUSIC (cont.)

Wind Symphony is an advanced wind and brass ensemble designed for performance of advanced band literature. Opportunities may be provided for students to participate in contests sanctioned by the Ohio Music Educators Association. This ensemble is for woodwind and brass sections only. This course has an Honors Option and may be taken for Honors level credit. Students electing the Honors Option may do so for one music course once in their junior or senior year. This is a year-long course; performance participation outside of school hours is mandatory.

**Prerequisite:** Audition or placement by Director  
**Year:** 9th, 10th, 11th, 12th  
**Credit:** 1 credit  
**Term:** 2 semesters  
**Fee:** $10.00

Gen./Honors Concert Orchestra

Orchestra is a string ensemble designed to develop skills, aesthetic and musical values through the performance of intermediate and advanced orchestra literature. Opportunity is provided for students to participate in large group, solo, and ensemble contests. This course has an Honors Option and may be taken for Honors level credit. Students electing the Honors Option may do so for one music course once in their junior or senior year. Performance participation outside of school hours is mandatory.

**Prerequisite:** Membership in 8th grade strings program, audition  
**Year:** 9th, 10th, 11th, 12th  
**Credit:** 1 credit  
**Term:** 2 semesters  
**Fee:** $10.00

Gen./Honors Chamber Orchestra (CHS ONLY)

This is an advanced orchestra designed to further develop advanced performance skills and techniques. The Chamber Orchestra performs for festivals, district concerts and other social engagements. Students will study music and music theory in greater depth. Students will perform with the full orchestral group and string orchestra, as well as in ensembles and the chamber music genre. This course has an Honors Option and may be taken for Honors level credit. Students electing the Honors Option may do so for one music course once in their junior or senior year. Performance participation outside of school hours is mandatory.

**Prerequisite:** Audition or placement by Director  
**Year:** 9th, 10th, 11th, 12th  
**Credit:** 1 credit  
**Term:** 2 semesters  
**Fee:** $10.00

**Students assigned a district owned instrument will be assigned a $30.00 maintenance fee**
MUSIC DEPARTMENT (cont.)

VOCAL MUSIC

Gen./Honors Concert Choir

Course #1311 – Gen. #1312 – Hon.

Concert Choir is an accelerated SATB vocal ensemble designed for performance of advance choral literature with a focus on a cappella singing. Opportunity may be provided for students to participate in contests sanctioned by the Ohio Music Education Association as well as other adjudicated events. This course has an Honors Option and may be taken for Honors level credit. Students electing the Honors Option may do so for one music course once in their junior or senior year. Performance participation outside of school hours is mandatory.

Prerequisite: Vocal Music Director recommendation
Year: 9th, 10th, 11th, 12th
Credit: 1 credit
Term: 2 semesters
Fee: $10.00

Gen. Women’s Ensemble

Course #1313

This is an all-female accelerated vocal ensemble designed for performance of advanced choral literature ranging from pop to classical, employing choreography when appropriate. Opportunity may be provided for students to participate in contests sanctioned by the Ohio Music Educator’s Association as well as other adjudicated events. Performance participation outside of school hours is mandatory.

Prerequisite: Vocal Music Director recommendation
Year: 9th, 10th, 11th, 12th
Credit: 1 credit
Term: 2 semesters
Fee: $10.00

Gen. Mixed Ensemble

Course #1314

Mixed Ensemble is a single semester, non-auditioned choir designed to develop a deeper understanding of the elements of music, as well as the vocal musicianship and sight reading skills required for participation in advanced choral groups. Emphasis is placed on developing good vocal tone, intonation and breath support. One performance outside of school hours may be required. No participation fee is required.

Prerequisite: None
Year: 9th, 10th, 11th, 12th
Credit: .5 credit
Term: 1 semester
Fee: $5.00

Gen./Honors Show Choir

Course #1315 – Gen. #1316 – Hon.

Show Choir is an elite competition show choir whose performances feature singing, dancing, backdrops, costume changes, and a live band. Participation will require after school rehearsals, one week attendance at choreography camp, competitions, and community events. Membership is based on auditions, consisting of vocal and dance segments, as well as personal interviews. Auditions are held each spring for the coming school Year. This course has an Honors Option and may be taken for Honors level Credit. Students electing the Honors Option may do so for one music course once in their junior or senior year. Performance participation outside of school hours is mandatory.

Prerequisite: Audition
Year: 9th, 10th, 11th, 12th
Credit: 1 credit
Term: 2 semesters
Fee: $10.00

**Students assigned a district owned instrument will be assigned a $30.00 maintenance fee**
MUSIC DEPARTMENT (cont.)

VOCAL MUSIC (cont.)

Gen. Music Appreciation  
Course #1317
This course develops the appreciation of music through listening to and studying the different styles of music from jazz to hip hop and rap. The class explores visual arts, music, dance, theatre and literature through the major movements, time periods, and cultures.

Prerequisite: None  
Credit: .5 credit
Year: 9th, 10th, 11th, 12th  
Term: 1 semester
Fee: $5.00

Gen./Honors Music Theory  
Course #1318 – Gen.  
Course #1319 – Hon.
This is a comprehensive honors level course of study in harmony and basic musicianship. Topics taught include melody, rhythm, analysis, dictation, sight-singing, and form. It is designed for students who are considering music studies beyond the high school level.

Prerequisite: Teacher Recommendation  
Credit: 1 credit
Year: 10th, 11th, 12th  
Term: 2 semesters
Fee: $20.00

Intro to Music Theory  
Course #1329.
This course involves the study of harmony and basic musicianship. Topics taught include melody, rhythm, analysis, dictation, sight-singing, and form. It is designed for students who may be considering music studies beyond the high school level.

Prerequisite: School Music Experience  
Credit: .5 credit
Year: 10th, 11th, 12th  
Term: 1 semester
Fee: $20.00

**Students assigned a district owned instrument will be assigned a $30.00 maintenance fee**
HEALTH/PHYSICAL EDUCATION

In order to meet graduation requirements, the Health course must be successfully completed.

Gen. Health
Course #1401
This is a blended class that combines traditional teaching with a 21st Century web-based interface called Blackboard. Students will work on-line in the new Blended computer labs. Topics covered in this course include Making Healthy Decisions, Health Agencies, First Aid/CPR, Preventing Disease, and Human Sexuality.

Prerequisite: None
Year: 9th, 10th, 11th, 12th
Credit: .5 credit
Term: 1 semester

All students are required to take Physical Education I and 1 P.E. elective to meet graduation requirements.

Gen. Physical Education I
Course #1402
Physical Education is a semester-long course designed to promote physical fitness and healthy living habits. It places an emphasis on activities that promote lifelong fitness and healthy living. This course is required for graduation.

Prerequisite: None
Year: 9th, 10th, 11th, 12th
Credit: .25 credit
Term: 1 semester

Gen. Physical Education II
Course #1403
This course is designed to introduce students to a wide variety of sports that they may take part in for life. Students will practice skills, participate in lead up games and play sports. Students will learn the basic terminology, rules, safety and history about each sport.

Prerequisite: Physical Education I
Year: 9th, 10th, 11th, 12th
Credit: .25 credit
Term: 1 semester

Gen. Strength Training and Conditioning
Course #1404
This semester-long course will offer students learning opportunities in the areas of strength and cardiovascular conditioning. The students will perform basic strength training exercises using free weights and nautilus machines. The students will learn proper techniques and spotting methods.

Prerequisite: None
Year: 9th, 10th, 11th, 12th
Credit: .25 credit
Term: 1 semester

Gen. Basketball Officiating
Course #1405
This semester-long course will afford the student the opportunity to develop and/or improve fundamental skills in basketball with emphasis on offensive and defensive strategies, while providing cardiovascular conditioning. The student will learn officiating of basketball. The main emphasis will be on basketball officiating and learning the three-man rotation, which is used at the high school and college level.

Prerequisite: None
Year: 9th, 10th, 11th, 12th
Fee: $8.00
Credit: .25 credit
Term: 1 semester

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HEALTH/PHYSICAL EDUCATION (cont.)

Gen. Fitness and Nutrition
This semester-long course is designed to advance the areas of fitness and nutrition. The students will learn muscular anatomy, physiology, and healthy nutrition, as well as learning to monitor their progress through goal setting, nutrition and fitness record keeping. Students will be expected to do outside class work.

Prerequisite: None
Year: 9th, 10th, 11th, 12th
Credit: .25 credit
Term: 1 semester

Adv. Strength Training and Conditioning (CHS only)
This is a semester long class that is designed to service the needs of students that want to strength train and condition. This class will also be available for students that are serious about transforming their body and improving their physical fitness. This is a high intensity class. Students will develop individualized fitness plans specific to their goals and will be expected to keep a detailed dietary journal. Activities include but are not limited to strength training, aerobic activities, anaerobic activities, flexibility training, plyometrics, and cardiovascular conditioning.

Prerequisite: Teacher recommendation
Year: 10th, 11th, 12th
Credit: .25 credit
Term: 1 semester
COLLEGE AND CAREER READINESS

Gen. RISE I– Raising Individual Student Excellence (CHS ONLY)  Course #1601
The purpose of RISE is to encourage and support Colerain High School minority students who exhibit academic potential to enroll in Honors and Advanced Placement courses, with the ultimate goal of attending college. Students will: maintain acceptable grades in at least ONE Honors or Advanced Placement class, take part in weekly tutorial sessions, participate in critical reading, writing, and thinking activities, organize and maintain a binder for all academic coursework, take organized and detailed notes, attend college informational sessions presented by CHS and local Universities regarding course offerings and financial aid during school hours, and a designated number of sessions outside of school hours. Freshman, sophomore, junior, and senior students will attend multiple free ACT/SAT tutorials provided after school by CHS.

Prerequisite: Completion of requirements in application packet & interview process, with teacher recommendation
Credit: 1 credit
Term: 2 semesters
Year: 9th, 10th, 11th, 12th
Fee: $15

Gen. RISE II (CHS ONLY)  Course #1602
This course is designed to prepare students for success in post-secondary education. RISE II will build on and continue the skills presented in RISE I, including critical reading and writing, collaborative discussion, tutorial inquiry study groups, preparation for college entrance and placement exams, study skills, test taking strategies, note taking and research. A strong emphasis will be placed on college and career readiness. Ample authentic learning opportunities will be offered through field trips to local college campuses, and collaboration with local college students and successful businessmen/women. Students will engage in higher levels of writing, inquiry, collaboration, reading, and reflection strategies than in RISE I to prepare them for the rigorous level of work they will experience in college. Technology integration is a major component of RISE II, and students will be expected to have access to the Internet outside of school.

Prerequisite: Completion of requirements in application packet & interview process, with teacher recommendation
Credit: 1 credit
Term: 2 semesters
Year: 10th, 11th, 12th
Fee: $15

ACT Preparatory Course  Course #1604
This course will focus on preparing students to excel on the ACT tests offered for college admissions and high school graduation. It will assist in the development of test taking skills, academic vocabulary building, advanced mathematical concepts, college level reading and writing skills, and general logic and critical thinking.

Prerequisite: Eng I and II, Alg I, Geometry
Credit: .5 credit
Year: 10th, 11th, 12th
Term: 1 semester
Fee: $22.00
Adv. School Leadership (FMP)  
This course is designed for the mentors who will facilitate activities for the Freshmen Mentor Program. The course is designed to develop leadership skills, conflict-resolution skills, listening skills, and mentoring skills. This course is open to juniors and seniors who are interested in being mentors. An application process is required before electing to take this course. This class meets every day during fourth bell and then two mentors are assigned to each FMP during their fourth bell class. There are also two dates in the summer required of students for training for this role.

**Prerequisite:** Students accepted through recommendation process  
**Year:** 11th, 12th  
**Credit:** 1 credit  
**Term:** 2 semesters
ACADEMIC SUPPORT PROGRAMS
Knowing that every student is not always immediately successful in their classes, NWLSD has progressive levels of academic intervention to help keep students on track for graduation and beyond.

**Gen. Eagle’s Gate**
Eagle’s Gate is an intervention program targeting those students who are two or more credits behind in their academic progress and who haven’t found success in the regular school setting. The program uses web-based lessons and assessments, and is staffed by a teacher who provides direct instruction and monitors the on-line courses.

**Prerequisite:** None  
**Year:** 10th, 11th, 12th  
**Credit:** varies  
**Term:** 1 semester

**Northwest Passage**
Northwest Passage is an alternative placement program for students that have had very limited success in the regular school setting. This program is operated off campus and students assigned to the program will begin and end their school day there. Students are assigned to this program by administrators and central office personnel and will be notified of their placement through the appropriate channels.

**Prerequisite:** Students accepted through recommendation process  
**Year:** 9th, 10th, 11th, 12th  
**Credit:** .5 to 21 credits  
**Term:** 2 semesters

**Gen. Career Based Intervention Co-Op - Butler Tech**
The Career Based Intervention Program is a career-technical program designed for students experiencing academic or economic challenges. The CBI Program is designed to help students improve academic competence, increase student attendance, transition to the next grade level, graduate from high school, and transition to a career-technical program related to personal interests and/or post-secondary opportunities. This program provides students an opportunity to meet their academic needs for graduation while allowing students to maintain approved employment and/or a service learning project. Students are enrolled in on-line core subject courses. Students also participate in a course that focuses on job and life-related issues during the morning hours. Students are selected based on need and recommendation of counselors, teachers and administrators.

Students can earn elective credits for approved employment or volunteer activities in approved programs during the afternoon hours of school. Emphasis is placed on developing appropriate work habits, attitudes and employer-employee relationships. All students are expected to have transportation to and from their place of employment.

**Gen. Career Based Intervention Related Online Academics - Butler Tech**
Students must be enrolled in CBI Co-Op #6002 to take this program.

**Prerequisite:** 16 years of age, with recommendation from a year counselor, teacher, or administrator  
**Year:** 10th, 11th, 12th  
**Credit:** Up to 4 credits per year  
**Term:** 2 semesters

**Gen. CBI Career Connections – Butler Tech**
Each student in the CBI/CC program participates in a Career Connections class taught by a certified CBIP Coordinator. In the Career Connections class students examine and develop important real-world skills like exploring career opportunities, career outlooks, career skills and career aptitudes, as well as the theories behind successful interviewing, resume writing and development, personal health and wellness, and current and future technologies.

**Prerequisite:** None  
**Year:** 9th, 10th, 11th, 12th  
**Credit:** 1 credit  
**Term:** 2 semesters
ACADEMIC SUPPORT PROGRAMS – cont.

Gen. CBI Career Connections – Butler Tech
Course #6003
Each student in the CBI/CC program participates in a Career Connections class taught by a certified CBIP Coordinator. In the Career Connections class students examine and develop important real-world skills like exploring career opportunities, career outlooks, career skills and career aptitudes, as well as the theories behind successful interviewing, resume writing and development, personal health and wellness, and current and future technologies.

Prerequisite: None
Credit: 1 credit
Year: 9th, 10th, 11th, 12th
Term: 2 semesters
Butler Tech Elective Offerings at Northwestern & Colerain High School

Highlights: Butler Tech offers a wide variety of elective and introductory courses at both Colerain and Northwest High Schools. Courses are designed to give you a sampling of the full pathway programs we offer, while teaching valuable skills for life. Courses are one period a day, taken at your high school and provide foundational knowledge in the field or pathway. Some provide opportunities for college credit.

CAREER TECHNICAL PROGRAMMING at Colerain High School in the COLERAIN HIGH SCHOOL CAREER TECH CENTER (CCTC)

Electives and Career Based Intervention (CCTC)
- Contemporary Cuisine 2 semesters (year)
- Baking & Pastry Arts 2 semesters (year)
- Career & College Readiness & Beyond (College & Beyond) 1 semester
- Human Growth and Development (Child Development) 1 semester
- CBI Connections 2 semesters (year)
- Career Connections/Co-Op 2 semesters (year)
- Exploring Career Pathways 1 semester (9th grade only)
- Remodeling and Carpentry 2 semesters (year)
- Principles of Business & Economics 2 semesters (year)
- Principles of Marketing 2 semesters (year)
- Principles of Finance 2 semesters (year)
- Principles of Business Management and Strategies 2 semesters (year)

Introduction Courses (CCTC)
- Intro to Healthcare Technologies (Lifespan Development) 2 semesters (year)
- Intro to Dental Assisting and Healthcare (Lifespan Development) 2 semesters (year)
- Manufacturing Engineering (Engineering or Precision Machine Pathway) 2 semesters (year)
- Information Technology (Formerly Programming and Software) 2 semesters (year)
- Intro to Precision Machining 2 semesters (year)
- Security and Protective Services (Formerly - Intro to Criminal Justice) 2 semesters (year)
- Intro to Construction Tech 2 semesters (year)
- Engineering Principles 2 semesters (year)
- Diesel Engine Technology 2 semesters (year)

Technical Preparation Programs (CCTC)
- Dental Assisting Tech Prep 2 bells Junior and 3 bells Senior – 5 credits
- Healthcare Services Tech Prep 2 bells Junior and 3 bells Senior – 5 credits
- Programming and Software Development Tech Prep 2 bells Junior and 2 bells Senior – 4 credits
- Criminal Justice Tech Prep 2 bells Junior and 2 bells Senior – 4 credits
- Diesel Engine Tech Prep 3 bells Junior and 2 bells Senior – 5 credits
- Engineering & Design Tech Prep 2 bells Junior and 2 bells Senior – 4 credits
- Precision Machining Tech Prep 3 bells Junior and 2 bells Senior – 5 credits
CAREER TECHNICAL PROGRAMMING @ NORTHWEST HS (NWHS) in the NORTHWEST HS CAREER TECH CENTER (NWCTC)

Electives and Career Based Intervention (NWHS/NWCTC)
- Culinary Fundamentals: 1 semester
- Contemporary Cuisine: 2 semesters (year)
- Baking & Pastry Arts: 2 semesters (year)
- Career & College Readiness & Beyond (College & Beyond): 1 semester
- Human Growth and Development (Child Development): 1 semester
- Intro to Interior Design: 2 semesters (year)
- CBI Connections: 2 semesters (year)
- Career Connections/Co-Op: 2 semesters (year)
- Principles of Business & Economics: 2 semesters (year)
- Principles of Marketing: 2 semesters (year)
- Principles of Finance: 2 semesters (year)
- Principles of Business Management and Strategies: 2 semesters (year)
- Exploring Career Pathways: 1 semester (9th grade only)

Introduction Courses (NWCTC)
- Financial Foundations: 2 semesters (year)
- Intro to Construction Tech: 2 semesters (year)
- Multi-Media Web Production (Digital Media): 2 semesters (year)
- Nutrition and Wellness (Sports Medicine): 2 semesters (year)

Technical Preparation Programs (NWCTC)
- Honors Financial Services Tech Prep: 2 bells Junior and 2 bells Senior – 4 credits
- Construction Tech Prep: 2 bells Junior and 2 bells Senior – 4 credits
- Digital Media Tech Prep: 2 bells Junior and 2 bells Senior – 4 credits
- Sports Medicine/Exercise Science Tech Prep: 2 bells Junior and 2 bells Senior – 4 credits
- Cosmetology Tech Prep: 3 bells Junior and 3 bells Senior – 6 credits
CAREER TECHNICAL PROGRAMMING
FAMILY AND CONSUMER SCIENCE – Butler Tech

All students can benefit from Family and Consumer Sciences courses. The classes are designed to meet the needs of all different types of learners. Students will learn skills for managing individual and family needs, problem solving, setting goals, and leadership. Students will experience a variety of teaching techniques: small group activities, presentations, hands on projects, classroom discussions, labs, field trips, and community involvement. In each course all students are required to complete a final semester culminating course project. Through integrated classroom activities students will be given the opportunity to participate in Family, Career, and Community Leaders of America (FCCLA), a youth leadership organization. A $25.00 one-time fee will be assessed for students enrolling in one or multiple FCS courses.

Culinary Fundamentals
Course #6201 (NWHS ONLY)
Students will be introduced to basic cooking skills, learn proper knife skills, food nutrition, basic food science principles, and cooking techniques such as sauté, poach, braise, and roast. Safe food handling and equipment usage are also introduced. Students will have the opportunity to be involved in Family, Career and Community Leaders of America (FCCLA) state and national organization.

Prerequisite: None
Credit: .5 credit
Year: 9th, 10th, 11th, 12th
Term: 1 semester
Fee: $25 (FCCLA)

Contemporary Cuisine
Course #6202
Are you hooked on cooking shows or are you a future Culinary Arts student? Get in on the latest culinary trends, flavors and plate presentations! Learn about cooking principles, methods and nutrition management strategies. Examine food science in preparation, cooking and presentation of foods and beverages. Safe food handling and equipment usage are also covered. Students will have the opportunity to be involved in Family, Career and Community Leaders of America (FCCLA) state and national organization.

Prerequisite: None
Credit: 1 credit
Year: 9th, 10th, 11th, 12th
Term: 2 semesters
Fee: $25 (FCCLA)

Baking & Pastry Arts
Course #6228
Are you the next Cake Boss or are you hooked on Cupcake Wars? Then this is the class for you! Cake decorating, cookies, baking bread, French pastries, and other baking techniques await. Learn food science principles that will make your baking a success. Safe food handling and proper equipment usage are also covered. Students will have the opportunity to be involved in Family, Career and Community Leaders of America (FCCLA) state and national organization.

Prerequisite: None
Credit: 1 credit
Year: 10th, 11th, 12th
Term: 2 semesters
Fee: $25 (FCCLA)
CAREER TECHNICAL PROGRAMMING
FAMILY AND CONSUMER SCIENCE – Butler Tech (cont.)

Career and College Readiness (College & Beyond)  
Course #6203
What’s your next step after high school? Explore career and education opportunities that reflect your interests, personality and abilities. Develop and practice leadership, team building and communication skills. Learn workplace-appropriate Netiquette, communication skills and business dining etiquette. Entrepreneurship, personal financial wellness and consumer protection issues are topics of the course. Students will have the opportunity to be involved in Family, Career and Community Leaders of America (FCCLA) state and national organization.

Prerequisite: None  
Credit: .5 credit
Year: 11th, 12th  
Term: 1 semester
Fee: $25 (FCCLA)

Human Growth and Development (Child Development)  
Course #6204
You will examine an overview of human growth and development during all stages of life. Physical, cognitive, social, and emotional developmental milestones will be emphasized. Additional topics covered are human characteristics, genetic defects, parenting styles and responsibilities and cultural differences within a family unit and community. Students will have the opportunity to be involved in Family, Career and Community Leaders of America (FCCLA) state and national organization.

Prerequisite: None  
Credit: .5 credit
Year: 9th, 10th, 11th, 12th  
Term: 1 semester
Fee: $25 (FCCLA)

Intro to Interior Design  
Course #6205 (NWHS ONLY)
Interior Design influences so many things in our homes – from the paint colors in the stores to the furniture we buy. This course introduces you to the principles and elements of design in residential spaces. Learn about the elements of design; selecting and organizing furnishings, floorings and wall coverings; and how the functionality and psychology influence design choices. Career opportunities in the fields of textiles and design will also be explored. Students will have the opportunity to be involved in Family, Career and Community Leaders of America (FCCLA) state and national organization.

Prerequisite: None  
Credit: 1 credit
Year: 10th, 11th, 12th  
Term: 2 semesters
Fee: $25 (FCCLA)
INTRODUCTION PATHWAY COURSES

Introduction courses are designed to give students an opportunity to explore various career fields in greater detail. Though, not required prior to entrance into a “Tech Prep” program, the course provide an excellent preview of what is expected in the selected career field. In most cases, introduction courses are designed for 9th and 10th graders.

Gen. Financial Foundations

Financial Foundations is a year-long course that provides students with an introduction to the exciting world of finance. Students investigate the business environment, our economy, money management, and business law in a fast-paced, interactive atmosphere. Students explore economics through hands-on projects that put these ideas into practice. Students learn how to budget their money, save and invest, protect themselves with insurance, and use credit wisely. And students learn how to navigate the legal system and contract law. Students also develop computer skills in Microsoft Word, Excel, PowerPoint, and Publisher. This class is designed as an introduction to Honors Financial Services Tech Prep.

Prerequisite: None
Year: 9th, 10th
Credit: 1 credit
Term: 2 semesters
Fee: $20 (BPA)

Gen. Intro to Construction Tech

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

Prerequisite: None
Year: 9th, 10th
Credit: 1 credit
Term: 2 semesters
Fee: $15 (SkillsUSA)

Multi-Media Web Production

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

Prerequisite: None
Year: 9th, 10th (others considered if space available)
Credit: 1 credit
Term: 2 semesters
Fee: $25 (BPA)

Gen. Nutrition and Wellness

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

Prerequisite: None
Year: 9th, 10th
Credit: 1 credit
Term: 2 semesters
Fee: $32 (HOSA)
Gen. Exploring Career Pathways

Explore and shadow the many different Butler Tech Programs during this semester class! Through hands-on learning and local business involvement, students will engage in career-related experiences to acquire skills in various career fields. Designed to provide experiences to begin career decision making. Teachers have the flexibility to select career fields related to Ohio’s in-demand jobs represented in the community. Students will identify career interests and skills to develop an understanding of how personal characteristics can impact career choice. An overview of all 16 Ohio career fields will be provided. Students will create a preliminary career plan using online tools, such as OhioMeansJobs, and will begin to develop an understanding of 21st century skills.

Prerequisite: None
Year: 9th
Fee: None

Course #6341
Credit: .5 credit
Term: 1 semesters
CAREER TECHNICAL PROGRAMMING @ CHS - CCTC

Gen. Intro to Healthcare Technologies
Course #6302 (CCTC)
The class gives students a basic foundation on topics related to communication, careers in the health field with an emphasis on Health Care Careers, employability skills, safety, common illnesses and disorders, health care prevention, human life cycle, legal/ethical issues, medical terminology, direct patient care. Students will build knowledge through class discussion, personal reflection, medical and scientific fact, as well as hands on lab participation.

Prerequisite: None
Year: 9th, 10th
Fee: $32 (HOSA)
Credit: 1 credit
Term: 2 semesters

Gen. Intro to Dental and Healthcare
Course #6303 (CCTC)
The class gives students a basic foundation on topics related to communication, careers in the health field with an emphasis on Health Care Careers, employability skills, safety, common illnesses and disorders, health care prevention, human life cycle, legal/ethical issues, medical terminology, direct patient care. The Dental Assisting program prepares students to work with dentists and dental laboratories. The training consists of learning computer assisted office practices and procedures, patient preparation and comfort, chairside assisting procedures, and the use of laboratory materials and equipment.

Prerequisite: None
Year: 9th, 10th
Fee: $32 (HOSA)
Credit: 1 credit
Term: 2 semesters

Gen. Manufacturing Engineering
(CCTC) (Formerly – Intro to Precision Machining and Formerly Engineering Technologies)
This hands on, projected based course production processes applied across manufacturing operations. Students will learn the basics of Computer Assisted Drafting (CAD) with Industry Level Software – Solidworks. Students will be able to demonstrate a broad array of technical skills with an emphasis given to quality practices, measurement, maintenance and safety.

Prerequisite: None
Year: 9th, 10th
Fee: $15 (TSA)
Credit: 1 credit
Term: 2 semesters

Gen. Information Technology (Formerly Programming and Software) Course #6305 (CCTC)
This first course in the IT career field is designed to provide students with a working knowledge of computer concepts and essential skills necessary for work and communication in today's society. Students will learn safety, security, and ethical issues in computing and social networking. Students will also learn about input/output systems, computer hardware and operating systems, and office applications.

Prerequisite: None
Year: 9th, 10th
Fee: $15 (BPA)
Credit: 1 credit
Term: 2 semesters
INTRODUCTION PATHWAY COURSES (cont.)

**Gen. Security and Protective Services (Formerly - Intro to Criminal Justice) Course #6306 (CCTC)**
Private Security is an ever-expanding industry that requires trained professionals that can detect, deter, and investigate crime. The course focuses on private security measures used to protect lives, property, and proprietary information. Students completing the Ohio Peace Officer Training Academy Private Security curriculum provided by an approved instructor will be eligible to sit for the OPOTA certification exam as a private security guard.

- **Prerequisite:** None
- **Credit:** 1 credit
- **Year:** 9th, 10th
- **Term:** 2 semesters
- **Fee:** $15 (Skills USA)

**Gen. Intro to Construction Technologies (Plan Reading) Course #6207 (CCTC)**
Learn skills which are valuable not only on the job, but also in everyday life. This semester course offers the student a great opportunity to explore a variety of careers in the construction field such as; carpentry, surveying, landscaping, bricklaying, drafting, roofing, cabinetmaking, construction management pre construction and design and electrical repair and maintenance. Learn to safely use hand and power tools, draft and read blue prints, and apply various construction techniques. This course is an excellent opportunity for students to explore the world of construction while at the same time increasing their skills with tools. Students in the program have the opportunity to join the Career Technical Student Organization known as SkillsUSA.

- **Prerequisite:** None
- **Credit:** 1 credit
- **Year:** 9th, 10th
- **Term:** 2 semesters
- **Fee:** $15 (TSA)

**Gen. Remodeling and Carpentry Course # 6232 (CCTC)**
Welcome to HGTV Colerain!!! This course will introduce to students the materials, methods, and equipment used in carpentry and masonry industry. Students will organize a project work sequence by interpreting plans and diagrams within a construction drawing set. They will layout and install basic wall, floor and roof applications. Students will perform introductory concrete applications including formwork, reinforcement, mixing, and finishing.

- **Prerequisite:** None
- **Credit:** 1 credit
- **Year:** 9th, 10th, 11th, 12th
- **Term:** 2 semesters
- **Fee:** $15 (TSA)

**Gen. Engineering Principles (Formerly - Intro to Engineering Technology I) Course #6308 (CCTC)**
This course will introduce students to fundamental engineering concepts and scientific principles associated with engineering design applications. Topics include mechanisms, energy, statics, materials, and kinematics. Additionally students will learn material properties and electrical, control and fluid power systems. Students will learn to apply problem solving, research and design skills to create solutions to engineering challenges.

- **Prerequisite:** None
- **Credit:** 1 credit
- **Year:** 9th, 10th
- **Term:** 2 semesters
- **Fee:** None
**Gen. Diesel Engine Technology**  
Introduction to Commercial Truck and Equipment is an entry level course that will give students an opportunity to become familiar with careers in the transportation industry. Students will be taught about a variety of ways technology can be used for transportation. Students will learn problem solving, critical thinking, leadership, teamwork, safety, health and environmental aspects, transportation fuels, and transportation systems technical skills sets for the commercial truck industry. Students in the program have the opportunity to join the Career Technical Student Organization known as SkillsUSA. *Students will be required to purchase appropriate safety equipment such as boots.

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<tr>
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<td>Year:</td>
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<td>Fee:</td>
<td>$15 (SkillsUSA)</td>
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<td>*cost based on purchase</td>
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**Gen. Intro to Precision Machining**  
Introduction to Precision Machining is a yearlong course that provides an opportunity to learn the fundamentals of precision machining. Students will be exposed to milling, cutting, designing and manufacturing metal parts for fabrication.

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**Gen. Exploring Career Pathways**  
Explore and shadow the many different Butler Tech Programs during this semester class! Through hands-on learning and local business involvement, students will engage in career-related experiences to acquire skills in various career fields. Designed to provide experiences to begin career decision making. Teachers have the flexibility to select career fields related to Ohio’s in-demand jobs represented in the community. Students will identify career interests and skills to develop an understanding of how personal characteristics can impact career choice. An overview of all 16 Ohio career fields will be provided. Students will create a preliminary career plan using online tools, such as OhioMeansJobs, and will begin to develop an understanding of 21st century skills.

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Frequently Asked Questions

Where will my student’s diploma be from? When you complete all requirements for graduation, you will join us at graduation and graduate with a Colerain High School or Northwest High School Diploma.

Does taking a Butler Tech (BT) course/program impact my GPA negatively? No, it has no bearing on your GPA.

Can I still take CCP courses when I am a BT student? Yes, in fact many Butler Tech courses are CCP or CTAG college credit.

How much of my schedule is taken up from a BT program? If you take on-site Butler Tech program, typically 2 bells in your junior year and 2 bells in your senior year will make up your Butler Tech program.

What will my day look like? On-site, as a junior you will take your Butler Tech program courses 2nd and 3rd and academics the remaining periods. As a senior, you will take your Butler Tech courses in the afternoon.

Can I still participate in extracurriculars/sports at my high school? Yes, taking a Butler Tech program onsite or offsite does not impact this.

Do we have transportation to and from my BT program? Yes!

Will my transcript be affected by Butler Tech courses? No, your transcript will look the same as a full time NWLSD student.

Additional Off-Site FAQs

If school is cancelled at Northwest do I still have to report to Butler Tech? No, Northwest will not provide transportation if the school is closed for a snow day. Attendance at Butler Tech is still required on its regularly scheduled days.

If Northwest is on early release do I get picked up from Butler Tech early? Yes

Can I attend half day?

Can I attend only one year?

How can I apply? Got to: hsapplication.butlertech.org

When will I know if I got accepted to a Butler Tech program? Students will be notified in Mid-March by mail.
College Credit
3 Semester Hours through UC—CCP

Industry Credential
Microsoft Certifications

Program Highlights: College-prep program for students who are looking for an exciting and challenging way to explore the world of business and finance. Students are able to discover what makes a company successful … and learn how to start, finance, and grow their own business!

JUNIOR YEAR (Two Bells)
Hon. Strategic Entrepreneurship
Course #6210 (NWCTC)
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.

COLLEGE CREDIT: CTAG 3 Semester Hours

Hon. Financial Accounting
Course #6211 (NWCTC)
Students will track, record, summarize, and report a business’s financial transactions. They will develop financial documents, project future income and expenses, and evaluate the accuracy of a business’s financial information. Students will also apply tools, strategies, and systems to evaluate a company’s financial performance and monitor the use of financial resources. Technology, employability skills, leadership and communications will be incorporated in classroom activities.

Prerequisite: 2.5 GPA, Passed Algebra I with a C or better; 11th grader 90% attendance rate
Credit: 2 Credits – 11th
Year: 11th
Term: 2 semesters
Fee: $27 (BPA)

SENIOR YEAR (Two Bells)
Hon. Fundamentals of Financial Services
Course #6212 (NWCTC)
Students will develop knowledge and skills needed in the banking, insurance and investment industries. They will analyze banking products and services, determine ways in which insurance reduces risk, and calculate insurable losses. Students will also learn to sell financial products and build positive relationships with clients and colleagues. They will use financial ratios to evaluate company performance and select profitable investments for clients.

COLLEGE CREDIT: CCP 3 Semester Hours at U.C. Uptown Campus

Hon. Corporate Finance
Course #6213 (NWCTC)
Students will manage policy and strategy for corporate budgeting, investment, and financial planning. They will calculate profitability, predict business success and the likelihood of failure, and compare business performance within and across industries. Students will also develop and track the achievement of financial goals. They will determine how to balance risk with return and select strategies for recovering from risky situations and disasters. Technology, employability skills, leadership and communications will be incorporated in classroom activities.

Prerequisite: Strategic Entrepreneurship
grader Financial Accounting
Credit: 2 Credits – 12th
Year: 12th
Term: 2 semesters
Fee: $27 (BPA)
Offered at Colerain High School and Northwest High School

High School of Business™ is designed much like a college business administration program. Students take approximately one course per year, beginning with an introduction to business. The program continues with courses in various business functions concluding with the capstone course, Principles of Management and Business Strategies that requires implementation of the principles addressed throughout the High School of Business™ program.

High School of Business™ courses encourage students to become involved with business problems and concepts, which fosters enthusiasm and interest in the subject. Students utilize active learning strategies such as project-based, inquiry-based, and problem-based learning using team-based strategies to solve business problems.

Upon completion of all 4 High School of Business™ courses students have the opportunity to earn up to 6 college credits from Bowling Green State University in Bowling Green, Ohio. Credit is available for students who pass required exams and enroll at Bowling Green State University. A $25.00 one-time fee will be assessed for students enrolling in one or multiple High School of Business courses.

Gen. Principles of Business and Economics HSB 1 Course #6101
Q: What do your favorite rock group’s tour schedule, the logo on a coffee mug, and the Wall Street Journal have in common? A: Business. It’s everywhere. Business Applications and Economics will open your eyes to the world of business through fun, real world projects. During the course, you will also consider how economics impact the decisions that businesses—and you—make every day.

Prerequisite: None
Year: 9th, 10th, 11th
Track: High School of Business™
Credit: 1 credit
Term: 2 semesters

Gen. Principles of Marketing HSB 2 Course #6102
Why would Volkswagen choose an e-mail campaign over a television commercial? How does Nike determine its pricing strategy? Through projects and problem solving you will get inside marketers’ heads and find out what makes them tick. Projects in the course will challenge you to analyze the business world around you, work through key marketing decisions such as pricing and product image, and use your knowledge to develop a marketing plan.

Prerequisite: Principles of Business and Economics
Year: 10th, 11th
Track: High School of Business™
Credit: 1 credit
Term: 2 semesters
Gen. Principles of Finance HSB 3  
Course #6103
Can you imagine a company president who doesn’t understand finances? Learning how companies manage their money is important in any business career. In this course, you will face issues that concern financial markets and institutions. This includes how companies get money for improvements (a new building, a Super Bowl advertisement), make money (sales of products, investments), and keep track of money (keeping the books, understanding financial reports, making smart and ethical decisions). The projects in this High School of Business™ course provide hands-on experience in this important area of business administration.

Prerequisite:  Principles of Business and Economics
Principles of Marketing
Year:  10th, 11th, 12th
Track:  High School of Business™

Credit: 1 credit
Term: 2 semesters

Gen. Principles of Management and Business Strategies HSB 4  
Course # 6104
Here’s where it all comes together. In this course you will learn first-hand how to manage projects and people—and, you’ll run your own business. Using the smarts gained in previous High School of Business™ courses, you will write a real business plan and use that plan to open and operate a business. You’ll learn about the importance of ethics and the law in business, and you’ll tackle problems real business professionals face, such as interviewing, hiring and supervising staff, keeping financial records, evaluating results, and much more.

Prerequisite:  Principles of Business and Economics
Principles of Marketing, Principles of Marketing
Year:  11th, 12th
Track:  High School of Business™

Credit: 1 credit
Term: 2

Gen. High School of Business Internship/Capstone (Formally Cooperative Business Education) Course# 6004
This course is designed to provide students with advanced instruction to further develop their skills in a professional environment. Students will have an opportunity to explore a career in the business industry and implement the principles addressed throughout the High School of Business™ program.

Prerequisite:  Must be currently enrolled in a High School of Business course
Year:  11th, 12th
Track:  High School of Business™

Credit: 1 credit
Term: 2 semesters
High School of Business course selection pathway examples are below and is determined by when the student enters the program: (Starting as a Freshman)

**SAMPLE Freshman Track 1**

<table>
<thead>
<tr>
<th>Grade</th>
<th>High School Of Business</th>
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<tbody>
<tr>
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<tr>
<td>10</td>
<td>Principles of Marketing</td>
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<tr>
<td>11</td>
<td>Principles of Finance</td>
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<tr>
<td>12</td>
<td>Principles of Business Management and Strategies</td>
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**SAMPLE Freshman Track 2**

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**SAMPLE Freshman Track 3**

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<tr>
<td>12</td>
<td>Principles of Business Management and Strategies</td>
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</tbody>
</table>
Construction Pathway

JUNIOR YEAR (Two Bells)
Gen. Construction Technology - Core Sustainable Construction Course #6214 (NWCTC)
Students will learn principles in basic safety (10-hr OSHA), construction math, hand and power tool are and operation, blueprint reading, material handling, communication and employability skills. An emphasis will be placed on safe and green construction practices.

Gen. Structural Systems Course #6215 (NWCTC)
Students will learn procedures and techniques required for layout and framing of walls and ceilings, including roughing-in door and window openings, constructing corners and partitions; bracing walls and ceilings; and applying sheathing. Students will learn methods of roof, cold formed steel, and wood stair framing. Students will learn site and personal safety, material properties, design procedures, and code requirements for structural systems.

Prerequisite: 2.0 GPA, Passed Algebra I with a C or better; grader 90% attendance rate
Credit: 2 Credits – 11th
Year: 11th
Fee: $100 for student tool kits approximate depending on supplier and $27 (SkillsUSA)

SENIOR YEAR (Two Bells)
Gen. Structural Coverings and Finishes Course #6216 (NWCTC)
This course will address applications of interior and exterior finish work. Students will identify material properties and select for appropriate application. Students will install thermal and moisture protection including roofing, siding, fascia and soffits, gutters, and louvers. Students will install drywall; trim-joinery and molding and apply wall, floor and ceiling coverings and finishes. Throughout the course, the safe handling of materials, personal safety, prevention of accidents and the mitigation of hazards are emphasized.

Gen. Remodeling and Renovation Course #6217 (NWCTC)
Students will apply structural and mechanical skills to remodeling and renovations. In addition, students will learn the process of securing the required building permits, the management of subcontractors, and the coordination of formal building inspections. Students will troubleshoot design or logistics issues and provide possible solutions. Throughout the course, the safe handling of materials, personal safety, prevention of accidents and the mitigation of hazards are emphasized.

Prerequisite: Construction Technology - Core Sustainable Construction grader Structural Systems
Credit: 2 Credits – 12th
Year: 12th
Fee: $27 (SkillsUSA)
### Arts and Communications Pathway

<table>
<thead>
<tr>
<th>College Credit</th>
<th>Industry Credential</th>
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<tr>
<td>CTAG—9 Semester Hours</td>
<td>Adobe Software</td>
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</table>

**Program Highlights:** Do you love music, film, art and photography? Digital Media Arts blends all of these concepts together in a hands-on, state of the art lab. Students learn lighting, video production and what it takes to be successful in the field.

#### JUNIOR YEAR (Two Bells)

##### Gen. Recording Arts

**Course #6218** (NWCTC)

Sound is essential to broadcast journalism and advertising. Students compare and contrast how sound alone and sound combined with visuals can entertain, inform and initiate action. They generate content, record, edit, mix and produce voice and music for airwaves, podcast and/or Internet. They adapt for analog and digital audio while adhering to Federal Communication Commission rules and regulations related to bandwidth and advertising.

##### Gen. Video Production

**Course #6219** (NWCTC)

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

**Prerequisite:** 2.0 GPA, Passed Algebra I with a C or better; grader 90% attendance rate  
**Credit:** 2 Credits – 11th  
**Year:** 11th  
**Term:** 2 semesters  
**Fee:** $27 (BPA)

#### SENIOR YEAR (Two Bells)

##### Gen. Entertainment Business

**Course #6220** (NWCTC)

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

##### Gen. Digital Broadcasting

**Course #6221** (NWCTC)

This course focuses on video broadcast for the journalism industry. Skills attained include interviewing, image capture, color manipulation, audio and video blend, lighting and editing. Students critique news broadcasts and research content. They plan and shoot video for live and recorded use in a specific time slot while adhering to laws related to defamation, libel, copyright and privacy.

**Prerequisite:** Recording Arts grader Video Production  
**Credit:** 2 Credits – 12th  
**Year:** 12th  
**Term:** 2 semesters  
**Fee:** $27 (BPA)
JUNIOR YEAR (Two Bells)

Gen. Medical Terminology  
Course #6222 (NWCTC)
This course focuses on the applications of the rules for constructing and defining medical terms with an emphasis on building a working medical vocabulary. Topics include using the appropriate abbreviations and symbols for anatomical, physiological and pathological classifications and the associated medical specialties and procedures. Students will decipher medical terms by identifying and using word elements with an emphasis on derivation, meaning, and pronunciation.

This course includes the option for articulated college credit with a qualifying score on the end of course assessment.

Gen. Athletic Injuries and Prevention  
Course #6223 (NWCTC)
Students will identify signs and symptoms of injury and apply emergency procedures and techniques used in the immediate care of athletic-related trauma. Students will learn clinical and field evaluative processes, injury prevention techniques, conditioning techniques, treatment, taping, bracing, and rehabilitation of musculoskeletal injuries and conditions. Students will design and implement conditioning programs, including nutritional considerations and ergogenic aids. Emphasis is placed on the synthesis of information gathered through injury history, observation, and manual muscle testing.

Prerequisite: 2.0 GPA, Passed Algebra I with a C or better; attendance rate
Credit: 2 Credits – 11th grader 90%
Term: 2 semesters

SENIOR YEAR (Two Bells)

Gen. Fitness Evaluation and Assessment  
Course #6224 (NWCTC)
Students will complete comprehensive fitness evaluations and develop individualized training programs. Students will administer lab and field tests of cardiovascular endurance, body composition, joint flexibility and muscular strength, power, and endurance. Emphasis is placed on assessing body composition, neuromuscular flexibility, agility, balance, coordination, and proprioception. Additionally, students will identify components of physical fitness and communicate how physical activity impact health and wellness. This course includes the option for articulated college credit with a qualifying score on the end of course assessment.

Gen. Exercise and Athletic Training  
Course #6225 (NWCTC)
In this, first course students will apply procedures and techniques used in athletic training and in the care and rehabilitation of athletic injuries and therapeutic exercise. Topics include injury prevention, conditioning, and wound care techniques of the musculoskeletal system. In addition, current trends, technology, legal considerations, and the role of exercise science in relationship to other health fields will be emphasized. This course includes the option for articulated college credit with a qualifying score on the end of course assessment.

Prerequisite: Medical Terminology
Athletic Injuries and Prevention
Credit: 2 Credits – 12th grader
Year: 12th
Term: 2 semesters
Fee: $30 (HOSA)
JUNIOR YEAR (Three Bells)

Gen. Microbiology and Infection Control
Course #6226 (NWCTC)
Students will learn basic bacteriology, infection control, and salon safety practices. Students will be able to recognize infectious disorders and contagious diseases learn the dispensary requirements, product storage, and requirements of the laws and rules, which regulate the cosmetology industry in Ohio.

Gen. Trichology
Course# 6229 (NWCTC)
Students will learn the anatomy of the head and scalp, structure of the hair and various techniques and procedures for analyzing hair, scalp disorders and diseases. Students will be able to determine hair porosity, elasticity, density, texture and growth patterns as well as conduct chemical tests for treated hair and ability to recommend corrective scalp procedures.

Prerequisite: 2.0 GPA, Passed Algebra I and Biology with a C or better; grader 90% attendance rate
Credit: 3 Credits – 11th
Term: 2 semesters
Year: 11th
Fee: $250.00 for student kit (Costs are approximate paid directly to supplier) $27 (SkillsUSA)

SENIOR YEAR (Three Bells)

Gen. Advanced Hair Cutting and Styling
Course #6227 (NWCTC)
Students will learn advanced cutting and formal styling using specialized equipment and techniques. This course offers enhanced training in current trends and razor techniques.

Gen. Advanced Chemical Services
Course # 6230 (NWCTC)
Students will learn advanced chemical services using specialized products and techniques. Students will do advanced coloring, dimensional coloring, corrective techniques, texturizing, and advanced chemical wave wrapping techniques.

Gen. Human Services Capstone
Course # 6231 (NWCTC)
The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in the Cosmetology program in a more comprehensive and authentic way. Capstones often include project/problem based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.

Prerequisite: All Coursework for Cosmetology Junior and Chemistry
Credit: 3 Credits – 12th grader
Term: 2 semesters
Year: 12th
Fee: $150.00 for student kit (Costs are approximate paid directly to supplier) $27 (SkillsUSA)
Dental Assisting Pathway

<table>
<thead>
<tr>
<th>College Credit</th>
<th>Industry Credential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Articulated with Sinclair Community College</td>
<td>Dental Assistant Radiographer’s Certificate; 1st Aid/CPR</td>
</tr>
<tr>
<td></td>
<td>(12 points)</td>
</tr>
<tr>
<td><strong>Program Highlights:</strong> Students are career ready upon graduation. Students wanting to pursue post-secondary studies will have an excellent foundation in the dental field. Students work in a hands on environment and become certified before graduation.</td>
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</tbody>
</table>

**Gen. Dental Technology**

#6312 (CCTC)

Students gain knowledge of dental history, professionalism and dental specialties, disinfection and sterilization, disease transmission and infection control, head and neck anatomy with a focus on the oral cavity and teeth. They will study bone structure, cosmetic dentistry, and tooth identification and numbering systems. Students gain knowledge of chemical and physical properties of dental materials, their indications for use, and proper manipulation of the materials.

**Gen. Medical and Dental Office Technology**

Course #6311 (CCTC)

Students will apply fundamental principles of communication, leadership, technology and management as it applies to the medical/dental office setting. Students will demonstrate documentation and record keeping procedures set forth by national accrediting organizations, billing and insurance, payment plans, treatment plans and appointment setting.

**Prerequisite:** 2.0 GPA, Passed Algebra I with a C or better; 90% attendance rate

**Credit:** 2 Credits – 11th grader

**Term:** 2 semesters

**Year:** 11th

**Fee:** $32 (HOSA)

**SENIOR YEAR (Three Bells)**

**Oral Diagnosis and Treatment Planning**

Course #6310 (CCTC)

Students will demonstrate knowledge and skills associated with the practice of dentistry. Topics include principles of dental procedures and comprehensive dental care; infection control in dentistry; and dental specialties including radiology and laboratory procedures. Students will perform chair-side assisting techniques including instrument sterilization, fluoride applications, dietary analysis, and assisting dentists. Emphasis is given to terminology, instruments and equipment, and patient communication.

**Gen. Dental Radiography**

Course #6313 (CCTC)

Students will perform procedures to expose, process, and interpret dental radiographs. Students will apply knowledge of radiation physics, infection prevention and quality control standards that are appropriate to the clinical setting. Students will apply effective communication skills for interacting with diverse patient populations and proper procedure documentation according to business and industry standards.

**Gen. Dental Sciences Capstone**

Course #6338 (CCTC)

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

**Prerequisite:** Gen. Medical and Dental Office Tech. Medical and Dental Office Technology

**Credit:** 2 Credits – 12th grader

**Term:** 2 semesters

**Year:** 12th

**Fee:** $32 (HOSA)
JUNIOR YEAR (Two Bells)

Gen. Patient Centered Care

Course #6314 (CCTC)

Students will apply psychomotor nursing skills needed to assist individuals in meeting basic human needs. Students will implement interventions following a nursing assistant plan of care. Students will collect patient's vital signs including temperature, pulse rate, respiration rate, and blood pressure. Students will perform phlebotomy procedures with emphasis on infection prevention, universal precautions, proper patient identification, specimen acquisition, handling, and processing. Additionally, students will observe patients' physical, mental, and emotional conditions and document any change. Students will explore a wide range of health care delivery systems and the vast opportunities for employment in the health care industry. Students will be introduced to a variety of topics such as professionalism, communication, health and wellness, and legal / ethical issues. Students gain further understanding of the content by participating in the career tech organization, HOSA. This is a junior level course in the Health Technology Program. Students must successfully complete this course in order to advance to their senior level in the Health Tech Program.

Gen. Health Science and Technology

Course #6315 (CCTC)

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

Prerequisite: 2.0 GPA, Passed Algebra I with a C or better; grader 90% attendance rate

Year: 11th

Fee: $32 (HOSA)

SENIOR YEAR (3 Bells)

Gen. Principles of Allied Health

Course #6316 (CCTC)

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

Gen. Patient Centered Care and Diagnostics

Course #6317 (CCTC)

Students will build on the knowledge and skills acquired from courses taken their junior year. Focus will be placed on recognizing normal changes throughout the life span and common diseases found in the aging population. Students will also learn interventions to promote and maintain the highest level of functioning for those in their care. In addition, students learn the legal and ethical principles needed to function within the scope of practice. Students gain further understanding of the content by participating in the career tech organization, HOSA. Upon successful completion of this course students will have the opportunity to take the state test to become a State Tested Nursing Assistant (STNA). Prerequisite Courses: Patient Centered Care, Health Science and Technology.
Gen. Health Sciences Capstone  Course #6339 (CCTC)
The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in Health Sciences program in a more comprehensive and authentic way. Capstones often include project/problem based learning opportunities that occur both in and away from school. Under supervision of the school and through community partnerships, students may combine classroom learning with work experience. This course can be delivered through a variety of delivery methods including cooperative education or apprenticeship.

**Prerequisite:** Patient Centered Care Grader Health Science and Technology

**Year:** 12th

**Fee:** $32 (HOSA)

**Credit:** 3 Credits – 12th

**Term:** 2 semesters
Information Technology Pathway

College Credit
12 CTAG & CCP credit available with Cin. State

Industry Credential
HTML, CSS, JavaScript, PHP, and SQL (no points by ODE)

Program Highlights: Students learn to create video games, interactive websites and program applications. Program provides an excellent foundation to go into the IT field by providing college courses at the high school level at no cost to the student!

JUNIOR YEAR (Two Bells)

Gen. Visual Programming
Course #6318 (CCTC)
Students will create event-driven programs using object oriented programming techniques for use in web based and standalone applications. Students will map out, design, and test computer applications, web applications, and mobile applications. Both commercial and open source programs and applications will be used. Students can earn 3 CTAG college credits for this course.

Gen. Web Design
Course #6319 (CCTC)
Students will learn the dynamics of the Web environment while pursuing an in-depth study of both Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS). Web based protocols such as FTP, TCP/IP, and HTTP will be addressed. Students will create a website with tag text elements, special characters, lines, graphics, hypertext links, and graphical tables. Students can earn 3 CTAG college credits for this course.

Prerequisite: 2.0 GPA, Passed Algebra I with a C or better; attendance rate
Credit: 2 Credits – 11th grader 90%
Term: 2 semesters
Year: 11th
Fee: $27

SENIOR YEAR (Two Bells)

Gen. Programming
Course #6320 (CCTC)
In this course, students will learn the basics of building simple interactive applications. Students will learn the basic units of logic: sequence, selection, and loop. Students will apply algorithmic solutions to problem-domain scenarios. Students will gain experience in using commercial and open source languages, programs, and applications. Students can earn 3 CTAG college credits for this course.

Gen. Object Oriented Programming
Course #6321 (CCTC)
Students will learn to represent programming concepts as "objects" that have data fields and associated procedures known as methods. Students will implement classes such as support static, instance method, inheritance, polymorphism, exception handling, and object serialization. A variety of commercial and open source programs and applications will be used, including Java and C++. Students can earn 3 CTAG college credits for this course.

Prerequisite: Visual Programming
Web Design
Credit: 2 Credits – 12th grader
Term: 2 semesters
Year: 12th
Fee: $27
Course #6322 (CCTC)

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

Prerequisite: 2.0 GPA, Passed Algebra I with a C or better; 9th grader 90% attendance rate
Year: 9th
Fee: $25

Course #6323 (CCTC)

Gen. Correctional System and Services
The correctional Officer plays a critical role in the Criminal justice System. In this course students will learn institutional rehabilitation and community correction strategies that prepare them for work in a correctional setting. The student will learn the role and responsibilities of a correctional Officer including processing inmates, maintaining security in a correctional setting and understanding inmate mental health needs.

Prerequisite: The American Criminal Justice System grader Gen. Correctional System and Justice
Year: 12th
Fee: $25

Credit: 2 Credits – 11th
Term: 2 semesters

Course #6324 (CCTC)

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

Prerequisite: The American Criminal Justice System grader Gen. Correctional System and Justice
Year: 12th
Fee: $25

Credit: 2 Credits – 12th
Term: 2 semesters

Course #6325 (CCTC)

Gen. Investigations and Forensics in Criminal Investigations
Forensic Science uses a structured and scientific approach to the investigation of crimes including assault, abuse and neglect, domestic violence, accidental death and homicide. Students will learn the psychology of criminal behavior and apply it to investigative procedures. Students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis, ballistics, and blood spatter analysis.

Prerequisite: The American Criminal Justice System grader Gen. Correctional System and Justice
Year: 12th
Fee: $25

Credit: 2 Credits – 12th
Term: 2 semesters
JUNIOR YEAR (Three Bells)

Gen. Truck Diesel Engines  
Course #6329  (CCTC)
Students will inspect, diagnose, and repair diesel truck engines. Students will learn the principles of valve train assemblies, lubrication, intake, exhaust and fuel systems. Additionally, skill development in engine testing, inspection and repair of electronic fuel management systems are emphasized. Students will break down and assemble heavy truck engines and supporting systems.

Gen. Truck Braking, Suspension, and Steering Systems  
Course #6328  (CCTC)
Students perform inspections, troubleshoot malfunctions, and service truck undercarriage systems. Students identify poor performing air brake systems and replace malfunctioning components. Students will install leaf springs, shock absorbers and air suspension components. Students inspect and replace truck steering components and replace wheel bearings. Additionally, students will perform wheel alignment and tire inspections, diagnostics, and repair. Identifying workplace risk factors associated with repetitive motion and lifting, operating, and moving of a heavy object is emphasized.

Prerequisite:  
- 2.0 GPA, Passed Algebra I with a C or better;  
- 90% attendance rate

Year:  
11th

Fee:  
$25

SENIOR YEAR (Two Bells)

Gen. Ground Transportation Maintenance  
Course #6326  (CCTC)
In this first course, students will apply skills needed to inspect and perform general service on vehicles. Students will research applicable service information and technical service bulletins, and perform maintenance on vehicles. Students will inspect and service engine, drive train, suspension, steering, electrical and braking systems. Students will perform ignition maintenance including spark plug/glow plug and ignition wire and coil pack replacement. Additionally, students change fluids, filters and inspect vehicles for leaks and fluid condition.

Gen. Ground Transportation Electrical/Electronics  
Course #6327  (CCTC)
Student will diagnose and repair vehicle electrical systems, including chassis electrical, charging, starting and lighting systems. Students will learn the fundamentals of direct current (DC) electronics including series, parallel, and series-parallel circuits. Students will use electronic diagnostic tools, read schematics, and utilize printed and electronic repair manuals to troubleshoot electrical circuits, test components and replace defective modules.

Prerequisite:  
- Ground Transportation Maintenance  
- Ground Transportation Electrical/Electronics

Year:  
12th

Fee:  
$25
Engineering Pathway

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<thead>
<tr>
<th>College Credit</th>
<th>Industry Credential</th>
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</thead>
<tbody>
<tr>
<td>12 Semester Hours—CTAG Engineering</td>
<td>CSWA (Certified SOLIDWORKS Associate) 4 Points</td>
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**Program Highlights:** Take college level coursework, aligned with an apprenticeship which employs and pays for 100% of an associates degree through FESTO/Sinclair, build autonomous robots and compete in an international robotics competition!

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**JUNIOR YEAR (Two Bells)**

**Gen. Engineering Design**

Course #6330 (CCTC)

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

**Gen. Digital Electronics**

Course #6331 (CCTC)

Students are introduced to electronics theory, DC Circuits, digital logic, combinational and sequential logic design. The system uses a precise sequence of discrete voltages, representing numbers, non-numeric symbols or commands for input, processing, transmission, storage, or display. Engineering standards and methods for technical documentation will also be learned.

**Prerequisite:** 2.0 GPA, Passed Algebra I with a C or better; 11th grade- 90% attendance rate

**Year:** 11th

**Fee:** No Fee

**SENIOR YEAR (Two Bells)**

**Gen. Mechanisms and Drives**

Course #6332 (CCTC)

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

**Gen. Robotics**

Course #6333 (CCTC)

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

**Prerequisite:** Engineering Design

12th grade - Digital Electronics

**Year:** 12th

**Fee:** No Fee

**Credit:** 2 Credits

**Term:** 2 semesters
Manufacturing Pathway

College Credit
Cincinnati State CCP—3-6 Semester Hours

Industry Credential
NIMS (Student Level)

Program Highlights: Learn programming, CNC and Co-Op during senior year! Obtain a high paying, skilled trade career, learn skills that last a lifetime, learn real life application of machining industry and networking for your future profession.

JUNIOR YEAR (Three Bells)

Gen. Machine Tools
Course #6334 (CCTC)
This course introduces students to all aspects of machining applications in manufacturing. They will be able to perform routine calculations, interpret basic drawings, begin the process of performing accurate measurements and be able to plan simple machining processes. Students will learn the fundamental principles and practices of cutting, drilling and grinding using modern machine tools, hand tools and precision measuring instruments.

Gen. Machining with Industrial Milling Machines
Course #6335 (CCTC)
In this course, students are directed in the safe use of manual milling machines. Students apply their knowledge of product characteristics, perform necessary calculations, and use precision measuring instruments and layout equipment to mill products to print dimensions. Students will use these machine tools to shape, cut, drill and bore and metal and other materials. Students will be able to identify operational problems and provide routine care and maintenance to the manual mill.

Prerequisite: 2.0 GPA, Passed Algebra I with a C or better; attendance rate
Year: 11th
Fee: $27
Credit: 3 Credits – 11th grader 90%
Term: 2 semesters

SENIOR YEAR (Two Bells)

Gen. Machining with Industrial Lathes
Course #6336 (CCTC)
This course directs the student in the safe use of different types of manual industrial lathes. Students will use these machine tools to shape, pattern, bore, thread and polish metal and other materials. Students will apply their knowledge of product characteristics, perform necessary calculations, use precision measuring instruments and make all adjustments needed to fabricate products to print dimensions. Students will be able to identify operational problems and provide routine care and maintenance to the lathe.

Gen. Computer Numerical Control Technology with Industrial Mills and Lathes
Course #6337 (CCTC)
In this course, students will use computer numerical control (CNC) programming to mill products comprised of various materials. Students will prepare numerical control programs in positioning systems using standard industrial G and M codes. They will program computerized numerical control mills and lathes.

Prerequisite: Machine Tools
Machining with Industrial Milling Machines
Year: 12th
Fee: $27
Credit: 2 Credits – 12th grader
Term: 2 semesters
**Bioscience Center**

**Biomedical/PLTW**

Principles of Biomedical Sciences
In this introductory course, students explore concepts of biology, and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person’s life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems.

Human Body Systems
Students examine the interactions of human body systems as they explore identify, power, movement, protection, and homeostasis. Exploring science in action, students build organs and tissues on a skeletal Maniken®; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases.

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

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

**Dental Assisting**

Oral Diagnosis and Treatment Planning
Students gain knowledge of head and neck anatomy with a focus on the oral cavity and teeth. They will study bone structure, cosmetic dentistry, and tooth identification and numbering systems. Students gain knowledge of chemical and physical properties of dental materials, their indications for use, and proper manipulation of the materials. Students perform radiographs, impressions, pouring, trimming, and wax bites methods and techniques. Additionally, students educate the patient on dental procedures and comprehensive dental care.
Bioscience Center – cont.

Medical and Dental Office Technology
Students will apply fundamental principles of communication, leadership, technology and management as it applies to the medical office setting. Students will demonstrate documentation and record keeping procedures set forth by national accrediting organizations.

Dental Technology
Students will demonstrate knowledge and skills associated with the practice of dentistry. Topics include principles of dental procedures and comprehensive dental care; infection control in dentistry; and dental specialties including radiology and laboratory procedures. Students will perform chair-side assisting techniques including instrument sterilization, fluoride applications, dietary analysis, and assisting physician. Emphasis is given to terminology, instruments and equipment, and patient communication. Additionally, students maintain accounts and inventory, records and appointments.

Dental Radiography
This course provides a comprehensive view of the principles and procedures of radiology as they apply to dentistry. Topics include techniques in exposing, processing, and evaluating radiographs, as well as radiation safety, quality assurance, and legal issues. Upon completion, students should be able to demonstrate proficiency in the production of diagnostically acceptable radiographs using appropriate safety precautions.

Industry Credential: Dental Radiography

Exercise Science

Exercise and Athletic Training
Students will apply procedures and techniques used in athletic training and in the care and rehabilitation of athletic injuries and therapeutic exercise. Topics include injury prevention, conditioning, and wound care techniques of the musculoskeletal system. Students will learn techniques in the analysis of mechanical factors related to human movement. In addition, current trends, technology, legal considerations, and the role of exercise science in relationship to other health fields will be emphasized.

Athletic Injury and Prevention
Students will identify signs and symptoms of injury and apply emergency procedures and techniques used in the immediate care of athletic-related trauma. Students will learn clinical and field evaluative processes, injury prevention techniques, conditioning techniques, treatment, taping, bracing, and rehabilitation of musculoskeletal injuries and conditions. Students will design and implement conditioning programs, including nutritional considerations and ergogenic aids. Emphasis is placed on the synthesis of information gathered through injury history, observation, and manual muscle testing.

Fitness Assessment and Evaluation
Students will complete comprehensive fitness evaluations and develop individualized training programs. Students will administer lab and field tests of cardiovascular endurance, body composition, joint flexibility and muscular strength, power, and endurance. Emphasis is placed on assessing body composition, neuromuscular flexibility, agility, balance, coordination, and proprioception. Additionally, students will identify components of physical fitness and communicate how physical activity impact health and wellness.

Industry credential: Certified Personal Trainer
Health Technology

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

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

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

Industry Credential: Medical Assistant, STNA, Patient Care Assistant
Auto Collision
The Collision Repair Technician career path is designed to provide students with knowledge and skills applicable to careers in automobile dealerships and independent collision repair shops. Experienced technicians can start their own businesses, work as adjusters for insurance companies, become factory representatives for industry suppliers or continue their education at a two or four year college.
CTSO: SkillsUSA, College Articulation: Yes, Industry Credentials: Dispatch training certificate, Healthcare Provider CPR

Automotive Technology
Because computers have made today’s automobiles highly complex, the role of the automotive technician has become highly technical. Auto Technology offers an opportunity for students to blend the basic concepts of engines, electric circuits, computer technology and customer relations into today’s professional, highly trained, automotive technician. Automotive Technology College Tech Prep prepares future automotive technicians to continue their education at a two or four year college. A large number of Automotive Technology Students qualify for and receive a Tech Prep Scholarship. Students may qualify to work with a mentor in an automotive dealership.

Construction Technology
Build your future in the ever-growing field of carpentry. Civil engineering, construction management, site coordination, material handling and independent contracting are just a few of the career opportunities available to those with carpentry skills. In the Carpentry program students will gain hands-on experience by building and framing complete structures right in the classroom!
Junior year, students will study material science and the applications of traditional and emerging construction materials. Some of the topics covered are: basic safety, construction math, introduction to hand and power tools, introduction to blueprints, basic rigging, floor systems, wall systems, roof framing, windows and doors.
Seniors will progress onto advanced skills such as: reading site plans and elevations, concrete and reinforcing materials, foundations and flatwork, concrete forms, manufactured forms, framing with metal studs, drywall installation and finishing, cabinet installation and interior door installation.
After graduation, students may enter directly into the career field or continue their education. Students that continue onto college will do so already possessing two years’ experience, and possibly NCCER certification, putting the ahead of their peers.
CTSO Affiliation: SkillsUSA, College Articulation: Yes, CT2
D. Russel Lee Career-Technology Center – cont.

Commercial Arts
In Commercial Arts at D. Russel Lee CTC students are guided and instructed in a comprehensive and creative environment that gets your art student college ready. Students will experience a hands-on, fundamental art and design training, balanced with extensive instruction of graphic computer programs used by professional designers today.
Submersed in a Professional grade studio, with a Mac computer systems and up-to-date graphics software, this cohesive environment of equipment, instruction and an interactive student body allows everyone to excel as young artists and designer.
Students are introduced to a variety of drawing and rendering techniques throughout junior and senior year. We also focus on sketching skills, which develop a student’s techniques. The student will create many projects that build on the elements and principles of design, coupled with the instruction of the Adobe Creative Suite. Students will create advertisements, book covers, logos, magazine articles, package design, and poster designs. New to the 2015/2016 school year is an AP 2D Studio design.
Students will have the option to submit their portfolios for the evaluation of college credit. We are committed to college readiness. Photoshop and Illustrator give the student tremendous creative power to manipulate images, giving them the visual impact to make a lasting impression. Color theory and color palette usage, are just another area students will be instructed in this program. Second year students get to experience client-based projects, which give them vital real world business skills and experience. 80 % of our students go on to attend a two or four year art college. After the completion of our program, each student will have a college ready portfolio, focusing on their best work, giving them a creative advantage over the traditional high school students. We are proud that our several of our student’s portfolios have been awarded scholarships. There is nothing more wonderful than and inspired and determined student artists please join the few the proud the “creative”
CTSO: SkillsUSA, College Articulation: Yes

Cosmetology
Cosmetology is both a science and an art. Students provide personal care for patrons’ hair, skin, and nails to aid them in enhancing their appearance. Skills will be developed in scalp and hair care treatments, shaping and styling hair, permanent waving, hair pressing and hair relaxing, hair coloring, manicuring, pedicuring, facial treatments, reception duties, and salon operations. Cosmetology is a State licensed program. Students are required to pass both lab and theory competencies according to Ohio State Board of Cosmetology standards.
Students who have passed all competencies and required academics are then eligible and required to take the licensing exam.
CTSO: SkillsUSA, College Articulation: Yes, Industry Credentials: State Cosmetology License

Criminal Justice
The Criminal Justice program is designed to help prepare individuals for careers in the Criminal Justice field. Students will learn from Ohio Peace Officer Training Council certified Law Enforcement instructors. All areas of Criminal Justice will be studied. Areas include: Law Enforcement, Corrections, Security, Probation, Parole, and Courts.
Articulation agreements with local colleges allow each student the opportunity to earn 12 or more college credits upon successful completion of this course. The course is fast paced and combines college-like instruction, partnered with hands on activities. Students will be instructed on a wide variety of topics including: Criminal Investigation, Interrogations, Forensics, Evidence Collection, Traffic Stops, Suspect Approaches, Building Searches, Traffic Crash Investigation, Speed Enforcement, Explosives, Arson Investigations, and other topics. Students will also be instructed in defensive tactics (unarmed self-defense) by a Nationally Recognized Police Officer.
CTSO: SkillsUSA, College Articulation: Yes, Industry Credentials: First Aid Certification, BLS for Health Care Providers certification, Haz Mat Awareness, NIMS 100, 200, 700, & 800.
D. Russel Lee Career-Technology Center – cont.

**Culinary Arts**
Express your creativity in the world of fine cuisine through the Culinary Arts program. Skills like menu planning and design, nutrition, food preparation and service, sanitation, safety, inventory control and calculation of food quantities are all topics that will be taught in this career driven program. Your education will open doors to career options such as executive chef, baker, or restaurant owner. Other opportunities in this field include caterer, food stylist, maitre d’, garde manger, baker or pastry chef. Jobs are available in hotels, restaurants, country clubs and commercial bakeries. Students enrolled in this program operate the practice restaurant, Cafe Lee, on the D. Russel Lee campus. Health and safety regulations require that a uniform be worn while in the culinary lab. A uniform consists of a standard chef’s coat, checkered chef’s pants, closed-toe shoes and a chef’s hat. Students will also purchase a professional knife kit.
Butler Tech Culinary Arts participates in the national certification program called ProStart. This program is sponsored by the National Restaurant Association. Students who pass level one and level two of the national ProStart tests, will be eligible for national certification that recognizes skills as a chef. Through this program, scholarship money is available for students who are planning to continue their culinary training in college.
CTSO : FCCLA, College Articulation: Yes, CT2, Industry Credentials: Pro-Start Certification, ServeSafe Certification, CPR

**Digital Media**
Digital Media Production offers students a creative outlet centered in professional electronic media production skills. Students learn skills that help them enhance their creativity and become young professionals in the expanding digital media field. During this two-year program, students develop the professional skills required to be effective directors, performers, writers, videographer, photographers, audio producers, video/audio editors, advertising executives and many other careers available in media production.
Digital Media Production is the first step to a post-secondary career path or moving into the rewarding field of media production as an employee or small business owner. Become part of Digital Media Production where our motto is “Don’t Change...Grow!”
CTSO: SkillsUSA, College Articulation: Yes

**Early Childhood**
The Early Childhood Education program is designed to give students an opportunity to learn about and interact with infants through elementary aged Children. The students learn business skills needed to operate a successful child care center utilizing the Ohio Department of Education Preschool Licensing Rules. Students understand developmentally- appropriate practice utilizing child development theory, best practices and The Ohio Early Learning and Development Standards. Students will study in the areas of curriculum design, healthy nutrition, assessment, language development and safety. Upon completion of this program, students will be qualified to work as an infant, toddler or preschool teacher and/or use the knowledge you acquire in this program to enter a two or four year Early Childhood Education Program. Early Childhood Education Graduates can explore multiple opportunities. A few of these are: Children’s Librarian, Curriculum Specialist, Director of Early Childhood Education Programs, Licensing Specialist, Parent Educator, Reading Specialist, Special Education Teacher, and Teacher.
CTSO : FCCLA, College Articulation: Yes, Industry Credentials: First Aid, CPR, Child Abuse Recognition, Communicable Disease Recognition, 10 Hours Child Development In-service Hours
D. Russel Lee Career-Technology Center – cont.

**Firefighting Technology**
Join the ranks of our nation’s Firefighters and Emergency Medical Technicians through the Firefighting Technology program. Master firefighting skills through the 240 level 2 firefighting certification as well as earning certification as an Emergency Medical Technician – Basic. Introduction to such advanced disciplines as hazardous materials response, vehicle extrication, rope rescue, and confined space rescue are provided as part of the exciting curriculum. Use your newly acquired skills to enter a Paramedic program, corporate emergency management, private or emergency ambulance operations, firefighting, fire safety inspection, or industrial safety management. 
CTSO: SkillsUSA, College Articulation: Yes, CT2, Emergency Medical Technician- Basic; Healthcare Provider CPR; Haz-Mat Operations Level Program Accreditation, Agency: Ohio Department of Public Safety, Fire Charter

**Information Technology**
The Information Technology Tech Prep Academy offers “hands-on/real world” computer/networking training. This is a two-year program at D. Russel Lee CTC, with the opportunity to go on to a two or four year postsecondary educational track with scholarship awards. This application-oriented program provides the student a chance to learn the following skills: Application Software, Computer Networking, the Internet, Computer Technology, Telecommunications/Electronics, Game Design/Animation and Modeling, Operating Systems, and Interactive Media. Students are given certification training for Comptia, Cisco, NACSE, Microsoft and LPI/RedHat. Voucher certification discounts are also made available. Butler Tech is committed to keeping the curriculum current and in pace with technology in order to meet the demands of the global economy. With the experiences gained, you could get that “dream job” through co-op on the-job training that may help pay your way through college. 

**Power Driven Equipment**
Power your way into a career with the Power Driven Equipment program at Butler Tech. Power Driven Equipment is a program that covers all types of power equipment used in the Construction, Commercial, Industrial and agricultural industries. Course work includes a strong emphasis on power sports and recreational equipment such as motorcycles, ATVs, side by sides, go-carts, jet skis, etc. Upon successful completion of the program, students will have a working knowledge of shop operations, shop safety, customer service, parts sourcing, tool use and identification, professionalism, and conduct. Curriculum includes lessons in the theory and practical application of engines, alternative fuels, suspension systems, brake systems, diagnostics, and electrical systems. The mission of this program is to provide each student with a sound and fundamental education in Power Equipment that promotes continued student success in post-secondary education, job placement, or military service. Power Driven Equipment provides an excellent foundation for Automotive, Equipment, or Truck Technical careers as well as acquiring a variety of academic credits toward college and the potential to earn a $3000.00 scholarship!
CTSO Affiliation: SkillsUSA, College Articulation: Yes, CT2
Precision Machining
Sporting equipment, automotive parts, and many other things you use on a daily basis, are made possible because of machine shops. As technology advances, the need for more sophisticated machinery becomes essential. The Precision Machining program provides students with skills necessary to create this new equipment and repair older models.
If you like working with your hands and have the ability to troubleshoot, design and work in a technical environment, Precision Machining may be the program for you.
During the two-year program, students will cover many aspects of the machining industry, including: milling, surface grinding, CNC machining, blue print reading, reading measuring gages, advanced manual machining and much more.
After graduation, many Precision Machining students attend college to earn degrees in the engineering field.
Students may also enter into apprenticeship programs, or go directly into the workforce.
**CTSO Affiliation:** SkillsUSA, **College Articulation:** Yes, CT2

Teacher Academy
Teacher Academy is designed for students who wish to pursue a teaching/educational degree in college. This course focuses on the methods and theories of education by studying the history of education, the diverse needs of learners, the school environment, and the daily requirements of an educator at all levels of public education.
The focus of the senior year is the professionalism of education through field observations at area elementary, middle school, and high schools that is documented in a capstone project of a senior Praxis III portfolio and the presentation of the portfolio to an authentic audience. Students are required to join Future Educators of America.
**CTSO Affiliation:** Future Educators of America. **College Articulation:** Yes

Welding Technology
No matter how sophisticated technology becomes, one thing remains constant in the construction, fabrication, and industrial maintenance world: metal must be joined to metal, and only skilled, qualified Welding Technicians can do this vital job!
The Welding Technology program at Butler Tech will give you the hands-on skills and knowledge to become part of this highly-skilled, highly-respected, high paying career. This course offers the student a great opportunity to explore the vast possibilities in the Welding Industry. We offer in-depth training using the latest up to date welding and metal fabrication technology being utilized in today's industry.
Students will gain hands-on experience with:
- OSHA Safety Regulations
- Plasma Cutting
- (GMAW) Gas Metal Arc Welding
- Carbon Arc Cutting and Gouging
- (FCAW) Flux Core Arc Welding
- Blueprint reading
- Basic Metallurgy
- (GTAW) Gas Tungsten Arc Welding
- Welding symbols interpretiation
- Metal Cutting and Gouging
- Carbon Arc
- (GTAW) Gas Tungsten Arc Welding
- Blueprint reading

Welding Technology students can earn up to 18 college semester hours while still in school. Students may also enter apprenticeships with local companies. After program completion, welding graduates have many options including: entering the workplace, attending traditional college, trade school or, entering an industry approved apprenticeship training program. Currently, skilled welders are in high demand in the industry.
**CTSO Affiliation:** SkillsUSA, **College Articulation:** Yes, CT2, **Industry Credentials:** NCCER
Equine Science
The Equine Science Program puts real-life learning to use. Students work with horses on a daily basis through riding, training, and regular health checks. These learning opportunities are all tied to the two-year program goals. Students will learn responsible equine management principals and routine husbandry practices, business management, and legal compliance. Our students demonstrate an understanding of the equine anatomy and describe the physiology and function in its biological systems. For the twenty horses on our campus, students will apply knowledge of health and nutrition when designing preventative health care plans, breeding plans, and feed management programs. Safe handling, grooming, training, equipment selection/maintenance/use and emergency care techniques are developed and applied on a daily basis. Students will evaluate responsible stewardship practices and develop production management strategies that emphasize the industry’s goals through good reproductive decision-making. Finally, students will develop business leadership and communication skills critical to the application knowledge gained in the equine field. No riding or horse experience is necessary for students enrolling in this program.

Landscape Design & Build
Do you want to Design, install, and maintain creative natural living and recreational spaces? At Butler Tech’s Natural Science Center, you will gain landscape industry knowledge through internships and real world projects. Courses will provide you with opportunities to learn Landscape Design, Hardscape Installation, Landscape Systems Management, and Turf Science and Management. The Landscape Science program places an emphasis on the business and design side of the landscape industry through a hands-on experience with the planning, design and installation of plants, brick pavers, hardscape, lighting design and water features. Students will also gain knowledge in plant identification and the installation of dry stack stone, water features, brick pavers, landscape lighting, irrigation systems, and much more. The smaller campus and outdoor environment will be a great change of pace from a typical high school. Successful Landscape Science students will gain a skill set that will make them immediately employable upon graduation with one of the many local landscaping companies in the area. Many of our students may also continue their education to work in landscape architecture, golf course management or horticulture careers. Throughout all of the courses, an emphasis on business management practices, employability skills (interview skills, resume building, and other soft skills) and safety procedures will be emphasized.

Veterinary Science
The Butler Tech Veterinary Science program is a great way to “jump start” a student’s career in the veterinary field. This program is for juniors and seniors in high school and is designed to give insight into the veterinary field and a head start into a competitive college program. Students will learn about both small and large animals to give a well-rounded education to help make a decision as to which career path is right for them. Many of our students go on to attend 2 and 4 year college with the goal of becoming a Veterinary Technician or a Doctor of Veterinary Medicine. The Veterinary Science program emphasizes hands-on learning, and students will work with the latest high-tech equipment and gain practical experience in the lab setting. Students will complete their coursework through a variety of modules which mirror those they will study in post-secondary education including: Safety/Animal Restraint and Handling, Intro to Animal Science, Careers in Animal Science, Medical Terminology, External Anatomy, Animal Behavior, Welfare and Husbandry, Preventative Animal Health, Pharmacology and Posology, Principles of Surgery, Hospital Procedures, Office Management, Preventative Animal Health, Disease and Parasites, and First Aid and CPR. Students will also learn laboratory techniques in: Chemical Analysis of Blood, Microbiology, and Common Diseases and Disorders. A focus on Professional Career Opportunities through our Senior Internship Program and Personal & Leadership Development provides a culminating experience for all of our students during their senior year.
**School of the Arts**

**Performing Arts (Dance, Theatre, Music)**

The Performing Arts program at School of the Arts covers the broad spectrum of career opportunities available within the field of Performing Arts. Students receive a base-level exposure to all areas within Performing Arts and are asked to specialize in one focus area for deeper training.

All Performing Arts students will take Business of Arts and Communication and one required course in their major area, in addition to at least two additional courses from the Performing Arts pathway in order to complete their program. All students are members of Skills USA and will earn a minimum of 4 credits in their career technical area over the course of the two year program.

**Performing Arts Areas of Focus:**

**Dance**- Students pursuing Dance at School of the Arts will explore different styles of dance, including jazz, tap, musical theatre, lyrical, partnering and hip hop. They will participate in strength and flexibility training and learn about the careers and influence of notable dancers and choreographers.

**Music (Rock!)-** Students pursuing Music at School of the Arts will be part of a program that has a focus in rock, jazz and popular music. Technique courses are focused primarily on guitar, bass, drums, keyboards and vocals.

**Theatre**- Students pursuing Theatre at School of the Arts will be exposed to all aspects of technical theatre as well as the acting performance side of theatre, with specific opportunities to explore Musical Theatre.

**Visual Arts**

The Visual Design program at School of the Arts covers the broad spectrum of career opportunities related to Visual Arts and Graphic Design. Students receive base-level exposure to all areas within Visual Design and emerge with a portfolio that can be used in job interviews and in the college application process. All Visual Design students will take Business of Arts and Communication and at least three additional courses in the pathway, in addition to completing a senior year Capstone project in their preferred visual medium.