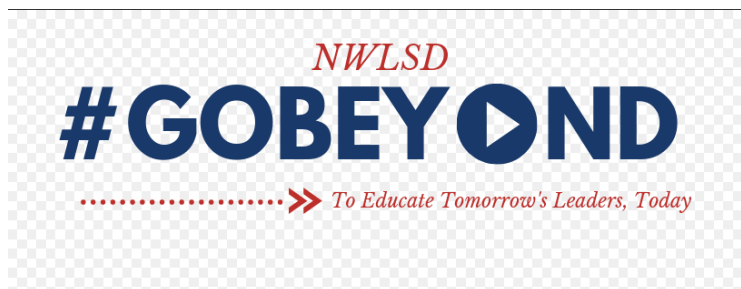


2022 – 2023 PROGRAM OF STUDIES



**COLERAIN HIGH SCHOOL &
NORTHWEST HIGH SCHOOL**

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FOREWORD

Northwest Local School District has 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 important tools for both students and staff.

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 that you choose to take in high school will prepare 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 students and staff excel best when they feel welcomed in the building, safe in their classrooms and trustful of each other
- We believe all students and staff can learn and deserve opportunities to show and achieve success
- We believe valuing diversity and working to understand one another is vital and important
- We believe a high priority should be placed on providing holistic support to ensure success for all
- We believe that building and maintaining collaborative relationships with community members is foundational to teaching and learning in the NWLSD

NORTHWEST LOCAL SCHOOL DISTRICT PORTRAIT OF A GRADUATE



ADAPTABILITY

Our students....

- demonstrate flexibility and resiliency by responding effectively to changing situations and circumstances
- reflect and respond productively to feedback, praise, setbacks, and criticism
- understand and balance differing views to negotiate workable solutions



COMMUNICATION

Our students....

- express thoughts and ideas effectively using oral, written, and nonverbal communication for a variety of purposes and audiences
- actively listen to understand others and remain open-minded
- use communication strategies to resolve disagreements peacefully and productively



CRITICAL THINKING

Our students....

- consider multiple strategies and solutions to complex problems
- consistently analyze, assess, and reflect to enhance the quality of their own thinking
- apply intentional thinking that is clear, logical, and informed by evidence
- propose solutions that are mindful to the impact they may have on self and others



EMPATHY

Our students....

- demonstrate awareness, sensitivity, concern, and respect for others
- seek to understand and connect with other's thoughts, feelings, experiences, and cultures



INTEGRITY

Our students....

- earn others' trust and respect by speaking and behaving in ways that are consistent and honest
- do the right thing even when it is challenging



LEARNER'S MINDSET

Our students....

- display positive attitudes and beliefs about learning
- demonstrate curiosity by exploring concepts and asking questions
- actively seek diverse perspectives and learn from others
- demonstrate perseverance by working towards a goal despite difficulties while learning and growing from mistakes

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In order to be fiscally responsible, course offerings at each high school will be dependent upon student requests during the scheduling process. While the Program of Studies lists all board approved courses, courses listed may not be offered on one or both high school campuses if the number of student requests for a course is below district class size minimums or if credentialed staff are not available to teach the course. Courses necessary to fulfill graduation requirements will be prioritized by building administration during the scheduling process.

CREDITS AND GRADING

CREDITS

- All students must earn a minimum of 20 credits to be eligible to graduate.
- In most cases, a course that lasts one full school year will merit one (1) unit of credit.
- Courses that last for a semester will merit one-half (.5) unit of credit.
 - o The exception to this is 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 requirements of .50 credit in Physical Education.

GRADES

- All high school students and teachers in the Northwest Local School District will follow the weighted grading scale below:

GRADE	SCALE	GENERAL/ ADVANCED	HONORS	AP/CCP
A	90-100	4.0	4.5	5.0
B	80-89	3.0	3.5	4.0
C	70-79	2.0	2.5	3.0
D	60-69	1.0	1.0*	1.0*
F	0-59	0.0	0.0*	0.0*

*For Honors and AP courses, no weighted values are awarded for grades below a C. College Credit Plus (CCP) courses must follow the grading scale of the university awarding the credit.

GRADING SYSTEM PROCEDURES

- Quarter and final grades are reported on a numerical basis as percentages.
- A numerical average of 60% or higher is required to pass and receive credit for a course.
- No quarter grade lower than 40% will be entered on the student report card.
- Quarter grades will comprise 90% of a student's overall grade and the semester exam will comprise the additional 10% of a student's overall semester grade.
- All students will receive credit by the semester for semester and year-long 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.
 - o Parents will be notified when there is a likelihood that a final incomplete (I) will be given.

- o Final determination of incomplete status will be determined by the building principal. This information is included in the student's permanent record.

COMPUTATION OF GRADE POINT AVERAGE (GPA)

- Each percentage 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.
- Cumulative grade point averages are calculated at the end of each semester.
- Graduation academic awards are calculated in January of the student's graduation year.

GRADUATION AWARDS DEFINED

GPA Requirements - Class of 2023 and beyond		
Summa Cum Laude <ul style="list-style-type: none"> • Minimum of 20 credits during high school • Minimum weighted GPA of 4.50 or higher • No final semester grade below a C 	Magna Cum Laude <ul style="list-style-type: none"> • Minimum of 20 credits during high school • Minimum weighted GPA of 4.25 or higher 	Cum Laude <ul style="list-style-type: none"> • Minimum of 20 credits during high school • Minimum weighted GPA of 3.75 or higher

GRADUATION REQUIREMENTS (BOE policy 5460)

In order to acknowledge each student's successful completion of the instructional program, appropriate to the achievement of District goals and objectives as well as personal proficiency, the Board of Education awards a diploma to eligible students at a graduation ceremony.

The Board of Education shall award a regular high school diploma to every student enrolled in this District who meets the requirements of graduation established by State law and this Board or who properly completes the goals and objectives specified in his/her individualized education program (IEP) including either the exemption from or the requirement to complete the tests required by the State Board of Education in order to graduate. In addition to earning course credits, each student must fulfill the requirements approved by the State of Ohio.

Course Credits Required for Graduation

The requirements for graduation from high school include earning twenty (20) units of credit in grades nine (9) through twelve (12) as established in State law and this Board and fulfilling the requirements of one (1) graduation pathway that has been approved by the State. To graduate, students must earn twenty (20) units of credit in grades nine through twelve as follows:

Subject	Units Required
English Language Arts	4
Health	0.5
Physical Education ¹	0.5
Mathematics ²	4
Science ³	3
Social Studies ⁴	3
Electives ⁵ *1 fine arts credit is required (7-12) (or 1 full unit of Career Tech)	5
TOTAL	20

Additional Graduation Requirements

¹ School districts may adopt policies that would exempt students who participate in interscholastic athletics, marching band or cheerleading for two full seasons or an approved Junior Reserve Officer Training Corps (JROTC) program for two years from the physical education requirement. Starting with the 2019-2020 school year show choir is a permissible activity as part of the PE Waiver policy. Students satisfying the physical education waiver must take another course of study of at least 60 hours of instruction (1/2 unit).

² Students must earn 4 mathematics units, which must include one unit of algebra II or the equivalent of algebra II. Exceptions: Algebra II or advanced computer science is not a requirement for students following a career technical pathway. However, students still must have four units in mathematics. A student may choose to apply one unit of advanced computer science to satisfy one unit of algebra II/math III or equivalent. Districts also may use credit in a computer science course approved by the Department to satisfy a student's mathematics credit.

³ Science units must include one unit of physical sciences, one unit of life sciences and one unit of advanced study in one or more of the following sciences: chemistry, physics or other physical sciences; advanced biology or other life science; astronomy, physical geology or other earth or space science. A student can choose to apply one credit in advanced computer science to satisfy one unit of advanced science (excluding biology or life sciences).

⁴ Students must include ½ unit of American history, ½ unit of American government, and ½ unit in world history and civilizations (for students in the classes of 2022 and beyond) in the three required social studies units.

⁵ Elective units must include one or any combination of world language, fine arts, business, career-technical education, family and consumer sciences, technology, agricultural education or English language arts, mathematics, science or social studies courses not otherwise required.

Financial Literacy

Students must receive instruction in economics and financial literacy (in high school). These state requirements are currently fulfilled through the American Government course.

NEW: Students who enter the ninth grade for the first time on or after July 1, 2022, must complete one-half unit (60 hours of instruction) in financial literacy. Each student may elect to complete the one-half unit of instruction in financial literacy either in lieu of one-half unit of instruction in mathematics or as one-half unit of the five required elective credits. A Financial Literacy course that fulfills this requirement is currently under development and will be added as an addendum.

Fine Arts

Students are required to complete at least two semesters of fine arts (during grades 7-12).

Classes of 2023 and Beyond Graduation Requirements

State law introduced new, permanent graduation requirements for students in the class of 2023 and beyond. Students entering ninth grade **after July 1, 2019**, must meet the new requirements outlined in state law.

Graduation Requirements for the Classes of 2023 and Beyond

Demonstrating Competency

Earn a passing score on Ohio's high school Algebra I (684) and English II (684) tests. Students who do not pass the test will be offered additional support and must retake the test at least once.

In lieu of attaining competency scores on the state tests, students can use alternative ways to demonstrate competency. Prior to being eligible to demonstrate competency in alternative ways, students first must retake the test and receive remedial support.

The three alternative ways to demonstrate competency for the subject area not passed are as follows:

1. College Credit Plus – Earn college credit in a non-remedial math or English course (for the subject area not passed) to demonstrate competency.
2. Career Experience and Technical Skill – Complete two demonstrations to show competency, at least one of which must be a foundational option.
 - Foundational: a. Earn a score of proficient or higher on three or more WebXams in a single career pathway; b. Earn a 12-point approved industry-recognized credential or group of credentials totaling 12 points in a single career field; c. Complete a

pre-apprenticeship in the student's chosen career field or, for students ages 18 and older, show evidence of acceptance into an apprenticeship program after high school.

- **Supporting:** a. Complete a 250-hour work-based learning experience with evidence of positive evaluations; b. Earn the workforce readiness score on WorkKeys; or c. Earn the OhioMeansJobs-Readiness Seal.

3. **Military Readiness** – Competency can be achieved by meeting the requirements to enlist in the military, which can be demonstrated by a contract with the military to enlist upon graduation (see the Military Enlistment Seal guidelines in this document for more information about enlistment).

Note: For any students receiving special education and related services under Ohio Revised Code Chapter 3323, the individualized education program specifies the manner in which the student will participate in the assessments for the purpose of demonstrating competency.

Demonstrating Readiness

Earn two of the following diploma seals, choosing those that line up with your goals and interests. These seals give you the chance to demonstrate academic, technical and professional skills and knowledge that align to your passions, interests and planned next steps after high school.

At least one of the two must be Ohio-designed:

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

For additional information on Ohio's Department of Education graduation requirements, visit:

https://education.ohio.gov/getattachment/Topics/Ohio-s-Graduation-Requirements/Ohio-s-Graduation-Requirements_Long-term-Requirements-2023-and-Beyond.pdf.aspx?lang=en-US

COLLEGE CREDIT PLUS (CCP) OVERVIEW

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.

What is CCP?

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 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 CCP?

Ohio needs more students who graduate college-and career-ready. College Credit Plus allows students the opportunity to earn college credits while in high school. Students may take college courses while still in high school at no cost to the student or family.

Where?

The student enrolled in both high school and college and can attend the class in any setting arranged by the college, including online coursework.

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:

- Students 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)
- Students earn **transcripted** college and high school credit upon completion of the course.
- Schools which 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 rank of students taking similar coursework under College Credit Plus.
- The Institute of Higher Education and High Schools coordinate annually on College Credit Plus events for students and parents.
- CCP courses must be taught by an instructor who meets the Board of Regents' academic credentialing requirements.
- **April 1** is the deadline for students to notify counselors of their intention to take College Credit Plus in the upcoming school year.
- For high school athletes, the "clock" for NCAA eligibility begins after graduation.

Sample College Credit Plus Model Course Pathways:

ASSOCIATE IN ARTS TRANSFER PATHWAY

FIRST SEMESTER		
Course Number	Course Name	Credit Hours
BIO 1111/1117	General Biology I	4
ENG 1101	English Composition I	3
MAT 1470 OR MAT 1450	College Algebra* OR Introductory Statistics*	3 OR 4
PLS 1120	American Federal Government	3
Total		13/14

** See Academic Advisor for appropriate course selection*

SECOND SEMESTER		
Course Number	Course Name	Credit Hours
BIO 1211/1217	General Biology II	4
COM 2211	Effective Public Speaking	3
ENG 1201	English	5
HIS 1112	Western Civilization II	3
PSY 1100	General Psychology	3
Total		16

Sample College Credit Plus Model Course Pathways cont.:

ASSOCIATE IN SCIENCE TRANSFER PATHWAY

FIRST SEMESTER		
Course Number	Course Name	Credit Hours
ENG 1101	English Composition I	3
BIO 1171 OR CHE 1211/1251	Principles of Biology I* (<i>Fall Only</i>) OR General Chemistry I*	5
PSY 1100	Introduction to Psychology	3
HIS 1112	Western Civilization II	3
Total		14

** See Academic Advisor for appropriate course selection*

SECOND SEMESTER		
Course Number	Course Name	Credit Hours
ENG 1201	English Composition II	3
BIO 1272 CHE 1221/1261	Principles of Biology II (Spring Only) General Chemistry II	5
MAT 2270	Calculus and Analytic Geometry I	5
SOC 1101	Introduction to Sociology	3
Total		16

STATE OF OHIO HONORS DIPLOMAS

High school students can gain state recognition for exceeding Ohio's graduation requirements through an honors diploma. Students challenge themselves by taking and succeeding at high-level coursework and in real-world experiences.

Ohio students have the opportunity to choose to pursue one of six honors diplomas. The requirements for each honors diploma are outlined below.

Academic Honors Diploma

Students must meet all but one of the following criteria, unless it is a minimum state or local graduation requirement.

Math	4 units
Science	4 units, including 2 units of advanced science
Social Studies	4 units
Fine Arts	1 unit
World Languages	3 units of one world language, or no less than 2 units of each of two world languages studied
GPA	3.5 on a 4.0 scale
ACT/SAT	ACT: Score of 27 or higher, SAT: Score of 1280 or higher

Career-Tech Honors Diploma

Students must meet all but one of the following criteria, unless it is a minimum state or local graduation requirement.

Math	4 units
Science	4 units, including 2 units of advanced science
Social Studies	4 units
World Languages	2 units of one world language
Electives	4 units of career-technical courses
GPA	3.5 on a 4.0 scale
ACT/SAT/WorkKeys	ACT: Score of 27 or higher, SAT: Score of 1280 or higher, WorkKeys: Score of 6 or higher on Reading for Information and 6 or higher on Applied Math
Field Experience	Complete a field experience and document the experience in a portfolio specific to the student's area of focus
Portfolio	Develop a comprehensive portfolio of work based on the student's field experience or a topic related to the student's area of focus.
Additional Assessments	Earn an industry-recognized credential or achieve proficiency benchmark for appropriate Ohio Career-Technical Competency Assessment or equivalent

Stem Honors Diploma

Students must meet all but one of the following criteria, unless it is a minimum state or local graduation requirement.

Math	5 units
Science	5 units, including 2 units of advanced science
Social Studies	3 units
World Languages	3 units of one world language, or no less than 2 units of each of two world languages studied
Fine Arts	1 unit
Electives	2 units with a focus in STEM (science, technology, engineering, math)
GPA	3.5 on a 4.0 scale
ACT/SAT	ACT: Score of 27 or higher, SAT: Score of 1280 or higher
Field Experience	Complete a field experience and document the experience in a portfolio specific to the student's area of focus
Portfolio	Develop a comprehensive portfolio of work based on the student's field experience or a topic related to the student's area of focus

Fine Arts Honors Diploma

Students must meet all but one of the following criteria, unless it is a minimum state or local graduation requirement.

Math	4 units
Science	3 units, including 1 unit of advanced science
Social Studies	3 units
World Languages	3 units of one world language, or no less than 2 units each of two world languages studied
Fine Arts	4 units
Electives	2 units with a focus in fine arts
GPA	3.5 on a 4.0 scale
ACT/SAT	ACT: Score of 27 or higher, SAT: Score of 1280 or higher
Field Experience	Complete a field experience and document the experience in a portfolio specific to the student's area of focus
Portfolio	Develop a comprehensive portfolio of work based on the student's field experience or a topic related to the student's area of focus

Civics and Social Sciences Honors Diploma

Students must meet all but one of the following criteria, unless it is a minimum state or local graduation requirement.

Math	4 units
Science	3 units, including 1 unit of advanced science
Social Studies	5 units
World Languages	3 units of one world language, or no less than 2 units each of two world languages studied
Fine Arts	1 unit
Electives	3 units with a focus in social sciences and/or civics
GPA	3.5 on a 4.0 scale
ACT/SAT	ACT: Score of 27 or higher, SAT: Score of 1280 or higher
Field Experience	Complete a field experience and document the experience in a portfolio specific to the student's area of focus
Portfolio	Develop a comprehensive portfolio of work based on the student's field experience or a topic related to the student's area of focus

OHIO REGENTS COLLEGE CORE CURRICULUM:

In addition to your test scores and GPA, colleges look at what classes you take in high school. The Ohio Core consists of high school courses in the core subjects of English/language arts, mathematics, science and social studies that prepare you for the demands of a knowledge-based economy and strengthen the link between high school graduation and college entry. Each college is independent of others and may vary the above requirements according to its own standards.

<https://www.ohiohighered.org/students/prepare-for-college/planning/the-ohio-core>

COURSE TYPES

Elective Courses:

Elective courses are those, which are not specifically identified as graduation requirements. You will need to take a minimum of five elective courses in order to have sufficient credits to graduate.

Honors Courses:

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

Advanced Placement (AP) Courses:

These classes are College Board approved courses designed to prepare you for taking college-level coursework and exams while still in high school. Taking AP courses can result in students earning college credit or placement upon enrollment in a college or university. Most colleges and universities award credit for meeting their success criteria on AP Exams. It is important for you to be informed about the policies of potential colleges of interest.

- All NWLSD students taking AP courses are required to take the AP exam in the Spring.
- Students taking more than 3 AP courses in the same term are only required to take 3 AP Exam(s). Students must take a final exam for any course(s) for which they do not take the AP Exam.

College Credit Plus (CCP) - courses offered on the CHS or NWHS campus

These classes are offered in our high schools and taught by our teachers, in partnership with area colleges. Students enrolled in these courses must be accepted by the corresponding college and meet all application deadlines in order to receive both high school and college credit for the course. Course availability is dependent upon teacher credentialing and may differ between our two high schools. Northwest partners with Sinclair College and Cincinnati State for all CCP courses offered on our campuses.

- **For additional information on Ohio's Department of Education College Credit Plus program, visit**
<http://education.ohio.gov/Topics/Ohio-Education-Options/College-Credit-Plus>

Conditional /Unconditional Acceptance by Colleges / Universities:

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.

Declared Courses:

- The purpose of declared courses is to permit students to take courses offered at a non-weighted level.
- For the purpose of class rank computation, students are permitted to **DECLARE** up to two credits per year as “no count” courses for the purpose 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.
- 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.
- 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 2022-23 school year by **Friday, September 16th, 2022 at 3:00 p.m.**
- The following rules apply in determining the course(s) to be declared:
 - A student must maintain a schedule of eight courses each semester in order to declare two credits per year. If a student has late arrival, early dismissal, taking a Pass-Fail course or a study hall, he/she cannot declare a course.
 - A student must maintain a schedule of seven courses each semester in order to declare one credit per year. If a student has late arrival, early dismissal, taking a Pass-Fail course or a study hall, he/she can declare only one course.
 - Students may not accumulate unused "declared" courses from year to year.
 - No changes of declarations are permitted once submitted.
 - The declared course will carry a grade and appropriate credit. Declared courses will not be used in computing class rank or honor roll.
 - Students may not declare any Honors, Advanced Placement, or College Credit Plus courses.
 - Students in grades nine through twelve are eligible to make such declarations.
 - Any courses required for graduation may not be declared.
 - In addition, Foreign Language courses may not be declared.

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.

Summer School Courses:

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

Course work completed prior to High School:

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.

CREDIT FLEXIBILITY (BOE policy 2370)

Ohio's plan for credit flexibility is designed to broaden the scope of curricular options available to students, increase the depth of study possible for a particular subject, and allow tailoring of learning time and/or conditions.

Credit flexibility is intended to motivate and increase student learning by allowing:

- Access to more learning resources, especially real-world experiences
- Customization around individual student needs
- Use of multiple measures of learning, especially those where students demonstrate what they know and can do, apply the learning, or document performance.

How to Access Credit Flexibility:

1. Successfully test out of a required or elective course.
2. Successfully demonstrate mastery through methods such as portfolios, internships, work study, independent study plans, or any combination of these methods.

More information about credit flexibility can be found on the curriculum page of our district website <https://www.nwlsd.org/Curriculum.aspx>.

All credit flexibility applications must be approved no later than **April 1st** the school year prior to actual participation.

HIGH SCHOOL ATHLETIC ELIGIBILITY POLICY

To be eligible, a student must be currently enrolled and must 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.

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. 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 transcripts be sent at the time their applications are submitted online. Transcript request information 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.

For more information regarding the rules, please go to www.NCAA.org.

DIVISION I 16 Core Courses:	DIVISION II 16 Core Courses:
Complete 10 core courses, including seven in English, math or natural/physical science, <u>before</u> your seventh semester. Once you begin your seventh semester, you may not repeat or replace any of those 10 courses to improve your core-course GPA.	
4 years of English	3 years of English
3 years of Mathematics (Algebra I or higher)	2 years of Mathematics (Algebra I or higher)
2 years of natural/physical science (including 1 year of lab if offered by HS)	2 years of natural/physical science (including 1 year of lab if offered by HS)
1 additional year of English, Mathematics or Natural/Physical Science	3 additional years of English, Mathematics or Natural/Physical Science
2 years of social science	2 years of social science
4 years of additional courses (from any area above, foreign language or non-doctrinal religion/philosophy)	4 additional years of additional courses (English, math, natural or physical science, social science, foreign language, comparative religion or philosophy)
Earn at least a 2.3 GPA in Core Courses	Earn at least a 2.2 GPA in Core Courses

NCAA APPROVED CORE COURSES

English

Adv. English I
 Honors English I
 Adv. English II
 Honors English II
 Honors English III
 Honors English IV
 AP Composition and Language
 AP Literature and Language
 Adv. Creative Writing/Publishing
 Adv. African American Literature
 Adv. World Literature
 Adv. Minority Perspectives in Lit.
 Adv. American Short Stories, Drama, and Poetry
 Adv. American Literature
 Adv. Genre Fiction
 Adv. Composition III
 Adv. Composition IV

Mathematics

Adv. Algebra I and 1a/1b
 Adv. Geometry
 Honors Geometry
 Adv. Algebra II
 Honors Algebra II
 Adv. Modeling & Reasoning
 Adv. Pre-Calculus
 Adv. Calculus
 Honors Pre-Calculus
 AP Calculus
 Adv. Statistics
 AP Statistics

Data Science Foundations (pending)
 Discrete Mathematics/
 Computer Science (pending)
 Adv. College Algebra

Science

Adv. Physical Science
 Honors Physical Science
 Adv. Biology
 Honors Biology
 AP Biology
 Adv. Chemistry
 Honors Chemistry
 AP Chemistry
 Adv. Physics
 Honors Physics
 AP Physics I
 Adv. Anat/Phys.
 Honors Anat/Phys.
 Adv. Ecology
 Adv. Forensic Science I
 Adv. Forensic Science II
 Adv. Genetics
 Honors Genetics
 Astronomy
 Geology
 Adv. Zoology
 Honors Zoology

Social Studies

Adv. Modern World History
 Honors Modern World Studies
 AP World History
 AP Human Geography

Adv. American History
 Honors American History
 AP US History
 Adv. American Government
 AP US Govt. & Pol. Sci
 Adv. Psychology
 AP Psychology
 AP European History
 Adv. Economics
 Adv. World Religions
 Adv. African Am. History
 Adv. Women in Am. History
 Adv. Sociology

World Languages

Adv. French I
 Adv. French II
 Adv. French III
 Honors French IV
 AP French
 Adv. Spanish I
 Adv. Spanish II
 Adv. Spanish III
 Honors Spanish IV
 AP Spanish
 Adv. American Sign Language I
 Adv. American Sign Language II
 Adv. American Sign Language III
 Honors American Sign Language IV

Please Note:

NWLSD Edgenuity core course offerings, including credit recovery courses, have NOT been approved by the NCAA. NWLSD is seeking NCAA approval for online course work at this time. Please see your guidance counselor before considering completing online coursework through Edgenuity.

College and Career Planning and Pathways

NAVIANCE is a comprehensive college and career readiness solution that helps districts and schools align student strengths and interests to postsecondary goals, improving student outcomes and connecting learning to life.

OhioMeansJobs.com is an additional one-stop virtual employment and career planning tool for students, and for parents, teachers, and counselors.

Career Pathways

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, CCP Ecology, CCP Environmental Geology, CCP Chemistry

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, Chamber Choir, Chamber Orchestra, Wind Symphony, Music Appreciation, History of American Popular Music, 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:

Butler Tech 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 , Welding Technology, Precision Machining, Power Driven Equipment, Interior Remodeling

Education and Training

Includes technical- and professional-level careers in planning, managing and providing education and training services and related learning support services.

Possible NWLSD Courses:

Psychology/Sociology, courses related to content area focus, CCP Introduction to Education, CCP The Developing Child

Butler Tech Courses:

Human Growth and Development

Engineering and Science Technologies

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.

Possible NWLSD Courses:

Chemistry, Physics, Calculus, CCP Chemistry, CCP Physics, CCP Pre-Calculus

Butler Tech Programs:

Engineering Design, Precision Machining

Finance

Includes technical- and professional-level careers in financial and investment planning, accounting, banking, insurance, real estate and business financial management.

Possible NWLSD Courses:

Economics, Calculus, Statistics, CCP Pre-Calculus

Butler Tech Programs:

Financial Services, Butler Tech Business

Government and Public Administration

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.

Possible NWLSD Courses:

Contemporary World Issues, Economics, A.P. European History, African American History, Women in Am. History,

Butler Tech Programs:

Butler Tech Business, Criminal Justice, Firefighting Technology

Health Science

Includes technical- and professional-level careers in planning, managing and providing therapeutic services, diagnostic services, health informatics, support services and biotechnology research and development.

Possible NWLSD Courses:

Genetics, Anatomy and Physiology, Physics, Chemistry, Zoology, AP Biology, Calculus, CCP Biology, CCP Chemistry, CCP Physics, CCP Pre-calculus

Butler Tech Programs:

Healthcare Services, Sports Medicine, Exercise Science, Health Technology, Biomedical Science

Hospitality and Tourism

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.

Possible NWLSD Courses:

Economics, Statistics, Customer Service and Sales, Retail Industry Fundamentals

Butler Tech Programs:

Butler Tech Business, Culinary Arts

Human Services

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.

Possible NWLSD Courses:

A.P. Psychology, Psychology/Sociology,

Butler Tech Programs:

Sports Medicine, Cosmetology, Teacher Academy, Health Technology

Information Technology

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.

Possible NWLSD Courses:

Calculus, Statistics, Chemistry, Biology, Physics, CCP Chemistry, CCP Physics, CCP Pre-calculus

Butler Tech Programs:

Information Technology, Programming and Software Development

Law and Public Safety

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.

Possible NWLSD Courses:

Contemporary World Issues, European History, African American History, Women in American History

Butler Tech Programs:

Criminal Justice, Firefighting Technology

Manufacturing Technologies

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

Possible NWLSD Courses:

Geometry, Pre-calculus, Chemistry, CCP Chemistry, CCP Physics, CCP Pre-calculus

Butler Tech Programs:

Construction Technology, Precision Machining, Construction, Welding Technology

Marketing

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.

Possible NWLSD Courses:

Economics, Statistics

Butler Tech Programs:

Financial Services, Butler Tech Business, Commercial Arts, Digital Media, Visual Design

Transportation Systems

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.

Possible NWLSD Courses:

Geometry, Economics

Butler Tech Programs:

Automotive Technology, Commercial Truck/Diesel and Equipment Repair, Power Driven Equipment

Guide to Understanding Course Descriptions

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

Co-requisite(s): Required courses that may be taken at the same time to be enrolled in the course.

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

NCAA ✓ indicates that the course has been approved by the NCAA (Note that new course offerings indicate that NCAA approval is pending.)

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

Course # is the scheduling number for each class.

Fees: The specific cost to take a Career and Technical Education course. Fees are also charged for academic and elective courses as approved by the Board of Education.

Course Weight Codes:

Adv. - Advanced

Hon. Honors

AP - Advanced Placement

CCP - College Credit Plus

Non-Core Elective Courses

Art	Course Numbers 1001-1199
Foreign Language	Course Numbers 1201-1299
Music (Instrumental & Vocal)	Course Numbers 1301-1399
PE/Health	Course Numbers 1401-1499
Other Non-Core Electives	Course Numbers 1501-1899

Core Academic Courses

English Language Arts	Course Numbers 2000-2999
Mathematics	Course Numbers 3000-3999
Science	Course Numbers 4000-4999
Social Studies	Course Numbers 5000-5999
Butler Tech Courses	Course Numbers 6000-6499
College Credit Plus	Course Numbers 6500-6599
Intervention/ Credit Recovery	Course Numbers 8000-8999

****Courses listed in the guide are for consideration and planning purposes. Actual offerings may vary depending on course requests, staffing, teacher certification, etc.**

*****Courses are offered based on teacher credentialing and courses offerings may vary between the high schools. See your counselor if you are considering taking a course that is only offered at a location other than where you currently attend.**

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.

Adv. Art Foundations

Course #1001

This course is an introduction 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

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

Credit: .5 credit

Term: 1 semester

Adv. Drawing

Course #1002

Drawing is an introduction to basic drawing skills with a focus on studio based art making where all students will develop their art making ability through creative/critical problem solving. Drawing includes mediums such as graphite, marker, pen/ink, colored pencil, charcoal, etc. as well as continued study in philosophies of art, art history, vocabulary and art making techniques. Students may be required to supply some materials in addition to a lab fee.

Prerequisite: Art Foundations

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

Credit: .5 credit

Term: 1 semester

Adv. Painting

Course #1008

Painting is an introduction to basic painting skills with a focus on studio based art making where all students will develop their art making ability through creative/critical problem solving. Painting includes mediums such as tempera paint, acrylic paint, watercolor, ink wash, etc. as well as continued study in philosophies of art, art history, vocabulary and art making techniques. Students may be required to supply some materials in addition to a lab fee.

Prerequisite: Art Foundations

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

Credit: .5 credit

Term: 1 semester

Adv. Ceramics and Sculpture

Course #1009

Ceramics is an introduction to basic three dimensional art with a focus on studio based art making where all students will develop their art making ability through creative/critical problem solving. Ceramics and Sculpture includes mediums such as clay, plaster, found objects, wood, etc. as well as continued study in philosophies of art, art history, vocabulary and art making techniques. Students may be required to supply some materials in addition to the lab fee.

This course is offered on the NWHHS campus.

Prerequisite: Art Foundations

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

Credit: .5 credit

Term: 1 semester

ART DEPARTMENT (cont.)

Adv. Drawing and Painting II

Course #1003

Advanced Drawing and Painting II is an upper level course to motivate and develop student's art making ability through creative/ critical problem solving skills. Students will focus on developing higher level studio based skills in mediums such as graphite, pen/ink, colored pencils, acrylic paint, watercolor, ink wash etc. as well as continued study in philosophies of art, art history, and vocabulary. Students will be required to supply some materials in addition to a lab fee.

Prerequisite: Art Foundations, Adv. Drawing,
Adv. Painting & teacher recommendation
Year: 11th, 12th

Credit: 1 credit
Term: 2 semesters

Adv. 3D Design

Course #1006

This course is designed to focus students' creativity on three-dimensional art including a focus 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.

This course is offered on the CHS campus.

Prerequisite: Art Foundations, Adv. Drawing,
& teacher recommendation
Year: 11th, 12th

Credit: 1 credit
Term: 2 semesters

Advanced Design I

Course #1011

Advanced Design is an advanced level course for motivated and experienced art students. Students will explore a variety of traditional and non-traditional mediums with an emphasis 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. Advanced Design I and II are not sequential.

Prerequisite: Art Foundations, Adv. Drawing,
Adv. Painting
Year: 11th, 12th

Credit: .5 credit
Term: 1 semester

ART DEPARTMENT (cont.)

Advanced Design II

Course #1012

Advanced Design is an advanced level course for motivated and experienced art students. Students will explore a variety of traditional and non-traditional mediums with an emphasis 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. Advanced Design I and II are not sequential.

Prerequisite: Art Foundations, Adv. Drawing,
Adv. Painting

Credit: .5 credit

Term: 1 semester

Year: 11th, 12th

Adv. Senior Studio

Course #1004

Senior Studio 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 Foundations, Adv. Drawing,
Adv. Painting, Adv. Drawing &
Painting, & teacher recommendation

Credit: 1 credit

Term: 2 semesters

Year: 12th

ART DEPARTMENT (cont.)

AP Studio Art

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 sections of the portfolio as outlined by the AP College Board. Units in all four components of art: history, aesthetics, criticism and studio will be explored. Slides and physical works of art will be required for the submission of the Drawing or 2D portfolio exam, and then sent to the College Board for evaluation. All students who request acceptance in this class are required to take the Advanced Placement portfolio exam in the spring. Summer work is required. Students will be required to supply some materials in addition to a lab Fee and AP Exam fee for work on their portfolios.

Prerequisite: Art Foundations, Adv. Drawing,
Adv. Painting, Adv. Drawing &
Painting, & teacher recommendation
Year: 12th

Credit: 1 credit
Term: 2 semesters

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 a minimum of 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

Year: 9th, 10th, 11th

Credit: 1 credit

Term: 2 semesters

NCAA √

Adv. Spanish II

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 (2nd Sem.)

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

Credit: 1 credit

Term: 2 semesters

NCAA √

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 (2nd Sem.)

Year: 10th, 11th, 12th

Credit: 1 credit

Term: 2 semesters

NCAA √

FOREIGN LANGUAGE DEPARTMENT (cont.)

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
(2nd Sem.)

Year: 11th, 12th

Credit: 1 credit

Term: 2 semesters

NCAA √

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 required to take the Advanced Placement exam in the spring.

Prerequisite: Grade of B or higher in Spanish IV (2nd Sem.)
and/or completion of CCP 1101-2202 sequence.

Year: 11th, 12th

Credit: 1 credit

Term: 2 semesters

NCAA √

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

Credit: 1 credit

Term: 2 semesters

NCAA √

FOREIGN LANGUAGE DEPARTMENT (cont.)

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 (2nd Sem.) **Credit:** 1 credit

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

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 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 Adv. French II (2nd Sem.) **Credit:** 1 credit

Year: 10th, 11th, 12th

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, field trips 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 Adv. French III (2nd Sem.) **Credit:** 1 credit

Year: 11th, 12th

Term: 2 semesters

NCAA √

FOREIGN LANGUAGE DEPARTMENT (cont.)

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 required to take the Advanced Placement exam in the spring.

Prerequisite: Grade of “B” or higher in Adv. French IV
and/or completion of the 1101-2202 sequence

Credit: 1 credit

Term: 2 semesters

Year: 11th, 12th

NCAA: √

Adv. American Sign Language I

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: √

Adv. American Sign Language II

Course #1233

American Sign Language 2 continues to study ASL grammatical structure, vocabulary, fingerspelling, use of signing space, conversational regulators and focusing on the development of receptive and expressive sign skills. At this level, students enrolled should feel comfortable communicating in the target language without talking. An understanding of the Deaf community as a distinct culture with its own history and language will be incorporated into this course.

Prerequisite: Grade of “C” or higher in Adv. ASL I (Sem. 2)

Credit: 1 credit

Year: 10th, 11th, 12th

Term: 2 semesters

NCAA: √

FOREIGN LANGUAGE DEPARTMENT (cont.)

Adv. American Sign Language III

Course #1234

American Sign Language 3 continues to study ASL grammatical structure, vocabulary, fingerspelling, use of signing space, conversational regulators and focusing on the development of receptive and expressive sign skills. At this level, students enrolled should feel comfortable communicating in the target language without talking. An understanding of the Deaf community as a distinct culture with its own history and language will be incorporated into this course.

Prerequisite: Grade of “C” or higher in
Adv. Am. Sign Lang. II (2nd Sem.)

Year: 11th, 12th

Credit: 1 credit

Term: 2 semesters

NCAA: √

Hon. American Sign Language IV

Course #1235

American Sign Language 4 continues to study ASL grammatical structure, vocabulary, fingerspelling, use of signing space, conversational regulators and focusing on the application of receptive and expressive sign skills. At the honors level, students enrolled should be proficient at communicating in the target language without talking. An understanding of the Deaf community as a distinct culture with its own history and language is incorporated into this course.

This course is offered on the CHS campus.

Prerequisite: Grade of “C” or higher in
Adv. Am. Sign Lang. III (2nd Sem.)

Year: 11th, 12th

Credit: 1 credit

Term: 2 semesters

NCAA: √

****American Sign Language courses will fulfill the foreign language requirement for an honors diploma but may not fulfill admissions requirements for all colleges and universities.**

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 - BAND

*****Students assigned a district owned instrument will be assigned a \$50.00 maintenance fee.***

Adv./Honors Freshman Concert Band

Course # 1323 - Adv.

Course # 1324 - Hon.

This group is designed for the performance of band literature. This class is designed for freshmen students. This is a year-long course; performance participation outside of school hours is mandatory. This class offers an honors option for students to receive honors credit.

This course is offered on the CHS campus.

Prerequisite: Prior School Band Experience or Director approval **Credit:** 1 credit

Year: 9th

Term: 2 semesters

Adv./Honors Concert Band

Course #1301 - Adv.

Course #1322 - Hon.

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. This is a year-long course; performance participation outside of school hours is mandatory.

Prerequisite: Prior School Band Experience

Year: 9th(NWHS), 10th, 11th, 12th

Credit: 1 credit

Term: 2 semesters

Adv./Honors Percussion Ensemble

Course #1302 – Adv.

Course #1321 – Hon.

This group is designed for the performance of band literature for percussionists only. This class is designed for performance of multiple percussion instruments at the high school level. This is a year-long course; performance participation outside of school hours is mandatory. This class offers an honors option for students to receive honors credit.

Prerequisite: Prior School Band Experience

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

Credit: 1 credit

Term: 2 semesters

MUSIC DEPARTMENT (cont.)

INSTRUMENTAL MUSIC - BAND

Adv./Honors Jazz Band

Course #1303 – Adv.

Course #1304 – Hon.

This group is designed for the performance of American Jazz styles based on the instrumentation of the traditional “Big Band”. This class is designed for brass, woodwind, and percussion students dedicated to practicing and performing on their instrument. Students will study the jazz style including improvisational techniques. Students electing to take this class will need to be in an additional band or orchestra class unless approved by the director, prior to the first day of class. This is a year-long course; performance participation outside of school hours is mandatory. This class offers an honors option for students to receive honors credit.

This course is offered on the CHS campus.

Prerequisite: Audition or placement by Director

Credit: 1 credit

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

Term: 2 semesters

INSTRUMENTAL MUSIC - ORCHESTRA

Adv./Honors Wind Symphony

Course #1305 – Adv.

Course #1306 – Hon.

This group is designed for the performance of advanced band literature. This class is designed for brass, woodwind, and percussion students dedicated to practicing and performing on their instrument. Opportunities for students include participation in contests sanctioned by Music for All and the Ohio Music Education Association. This is a year-long course; performance participation outside of school hours is mandatory. This class offers an honors option for students to receive honors credit.

Prerequisite: Audition or placement by Director

Credit: 1 credit

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

Term: 2 semesters

Adv./Honors Freshman Concert Orchestra

Course # 1325 – Adv.

Course # 1326 – Hon.

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. Performance participation outside of school hours is mandatory.

This course is offered on the CHS campus.

Prerequisite: Membership in 8th grade strings program,
audition or placement by Director

Credit: 1 credit

Year: 9th

Term: 2 semesters

MUSIC DEPARTMENT (cont.)

INSTRUMENTAL MUSIC - ORCHESTRA

Adv./Honors Concert Orchestra

Course #1307 – Adv.

Course #1308 – Hon.

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. Performance participation outside of school hours is mandatory.

Prerequisite: Membership in 8th grade strings program,
audition or placement by Director

Credit: 1 credit

Term: 2 semesters

Year: 9th (NWHS), 10th, 11th, 12th

Adv./Honors Chamber Orchestra

Course #1309 – Adv.

Course #1310 – Hon.

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. Performance participation outside of school hours is mandatory.

Prerequisite: Audition or placement by Director

Credit: 1 credit

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

Term: 2 semesters

MUSIC DEPARTMENT (cont.)

VOCAL MUSIC

Adv./Honors Treble Choir I

Course #1313 – Adv.

Course #1331 – Hon.

Treble Choir I is a non-auditioned ensemble for sopranos and altos grades 9 - 12. Students will learn the basics of vocal technique and music reading. Beginning music of all styles and from all time periods will be performed. Students will be required to participate in concerts and community performances throughout the year. Performance participation outside of school hours is mandatory.

Prerequisite: None

Credit: 1 credit

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

Term: 2 semesters

Adv./Honors Treble Choir II

Course # – 1333 Adv.

Course # – 1334 Hon.

Intermediate Treble Choir II is an auditioned ensemble for sopranos and altos grades 9 - 12. Students will learn the basics of vocal technique and music reading. Students will be required to participate in concerts, adjudicated events, and community performances throughout the year. Intermediate music of all styles and from all time periods will be performed. Performance participation outside of school hours is mandatory.

This course is offered on the CHS campus.

Prerequisite: Vocal Music Director Recommendation & Audition

Credit: 1 credit

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

Term: 2 semesters

Adv./Honors Concert Choir

Course # 1327 – Adv.

Course # 1328 – Hon.

Concert choir is an accelerated SATB vocal ensemble designed for performance of advanced choral literature with a focus on acapella 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. Performance participation outside of school hours is mandatory.

This course is offered on the NWHS campus.

Prerequisite: Vocal Music Director Recommendation

Credit: 1 credit

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

Term: 2 semesters

MUSIC DEPARTMENT (cont.)

VOCAL MUSIC

Adv./Honors A Capella Choir

Course # 1340 – Adv.

Course # 1341 – Hon.

A Capella Choir will explore, study and perform various forms of popular music in the A Capella style. Students will learn how to improvise and arrange songs. Admission to A Capella is by audition only. Students must also be enrolled in Treble Choir, Bass Choir or Chamber Singers.

This course is offered on the CHS campus.

Prerequisite: Audition Only

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

Credit: 1 credit

Term: 2 semesters

Adv./Honors Bass Choir

Course #1311 – Adv.

Course #1312 – Hon.

Bass Choir is a non-auditioned ensemble for tenors and basses grades 9 - 12. Students will learn the basics of vocal technique and music reading. Students will be required to participate in concerts and community performances throughout the year. Intermediate music of all styles and from all time periods will be performed. Performance participation outside of school hours is mandatory.

Prerequisite: Vocal Music Director Recommendation

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

Credit: 1 credit

Term: 2 semesters

Cardinal/ Knight Choir

Course #1337 - Honors

Course #1314 - Ensemble I

Course #1330 - Ensemble II

Cardinal/ Knight Choir is a choir for students with special needs and those interested in working in collaboration with these students. Cardinal/ Knight Choir will explore different styles of music through song, dance, and instruments. Students will be required to participate in two concerts per semester. No participation fee is required.

Prerequisite: None

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

Credit: .5 credit

Term: 1 semester

MUSIC DEPARTMENT (cont.)

VOCAL MUSIC

Adv./Honors Chamber Singers

Course #1315 – Adv.

Course #1316 – Hon.

Chamber Singers is an auditioned ensemble for sopranos, altos, tenors, and basses grades 10 - 12. Students will develop advanced vocal technique and music reading skills. Students will be required to participate in concerts, adjudicated events, and community performances. In addition, students are expected to perform solos and in small ensembles. Advanced music of all styles and from all time periods will be performed. Performance participation outside of school hours is mandatory.

Prerequisite: Audition

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

Credit: 1 credit

Term: 2 semesters

Adv. Music Appreciation

Course #1317

This course is a non-performance based class intended to serve as an introduction to the diverse field of music. This course will provide students a background into the historical, regional, and basic theoretical foundations in music. It will help students understand more about the people from different racial or ethnic backgrounds worldwide, to see music as a vehicle for establishing more meaningful relationships, and to read, write, and communicate about music using appropriate terminology.

Prerequisite: None

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

Credit: .5 credit

Term: 1 semester

Adv. History of American Popular Music

Course #1335

This course develops an appreciation of music through listening to and studying the different styles of popular music from the early 20th century to the present, from jazz to hip-hop and Rhythm and Blues. The class explores visual arts, music, dance, theater and literature through major movements, time periods, and cultures.

This course is offered on the NWHS campus.

Prerequisite: None

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

Credit: .5 credit

Term: 1 semester

MUSIC DEPARTMENT (cont.)

OTHER MUSIC COURSES

Adv. Guitar

Course #1332

This course is designed to cover the basics of beginning guitar performance. Areas of concentration will be: posture and position, note reading, aural skills, flat picking, strumming, rhythmic patterns, chord study, improvisation and performing. Students with previous guitar experience are welcomed as are complete beginners. Some guitars will be available for student use and personal instruments may be used with approval by the instructor. A fee will be assessed for use of a school instrument.

This course is offered on the CHS campus.

Prerequisite: None

Credit: .5 credit

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

Term: 1 semester

Advanced Music Theory

Course #1329

This is a study in harmony and basic musicianship. Topics taught include melody, rhythm, analysis, dictation, sight-singing, and form.

Prerequisite: None

Credit: .5 credit

Year: 10th, 11th, 12th

Term: 1 semester

Honors Music Theory

Course #1319

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.

This course is offered on the CHS campus.

Prerequisite: Teacher Recommendation

Credit: 1 credit

Year: 10th, 11th, 12th

Term: 2 semesters

HEALTH/PHYSICAL EDUCATION

In order to meet graduation requirements, the Adv. Health course must be successfully completed. The Adv. Health course is available on-line and can be taken prior to starting the 9th grade.

Adv. Health

Course #1401

This is a class that combines traditional and online teaching. Topics covered in this course include Making Healthy Decisions, Health Agencies, First Aid/CPR, Preventing Disease, Human Sexuality and Opioid Abuse Prevention.

Prerequisite: None

Credit: .5 credit

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

Term: 1 semester

All students are required to take Physical Education I and an additional Physical Education course to meet graduation requirements. A student who, during high school, has participated in interscholastic athletics, marching band, show choir, 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.

Adv. 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

Credit: .25 credit

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

Term: 1 semester

Adv. Physical Education II

Course #1403

This course is designed to introduce students to a wide variety of sports that they 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

Credit: .25 credit

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

Term: 1 semester

HEALTH/PHYSICAL EDUCATION (cont.)

Adv. 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

Adv. Basketball Officiating

Course #1405

This semester-long course will afford the student the opportunity to develop and/or improve fundamental skills in basketball with an emphasis on offensive and defensive strategies, while providing cardiovascular conditioning. The student will learn officiating 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

Credit: .25 credit

Term: 1 semester

Adv. Fitness and Nutrition

Course #1406

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 II

Course #1407

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 bodies 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 and plyometric training, and cardiovascular conditioning.

This course is offered on the CHS campus.

Prerequisite: Teacher recommendation

Year: 10th, 11th, 12th

Credit: .25 credit

Term: 1 semester

OTHER NON-CORE ELECTIVES

Adv. RISE I– Raising Individual Student Excellence

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.

This course is offered on the CHS campus.

Prerequisite: Completion of requirements in application packet & interview process, with teacher recommendation

Credit: 1 credit

Term: 2 semesters

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

Adv. RISE II

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. This course is offered on the CHS campus.

Prerequisite: Completion of requirements in application packet & interview process, with teacher recommendation

Credit: 1 credit

Term: 2 semesters

Year: 10th, 11th, 12th

OTHER NON-CORE ELECTIVES (cont.)

Adv. AP Enrichment

Course #1603

This course is designed to support students who are enrolled in upper level course work. Students will be assigned to this course, which is facilitated by an AP teacher in the building, to practice skills needed to be successful in rigorous courses, and to receive additional time working with a trained AP instructor during the school day. This course may also be used to supplement science class time to complete laboratory and experiment activities that take longer than the allotted course time.

Prerequisite: Participation in AP, CCP or Honors
level coursework

Credit: none

Term: 2 semesters

Year: 10th, 11th, 12th

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: English I and II, Algebra I,
Geometry

Credit: .5 credit

Term: 1 semesters

Year: 10th, 11th, 12th

Ohio End of Course (EOC) Assessment Remediation

Course #1705

This course is designed to review course content in preparation for retaking one or more of Ohio's End of Course Assessments (ENG 1, ENG 2, ALG 1, GEO, BIO, AM. HIST, AM. GOV). Students enrolling in this course should have previously taken the EOC Assessment and scored at the Limited (1) or Basic (2) level. Students will be awarded a pass or fail grade upon completion of this course.

Prerequisite: Admin./Counselor Recommendation

Credit: .5 credit

Year: 11th, 12th

Term: 1 semesters

OTHER NON-CORE ELECTIVES (cont.)

Adv. Service Learning

Course #1802

This elective course provides students with the opportunity to voluntarily serve in, with, and for community-based institutions (school, government, hospital, nursing home, day care center, business, police, etc.). Students will select their field-service placement in collaboration with the program coordinator. This course is designed to allow students to experience co-op experience and participate in community service opportunities that can positively affect their community. Students will be required to keep a reflective journal as part of this course.

Prerequisite: None

Credit: .5 credit

Year: 11th, 12th

Term: 1 semester

Adv. Service Learning 2

Course #1807

This elective course provides students with the opportunity to voluntarily serve in, with, and for community-based institutions (school, government, hospital, nursing home, day care center, business, police, etc.). Students will select their field-service placement in collaboration with the program coordinator. This course is designed to allow students to experience co-op experience and participate in community service opportunities that can positively affect their community. Students will be required to keep a reflective journal as part of this course.

Prerequisite: Adv. Service Learning

Credit: .5 credit

Year: 11th, 12th

Term: 1 semester

Adv. Student Technology Support and Innovation I

Course # 1805

The Student Technology Support and Innovation course is a hands-on study of technology in an educational context. Students will be required to troubleshoot, assess problems, and define the best approach to addressing or solving a problem. In addition to solving problems for students and teachers, students will be required to complete projects that integrates computers, digital media, or programming. . The course also asks students to have prior understanding of Chrome OS, Microsoft Windows OS iOS and Android or be willing to learn these operating systems. This course seeks students who are self-motivated learners and use inquiry to drive their exploration and experiment in order to reach greater discovery. The application process begins in the spring, with **teacher recommendations** and **formal interviews**.

This course is offered on the NWHHS campus.

Prerequisite: Students accepted through recommendation and interview process

Credit: 1 credit

Year: 10th, 11th, 12th

Term: 2 semesters

OTHER NON-CORE ELECTIVES (cont.)

Adv. Student Technology Support and Innovation II

Course # 1806

The Student Technology Support and Innovation course is a hands-on study of technology in an educational context. Students will be required to troubleshoot, assess problems, and define the best approach to addressing or solving a problem. In addition to solving problems for students and teachers, students will be required to complete projects that integrate computers, digital media, or programming. The course also asks students to have prior understanding of Chrome OS, Microsoft Windows OS iOS and Android or be willing to learn these operating systems. This course seeks students who are self-motivated learners and use inquiry to drive their exploration and experiment in order to reach greater discovery. The application process begins in the Spring with **teacher recommendations** and **formal interviews**.

This course is offered on the NWHs campus.

Prerequisite: Adv. Student Technology Support
and Innovation I, teacher recommendation

Credit: 1 credit

Term: 2 semesters

Year: 11th, 12th

Intro to Education

Course#1808

Introduction to Education engages students in knowledge construction about, and critical analysis of, the historical development and structure of schooling and teaching in the United States. This introductory course explores the purposes, organization and outcomes of schooling from cultural studies, economic, ethical, historical, legal, philosophical and sociological perspectives. Candidates undertake critical inquiry into teaching as a profession at the state and national level and explore licensure requirements, teacher responsibilities and the accountability of public schools. The exploration of these topics and perspectives is paired with current experiences during a required 10-hour field experience in an instructor-approved diverse setting outside of class. This honors level course was developed by the University of Cincinnati and is being taught through an Articulation Agreement. Students who complete this course will have the opportunity to earn college level credit if they attend the University of Cincinnati post graduation.

Prerequisite: None

Credit: 1 credit

Year: 11th, 12th

Term: 2 semesters

OTHER NON-CORE ELECTIVES (cont.)

Study Skills Class- 9**Course #8001**

This course provides a more structured solution for struggling 9th grade students to receive more instructional support during the day. This class would provide a basis for basic school skills such as: how to study, how to use google applications, how to type, etc. This course could also provide a structured reteaching of essential core class concepts. This course counts as an elective course credit.

Prerequisite: Teacher Recommendation

Credit: 1 credit

Year: 9th

Term: 2 semesters

Study Skills Class- 10**Course #8002**

This course provides a more structured solution for struggling 10th grade students to receive more instructional support during the day. This class would provide a basis for basic school skills such as: how to study, how to use google applications, how to type, etc. This course could also provide a structured reteaching of essential core class concepts. This course counts as an elective course credit.

Prerequisite: Teacher Recommendation

Credit: 1 credit

Year: 10th

Term: 2 semesters

ESL Study Skills Class- A**Course #8015**

This course provides a more structured solution to emergent students/newcomers and struggling ELL students to receive more instructional support during the day. This class would provide a basis for basic school skills such as: how to study, how to use google applications, how to type, etc. This course could also provide a structured reteaching of essential core class concepts. This course counts as an elective course credit.

Prerequisite: None

Credit: 0.5 credit

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

Term: 1 semester

ESL Study Skills Class- B**Course #8016**

This course provides a more structured solution to beginners, early intermediate, and struggling ELL students to receive more instructional support during the day. This class would provide a basis for basic school skills such as: how to study, how to use google applications, how to type, etc. This course could also provide a structured reteaching of essential core class concepts. This course counts as an elective course credit.

Prerequisite: None

Credit: 0.5 credit

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

Term: 1 semester

OTHER NON-CORE ELECTIVES (cont.)

ESL Study Skills Class- C

Course #8017

This course provides a more structured solution to intermediate and struggling ELL students to receive more instructional support during the day. This class would provide a basis for basic school skills such as: how to study, how to use google applications, how to type, etc. This course could also provide a structured reteaching of essential core class concepts. This course counts as an elective course credit.

Prerequisite: None

Credit: 0.5 credit

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

Term: 1 semester

ESL Study Skills Class- D

Course #8018

This course provides a more structured solution to early advanced, advanced, and struggling ELL students to receive more instructional support during the day. This class would provide a basis for basic school skills such as: how to study, how to use google applications, how to type, etc. This course could also provide a structured reteaching of essential core class concepts. This course counts as an elective course credit.

Prerequisite: None

Credit: 0.5 credit

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

Term: 1 semester

ENGLISH DEPARTMENT

The State of Ohio requires students to earn a minimum of 4 English credits for graduation. Students are required to take End of Course Exams after completion of Adv./Hon. English I and Adv./Hon. English II.

Adv. English I

Course #2101

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.

Prerequisite: None

Year: 9th

Credit: 1 credit

Term: 2 semesters

NCAA √

Honors English I

Course #2102

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. A variety of oral communication experiences are taught throughout the course. **Attendance at the summer Pre-AP camp is mandatory for placement in this course.**

Prerequisite: 9th grade standing and selected criteria

Year: 9th

Credit: 1 credit

Term: 2 semesters

NCAA √

Adv. English II

Course #2201

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

Year: 10th

Credit: 1 credit

Term: 2 semesters

NCAA √

ENGLISH DEPARTMENT (cont.)

Honors English II

Course #2202

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. 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. **Attendance at the summer Pre-AP camp is mandatory for placement in this course.**

Prerequisite: Honors English I and/or
Teacher Recommendation

Credit: 1 credit

Term: 2 semesters

Year: 10th

NCAA √

Adv. Composition III

Course #2319

This required course prepares students to write frequently and publish works intended for a wide variety of audiences. The modes of writing will include academic pieces such as college essays, analysis pieces, argumentative and critical responses, and supporting career research and analysis. These writing experiences will allow for opportunities to develop vocabulary, strengthen the writing and publishing process and employ critical thinking skills for a variety of writing purposes. Students will develop strong writing skills that will serve them in college or career paths in the 21st century.

Prerequisite: Adv. English I, II

Credit: .5 credit

Year: 11th

Term: 1 semester

NCAA √

Adv. African American Literature

Course #2311

This course is one of the ½ credit options to fulfill the literature requirement. Students will engage in close reading, writing, textual citation, critical discussion, and careful analysis of literature produced by African American writers and African-centered literature from the 1750s through today. Each major work is studied critically in its historical, social, philosophical, biographical, and canonical contexts, in relation to developing a cultural identity. The literary works provide opportunities for critical writing, creative projects, and discussions. Students develop vocabulary usage and critical thinking skills through close reading of seminal American literature texts by African American writers.

Prerequisite: English I, II

Credit: .5 credit

Year: 11th, 12th

Term: 1 semester

NCAA √

ENGLISH DEPARTMENT (cont.)

Adv. American Literature

Course #2312

This course is one of the ½ credit options to fulfill the literature requirement. In this course, students read and analyze works of American literature from Colonial to contemporary times, including poetry, short stories, novels, drama, and nonfiction. Students will develop a strong understanding of the progression of American authors through study of these texts. The literary works provide opportunities for critical writing, creative projects, and discussions. Students develop vocabulary usage and critical thinking skills through close reading of seminal American literature texts.

Prerequisite: English I, II

Year: 11th, 12th

Credit: .5 credit

Term: 1 semester

NCAA √

Adv. American Short Stories, Drama and Poetry

Course #2313

This course is one of the ½ credit options to fulfill the literature requirement. This course will study a wide variety of short stories, plays and a number of poetic forms. Students will gain insight in analysis of literature by studying form (diction, tone, figures of speech, and rhythm) and will complete author, poet and playwright studies. The literary works provide opportunities for critical writing, creative projects, and discussions. Students develop vocabulary usage and critical thinking skills through close reading of historical and modern selections

Prerequisite: English I, II

Year: 11th, 12th

Credit: .5 credit

Term: 1 semester

NCAA √

Adv. Genre Fiction

Course #2411

This course is one of the ½ credit options to fulfill the literature requirement. The course will focus on gothic, fantasy, and science fiction as genres melding literary art, scientific and philosophical speculation. It will survey the history of the genre and then delve into representative themes, rhetoric, and methods of storytelling in texts and other media. In addition, we'll examine the composition of this genre of texts from a writer's standpoint. The literary works provide opportunities for critical writing, creative projects, and discussions. Students develop vocabulary usage and critical thinking skills through close reading of historical and modern selections.

Prerequisite: English I, II

Year: 11th, 12th

Credit: .5 credit

Term: 1 semester

NCAA √

ENGLISH DEPARTMENT (cont.)

Adv. Literary Non-fiction

Course #2412

This course is one of the ½ credit options to fulfill the literature requirement. This course focuses on literary nonfiction—a kind of writing influenced by fiction, magazine journalism, memoir, and personal essay. Students will explore the various forms of creative non-fiction such as the literary memoir and the personal essay as well as newer online forms of the genre. Students learn about the creative possibilities in the blending of fact and fiction that occurs in literary nonfiction. They will study the techniques that turn facts into compelling stories. The literary works provide opportunities for critical writing, creative projects, and discussions. Students develop vocabulary usage and critical thinking skills through close reading of historical and modern selections.

Prerequisite: English I, II

Year: 11th, 12th

Credit: .5 credit

Term: 1 semester

NCAA √

Adv. World Literature

Course #2413

This course is one of the ½ credit options to fulfill the literature requirement. This course is a comparative study of literary and informational selections from Africa, the Middle East, Asia, Europe, and the Americas, while highlighting British authors and poets, in their historical, social, philosophical, biographical, and canonical contexts. By studying the world and time from which the literature came, examining the author's life, and placing works within literary movements from around the world, students will become more aware of the relationship of the individual to humanity and literature as a reflection of culture. The literary works provide opportunities for critical writing, creative projects, and discussions. Students develop vocabulary usage and critical thinking skills through close reading of historical and modern selections.

Prerequisite: English I, II

Year: 11th, 12th

Credit: .5 credit

Term: 1 semester

NCAA √

Adv. Composition IV

Course #2419

This required course is a continuation of the writing instruction in Adv. Composition III. Writing experiences in this course will prepare students for college or career paths in the 21st century and require critical thinking skills. The modes of writing will include academic pieces such as college essays, literary analysis pieces, argumentative and critical responses, and supporting career research and analysis. These writing experiences will allow for opportunities to develop vocabulary, strengthen the writing and publishing process and employ critical thinking skills for a variety of writing purposes. Students will develop strong writing skills that will serve them in college or career paths in the 21st century.

Prerequisite: Adv. English I, II, Composition III

Year: 12th

Credit: .5 credit

Term: 1 semesters

NCAA √

ENGLISH DEPARTMENT (cont.)

Honors English III

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. Depth of materials and pace of instruction will be tailored to meet the increasing independence and sophistication of the academically advanced junior student. **Course requirements may include summer reading and assignments, a personal narrative applicable for college entrance requirements, a successfully completed writing portfolio and compositions utilizing critical analysis.**

This course is offered on the CHS campus.

Prerequisite: Honors English II, Teacher Recommendation

Year: 11th

Credit: 1 credit

Term: 2 semesters

NCAA √

Honors English IV

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 Honors English III. 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. Written resumes, along with a cover letter, are required components of the successfully completed Career Passport. **Summer readings and a completed writing portfolio may be required components of the course.**

This course is offered on the CHS campus.

Prerequisite: Honors English III, Teacher Recommendation

Year: 11th

Credit: 1 credit

Term: 2 semesters

NCAA √

ENGLISH DEPARTMENT (cont.)

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 required to take the Advanced Placement exam in the spring. **Summer readings and a completed writing portfolio may be required components of the course.**

Prerequisite: Honors English II, Teacher Recommendation

Year: 11th, 12th

Credit: 1 credit

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 work 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. All students who request acceptance in this class are required to take the Advanced Placement exam in the spring. **Summer readings and a completed writing portfolio may be required components of the course.**

Prerequisite: Honors English III/AP Language & Composition

Year: 12th

Credit: 1 credit

Term: 2 semesters

NCAA √

ENGLISH DEPARTMENT (cont.)

Adv. Newcomer English A

Course #2510

This semester-long course is designed for emergent English learners to earn half an English credit for graduation. This course focuses on building up a foundation for listening, speaking, reading, and writing in the English language through instruction of Language Arts concepts. Students will develop strong reading and writing skills that will serve them in future English courses and in college. EL students will learn to express themselves in argumentative and critical response writing, as well as, analyze literature and nonfiction through short stories, novels, poetry and contemporary articles.

Prerequisite: Teacher Recommendation

Credit: 0.5 credit

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

Term: 1 semester

Adv. Newcomer English B

Course #2511

This semester-long course is designed for emergent English learners to earn half an English credit for graduation. This course focuses on building up a foundation for listening, speaking, reading, and writing in the English language through instruction of Language Arts concepts. Students will develop strong reading and writing skills that will serve them in future English courses and in college. EL students will learn to express themselves in argumentative and critical response writing, as well as, analyze literature and nonfiction through short stories, novels, poetry and contemporary articles.

Prerequisite: Teacher Recommendation

Credit: 0.5 credit

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

Term: 1 semester

Adv. Newcomer English C

Course #2512

This semester-long course is designed for emergent English learners to earn half an English credit for graduation. This course focuses on building up a foundation for listening, speaking, reading, and writing in the English language through instruction of Language Arts concepts. Students will develop strong reading and writing skills that will serve them in future English courses and in college. EL students will learn to express themselves in argumentative and critical response writing, as well as, analyze literature and nonfiction through short stories, novels, poetry and contemporary articles.

Prerequisite: Teacher Recommendation

Credit: 0.5 credit

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

Term: 1 semester

ENGLISH DEPARTMENT (cont.)

Adv. Newcomer English D

Course #2513

This semester-long course is designed for emergent English learners to earn half an English credit for graduation. This course focuses on building up a foundation for listening, speaking, reading, and writing in the English language through instruction of Language Arts concepts. Students will develop strong reading and writing skills that will serve them in future English courses and in college. EL students will learn to express themselves in argumentative and critical response writing, as well as, analyze literature and nonfiction through short stories, novels, poetry and contemporary articles.

Prerequisite: Teacher Recommendation

Credit: 0.5 credit

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

Term: 1 semester

ENGLISH DEPARTMENT INTERVENTION COURSES

ESL I

Course #2501

This course is intended for newcomers to the English language. ESL I focuses on developing the initial skills of the English language in the areas of: speaking, reading, writing, and listening. Topics covered in this course include: Tier 1 vocabulary in English, basic sentence structures, and formation of Wh- questions. ESL I is aligned with Ohio's English Language Proficiency standards. This course emphasizes guided language practice and the gradual release of responsibility (I do it, you do it, we do it) in order to effectively communicate.

This is an intervention course and is intended to be taken in addition to another core English course.

Prerequisite: Teacher Recommendation

Credit: 1 credit

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

Term: 2 semesters

ESL II

Course #2502

This course is intended for beginners and advanced beginners to the English language. ESL II focuses on further developing core vocabulary and usage of the English language in the areas of: speaking, reading, writing, and listening. Topics covered in this course include: Tier 1 vocabulary in English, basic sentence structures, formation of Wh- questions and reading comprehension. ESL II is aligned with Ohio's English Language Proficiency standards. This course emphasizes guided language practice and the gradual release of responsibility (I do it, you do it, we do it) in order to effectively communicate.

This is an intervention course and is intended to be taken in addition to another core English course.

Prerequisite: Teacher Recommendation

Credit: 1 credit

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

Term: 2 semesters

ENGLISH DEPARTMENT (cont.)

INTERVENTION COURSES

ESL III

Course #2503

This course is intended for lower progressing to middle progressing students in the English language. ESL III focuses on further developing academic vocabulary and usage of the English language in the areas of: speaking, reading, writing, and listening. Topics covered in this course include: Tier 2 vocabulary in English, complex sentence structures, oral presentations and complex literary and informational text comprehension. ESL III is aligned with Ohio's English Language Proficiency standards. This course emphasizes guided language practice and the gradual release of responsibility (I do it, you do it, we do it) in order to effectively communicate. **This is an intervention course and is intended to be taken in addition to another core English course.**

Prerequisite: Teacher Recommendation

Credit: 1 credit

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

Term: 2 semesters

ESL IV

Course #2504

This course is intended for upper progressing students in the English language with the goal of exiting the EL program. ESL V focuses on further developing and perfecting academic vocabulary and usage of the English language in the areas of: speaking, reading, writing, and listening. Topics covered in this course include: Tier 2 and 3 vocabulary in English, complex sentence structures, oral presentations and complex literary and informational text comprehension. ESL V is aligned with Ohio's English Language Proficiency standards. This course emphasizes guided language practice and the gradual release of responsibility (I do it, you do it, we do it) in order to effectively communicate.

This is an intervention course and is intended to be taken in addition to another core English course.

Prerequisite: Teacher Recommendation

Credit: 1 credit

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

Term: 2 semesters

ESL V

Course #2505

This course is intended for upper progressing students in the English language with the goal of exiting the EL program. ESL V focuses on further developing and perfecting academic vocabulary and usage of the English language in the areas of: speaking, reading, writing, and listening. Topics covered in this course include: Tier 2 and 3 vocabulary in English, complex sentence structures, oral presentations and complex literary and informational text comprehension. ESL V is aligned with Ohio's English Language Proficiency standards. This course emphasizes guided language practice and the gradual release of responsibility (I do it, you do it, we do it) in order to effectively communicate.

This is an intervention course and is intended to be taken in addition to another core English course.

Prerequisite: Teacher Recommendation

Credit: 1 credit

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

Term: 2 semesters

ENGLISH DEPARTMENT (cont.)
ELECTIVE COURSES

Adv. Drama I

Course #2601

This course provides students experience 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.

Prerequisite: None

Credit: .5 credit

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

Term: 1 semester

Adv. Drama II

Course #2602

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. *This course will be offered on the CHS campus.*

Prerequisite: Drama I, Audition, & Teacher Recommendation

Credit: .5 credit

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

Term: 1 semester

Adv. Sports in Literature

Course #2603

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.

Prerequisite: None

Credit: .5 credit

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

Term: 1 semester

Adv. Creative Writing/Publishing I

Course #2604

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.

Prerequisite: Advanced or Honors English I

Credit: .5 credit

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

Term: 1 semester

NCAA √

ENGLISH DEPARTMENT (cont.)
ELECTIVE COURSES

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: English I
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

The State of Ohio requires students to earn a minimum of 4 Mathematics credits for graduation. Students are required to take End of Course Exams after completion of Adv. Algebra I and Adv./Hon. Geometry.

Adv. Algebra I

Course #3101

This required freshman course focuses on 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 can be obtained using the Desmos website or app on the district provided Chromebook. This course is aligned with a required State End of Course Exam which counts toward a student's cumulative graduation points.

Prerequisite: None

Year: 9th

Credit: 1 credit

Term: 2 semesters

NCAA √

Adv. Algebra IA

Course #3102

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 can be obtained using the Desmos website or app on the district provided Chromebook.

This class is offered on the CHS campus.

Prerequisite: None

Year: 9th

Credit: 1 credit

Term: 2 semesters

NCAA √

Adv. Algebra IB

Course #3103

This course provides experiences in beginning algebra topics. Students will continue the work started in Algebra I A, and have in depth experience 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 can be obtained using the Desmos website or app on the district provided Chromebook. This course is aligned with a required State End of Course Exam which counts toward a student's cumulative graduation points.

This class is offered on the CHS campus.

Prerequisite: Adv. Algebra IA

Year: 10th

Credit: 1 credit

Term: 2 semesters

NCAA √

MATHEMATICS DEPARTMENT (cont.)

Adv. Geometry

Course #3201

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 their everyday lives. Topics include geometry from an algebraic and synthetic viewpoint, 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 can be obtained using the Desmos website or app on the district provided Chromebook. This course is aligned with a required State End of Course Exam.

Prerequisite: Adv. Algebra I

Year: 10th, 11th

Credit: 1 credit

Term: 2 semesters

NCAA √

Honors Geometry

Course #3202

This course provides contextual math experiences in geometry while continuing and extending algebraic concepts focusing expansion of topics 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, probability, and discrete mathematics. Technology Integration is essential in this class and can be obtained using the Desmos website or app on the district provided Chromebook. This course is aligned with a required State End of Course Exam.

Prerequisite: Adv. Algebra I & Teacher Recommendation

Year: 9th, 10th

Credit: 1 credit

Term: 2 semesters

NCAA √

Adv./Honors Algebra II

Course #3301 Adv

Course #3304 Honors

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.

Prerequisite: Adv. Geometry or Honors Geometry

Year: 10th, 11th, 12th

Credit: 1 credit

Term: 2 semesters

NCAA √

MATHEMATICS DEPARTMENT (cont.)

Adv. Mathematics Modeling and Reasoning

Course #3409

This elective course is intended for students who are not intending to pursue a pathway requiring calculus. This course is designed to promote reasoning, problem-solving and modeling through thematic units focused on mathematical practices while reinforcing and extending content in Number and Quantity, Algebra, Functions, Statistics and Probability, and Geometry. It is a year-long course taught using student-centered pedagogy. *This course satisfies the Algebra 2 graduation requirement.*

Prerequisite: Geometry (Adv. or Honors)

Year: 11th, 12th

Credit: 1 credit

Term: 2 semesters

NCAA ✓

Adv. Data Science Foundations

Course # 3411

Pending ODE Approval

In today's society, data is all around you. Whether you go online or to the supermarket, data about you is continuously being collected and used to make decisions. Data Science Foundations will teach you how to collect, analyze and make decisions using data. You will build graphical and statistical models to describe and communicate data using your newly acquired computer programming skills. This course is perfect for beginners! Note: The big difference between data science and statistics is that statistics focuses on explaining the data, while data science focuses on uncovering insights that help make predictions and decisions. *This course satisfies the Algebra 2 graduation requirement.*

Prerequisite: Geometry (Adv. or Honors)

Year: 11th, 12th

Credit: 1 credit

Term: 2 semesters

NCAA pending

Adv. Discrete Math/Computer Science

Course # 3412

Pending ODE Approval

Are you interested in exploring the skills needed for a technology-based field? Then Discrete Math/Computer Science might be for you. This course builds upon concepts in algebra, geometry and probability and shows how these ideas apply to a digital world. Through hands-on computer programming, you will actively engage with discrete math. Discrete math is the study of "counting" problems, examples include the number of unique handshakes in a room full of people, the way viruses spread from contact to contact and the optimum strategies for board games. Discrete math is the language of computer science. This course is perfect for beginners. No prior programming experience is necessary.

This course satisfies the Algebra 2 graduation requirement.

Prerequisite: Geometry (Adv. or Honors)

Year: 11th, 12th

Credit: 1 credit

Term: 2 semesters

NCAA pending

MATHEMATICS DEPARTMENT (cont.)

Adv. College Algebra

Course #3408

This course is designed for students who have passed Algebra II and are planning to continue their education beyond high school but may not quite be prepared for an Advanced Pre-Calculus course. Topics discussed in this class will be divided into three categories: Pre-Calculus, Trigonometry, and Probability & Statistics. Successful completion of this course prepares students for entry-level college mathematics courses.

Prerequisite: Algebra II

Year: 11th, 12th

Credit: 1 credit

Term: 2 semesters

NCAA √

Adv. Pre-Calculus

Course #3401

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

Year: 11th, 12th

Credit: 1 credit

Term: 2 semesters

NCAA √

Honors Pre-Calculus

Course #3402

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

Year: 11th, 12th

Credit: 1 credit

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

Year: 11th, 12th

Credit: 1 credit

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 this class are required 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

Year: 12th

Credit: 1 credit

Term: 2 semesters

NCAA √

Adv. Statistics

Course #3407

This course is designed to give students a basic understanding of 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. Technology integration is essential in this class and a **graphing calculator will be required**.

Prerequisite: Data Sciences or Algebra II

Year: 11th, 12th

Credit: 1 credit

Term: 2 semesters

NCAA √

MATHEMATICS DEPARTMENT (cont.)

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 this class are required to take the Advanced Placement exam in the spring. Technology integration is essential in this class and a **graphing calculator will be required**.

Prerequisite: Data Sciences, Statistics or
Algebra II & Teacher Recommendation
Year: 11th, 12th

Credit: 1 credit
Term: 2 semesters
NCAA √

SCIENCE DEPARTMENT

The State of Ohio requires students to earn a minimum of 3 science credits for graduation including one credit in biological science and one credit in physical science. Students are required to take an End of Course Exam after completion of the Biology course. Each course in this section has a notation as to whether it is offered for biological or physical science credit.

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. **This course meets the graduation requirements for a unit of physical science.**

Prerequisite: None

Year: 9th

Credit: 1 credit

Term: 2 semesters

NCAA √

Hon. Physical Science

Course #4102

This honors level 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. **This course meets the graduation requirements for a unit of physical science.**

This class is offered on the NWHS campus.

Prerequisite: Concurrent enrollment in Honors Biology,
Honors Geometry and Teacher Recommendation
based on student data

Year: 9th

Credit: 1 credit

Term: 2 semesters

NCAA √

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. **This course meets the graduation requirements for a unit of biological science.**

Prerequisite: Adv. Physical Science

Year: 10th

Credit: 1 credit

Term: 2 semesters

NCAA √

SCIENCE DEPARTMENT (cont.)

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. This course meets the graduation requirements for a unit of biological science.

Prerequisite: Adv. Physical Science with a "B"
or Honors Physical Science with a "C" or
better and/or Teacher Recommendation

Credit: 1 credit
Term: 2 semesters
NCAA √

Year: 9th, 10th

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, lectures, and discussions. This course is designed for students planning to enter a four-year college. This course meets the graduation requirements for a unit of physical science.

Prerequisite: Completion with a "C" or higher of/or
concurrent with Adv. Algebra II.
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

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 deeper analysis of topics and assessment. This course meets the graduation requirements for a unit of physical science.

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

SCIENCE DEPARTMENT (cont.)

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 required to take the Advanced Placement exam in the spring. This course meets the graduation requirements for a unit of physical science.

Prerequisite: Completion of Adv./Honors Chemistry and Algebra II, with a “B” or better, and Teacher Recommendation

Credit: 1 credit
Term: 2 semesters
NCAA √

Year: 11th, 12th

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 required to take the Advanced Placement exam in the spring. This course meets the graduation requirements for a unit of biological science.

Prerequisite: Honors Biology, Honors Chemistry, and completion of a biology elective is recommended (e.g., Anatomy/Physiology, Genetics)

Credit: 1 credit
Term: 2 semesters
NCAA √

Year: 11th, 12th

SCIENCE DEPARTMENT (cont.)

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. This course meets the graduation requirements for a unit of physical science.

Prerequisite: Adv./Honors Algebra II (or co-requisite)

Year: 11th, 12th

Credit: 1 credit

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. All students who request acceptance in this class are required to take the Advanced Placement exam in the spring. This course meets the graduation requirements for a unit of physical science.

Prerequisite: Completion of Adv. /Honors Chemistry and Adv. Pre-Calculus, with a “B” or better, or concurrent enrollment in Honors Pre-Calculus, with a “B” or better and Teacher Recommendation

Year: 11th, 12th

Credit: 1 credit

Term: 2 semesters

NCAA √

SCIENCE DEPARTMENT ELECTIVE COURSES

Adv. Ecology

Course #4300

This elective science 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.

Prerequisite: Adv. Physical Science & Adv. Biology

Year: 11th, 12th

Credit: .5 credit

Term: 1 semester

NCAA √

Adv. Zoology

Course #4304

This elective 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 a “B” or better, and
Teacher Recommendation

Year: 11th, 12th

Credit: 1 credit

Term: 2 semesters

NCAA √

Honors Zoology

Course #4305

This elective science 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 better, and
Teacher Recommendation

Year: 11th, 12th

Credit: 1 credit

Term: 2 semesters

NCAA √

Adv. Geology

Course #4402

This elective science 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, geologic time periods, and map reading.

Prerequisite: Adv. Physical Science and Adv. Biology

Year: 11th, 12th

Credit: .5 credit

Term: 1 semester

NCAA √

SCIENCE DEPARTMENT ELECTIVE COURSES (cont.)

Adv. Animal Care and Conservation

Course #4400

This elective science course 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.

Prerequisite: Adv. Physical Science and Adv. Biology

Credit: .5 credit

Year: 11th, 12th

Term: 1 semester

Adv. Astronomy

Course #4401

This elective science 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.

Prerequisite: Adv. Physical Science and Adv. Biology

Credit: .5 credit

Year: 11th, 12th

Term: 1 semester

NCAA √

Adv. Anatomy & Physiology

Course #4406

This elective science 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 a medical doctor, nurse, or physical therapist. Activities include examinations of various types with microscopes, analysis of various physiologic concepts, and a study of the anatomical structures.

Prerequisite: Adv./Honors Biology, with “B” or better
and Teacher Recommendation

Credit: 1 credit

Year: 11th, 12th

Term: 2 semesters

NCAA √

Honors Anatomy and Physiology

Course #4407

This elective science 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 a medical doctor, nurse, and physical therapist. Activities include examinations of various types with microscopes, analysis of various physiologic concepts, and a **thorough** study of the anatomical structures.

Prerequisite: Honors Biology, with “B” or better, and
Teacher Recommendation

Credit: 1 credit

Year: 11th, 12th

Term: 2 semesters

NCAA √

SCIENCE DEPARTMENT ELECTIVE COURSES (cont.)

Adv. Genetics

Course #4408

This elective science 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 a “B” or better,
and Teacher Recommendation

Credit: 1 credit

Term: 2 semesters

Year: 11th, 12th

NCAA √

Honors Genetics

Course #4409

This elective science 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 a “B” or better,
and Teacher Recommendation

Credit: 1 credit

Term: 2 semesters

Year: 11th, 12th

NCAA √

Adv. Forensic Science 1

Course #4411

Advanced Forensic Science is an advanced high school elective targeted for students interested in the application of math and science (physical science, earth science, biology, chemistry and physics) and hands-on experiences in various aspects of criminal investigation. This includes, but is not limited to, the investigation of a crime scene, fingerprinting, arson, trace evidence analysis, forensic anthropology (bones), tool marks and DNA analysis. Students in Advanced Forensic Science 1 will be taught the proper collection, preservation, documentation and laboratory analysis techniques for various sample types.

Prerequisite: Algebra 1, Geometry, and Biology

Credit: .5 credit

Year: 10th, 11th, 12th

Term: 1 semester

NCAA √

SCIENCE DEPARTMENT (cont.)
ELECTIVE COURSES

Adv. Forensic Science 2

Course #4412

Advanced Forensic Science is an advanced high school elective targeted for students interested in the application of math and science (physical science, earth science, biology, chemistry and physics) and hands-on experiences in various aspects of criminal investigation. This includes, but is not limited to, the investigation of hair and fiber analysis, ballistics, drugs and toxicology, blood spatters and blood samples. Students in Advanced Forensic Science 2 will be taught the proper collection, preservation, documentation and laboratory analysis techniques for various samples.

Prerequisite: Algebra 1, Geometry, Biology,
Year: 10th, 11th, 12th

Credit: .5 credit
Term: 1 semester
NCAA √

SOCIAL STUDIES DEPARTMENT

The State of Ohio requires students to earn a minimum of 3 Social Studies units for graduation (World History or its equivalent, American History, American Government). Students are required to take End of Course Exams after completion of American History and American Government. 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.

Adv. Modern World History

Course #5101

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 for success on future Ohio End of Course assessments in American History and American Government.

Prerequisite: None

Year: 9th

Credit: 1 credit

Term: 2 semesters

NCAA √

Honors Modern World History

Course #5102

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 for success on future Ohio End of Course assessments in American History and American Government. *This course is offered on the CHS campus.*

Prerequisite: Teacher Recommendation

Year: 9th

Credit: 1 credit

Term: 2 semesters

NCAA √

SOCIAL STUDIES DEPARTMENT (cont.)

AP World History

Course # 5119

AP World History is designed to be the equivalent of a two semester introductory college or university world history course. In AP World History students investigate significant events, individuals, developments, and processes in six historical periods from approximately 8000 B.C.E. to the present. Students develop and use the same skills, practices and methods employed by historians; analyzing primary and secondary sources; making historical comparisons; utilizing reasoning about contextualization, causation and continuity and change over time; and developing historical arguments. All students who request acceptance in this class are required to take the Advanced Placement exam in the spring. This course meets the graduation requirement for World History. **Attendance at the summer Pre-AP camp is mandatory for placement in this course.** *This class is offered on the NWHS campus.*

Prerequisite: Teacher Recommendation

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

Credit: 1 credit

Term: 2 semesters

NCAA √

AP Human Geography

Course # 5120

AP Human Geography is a course to introduce students to the systematic study of the patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students learn to employ spatial concepts and landscape analysis to examine human socioeconomic organization and its environmental consequences. All students who request acceptance in this class are required to take the Advanced Placement exam in the spring. This course meets the graduation requirement for World History. **Attendance at the summer Pre-AP camp is mandatory for placement in this course.** *This class is offered on the CHS campus.*

Prerequisite: Teacher Recommendation

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

Credit: 1 credit

Term: 2 semesters

NCAA √

Adv. American History

Course #5201

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 include industrialization, World Wars, the Great Depression, the 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 for success on the Ohio End of Course assessment 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. Modern World History

Year: 10th

Credit: 1 credit

Term: 2 semesters

NCAA √

SOCIAL STUDIES DEPARTMENT (cont.)

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, the 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 for success on the Ohio End of Course assessment in American History. This course is aligned with a required State End of Course Exam which counts toward a student's cumulative graduation points.

This class is offered on the CHS campus.

Prerequisite: Adv./Honors Modern World History

Year: 10th

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 request acceptance in this class are required to take the Advanced Placement 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

Term: 2 semesters

NCAA √

SOCIAL STUDIES DEPARTMENT (cont.)

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, the structure and function of the federal government, the role of the people, state and local governments, public policy and the economy. A unit on financial literacy is embedded within this course. Attention is given to developing student's critical thinking skills including interpreting maps, charts and other statistical information. These skills will be important for success on the Ohio End of Course assessment 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 American History or
AP U.S. History

Year: 11th

Credit: 1 credit

Term: 2 semesters

NCAA √

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, the role of the people, state and local governments, public policy and the economy. A unit on financial literacy is embedded within this course. Attention is given to developing student's critical thinking skills including interpreting maps, charts and other statistical information. These skills will be important for success on the Ohio End of Course assessment 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 and
American History

Year: 11th

Credit: 1 credit

Term: 2 semesters

NCAA √

SOCIAL STUDIES DEPARTMENT (cont.)

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. Financial literacy content is embedded within this course. Students learn to apply disciplinary reasoning, assess the 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 request acceptance into this class are required to take the Advanced Placement exam in the spring.

Prerequisite: Teacher Recommendation

Year: 11th

Credit: 1 credit

Term: 2 semesters

NCAA √

SOCIAL STUDIES DEPARTMENT ELECTIVE COURSES

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: Completed or Concurrent enrollment
in American History

Year: 10th, 11th, 12th

Credit: .5 credit

Term: 1 semester

NCAA √

Adv. Modern American 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: Completed or Concurrent enrollment
in American History

Year: 10th, 11th, 12th

Credit: .5 credit

Term: 1 semester

NCAA √

SOCIAL STUDIES DEPARTMENT (cont.)
ELECTIVE COURSES

Adv. Psychology

Course #5411

This elective course focuses on 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.

Prerequisite: Adv./Honors American History
Year: 11th, 12th

Credit: .5 credit
Term: 1 semester
NCAA √

Adv. Sociology

Course #5410

This elective course focuses on the study of group behavior. 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. Sociology topics include socialization, cultural development, social change, and gender roles.

Prerequisite: Completed or Concurrent enrollment
in American History
Year: 10th, 11th, 12th

Credit: .5 credit
Term: 1 semester
NCAA √

Adv. Economics

Course #5405

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 States government in the economy, and discuss the issues and challenges that face the American and global economies in the 21st century.

Prerequisite: Completed or Concurrent enrollment
in American History
Year: 10th, 11th, 12th

Credit: .5 credit
Term: 1 semester
NCAA √

SOCIAL STUDIES DEPARTMENT (cont.)

ELECTIVE COURSES

Adv. Women in American History

Course #5406

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, Latina 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.

Prerequisite: Completed or Concurrent enrollment
in American History

Year: 10th, 11th, 12th

Credit: .5 credit

Term: 1 semester

NCAA √

AP European History

Course #5407

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 principal 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 required to take the Advanced Placement exam in the spring.

Prerequisite: Teacher Recommendation

Year: 11th, 12th

Credit: 1 credit

Term: 2 semesters

NCAA √

AP Psychology

Course #5408

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 required to take the Advanced Placement exam in the spring.

Prerequisite: Teacher Recommendation

Year: 11th, 12th

Credit: 1 credit

Term: 2 semesters

NCAA √

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. All courses listed are weighted at the Advanced Level.

Eagle's Gate

Course #8888

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 online lessons and assessments, and is facilitated by a staff member who provides direct instruction and monitors completion of the online course(s). Academic course credit is awarded as earned.

Prerequisite: None

Credit: varies

Year: 10th, 11th, 12th

Term: 1 semester

Career Based Intervention (CBI)

Course #6002

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 online 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 the 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.

Prerequisite: 16 years of age, with recommendation from a counselor, teacher, or administrator

Credit: Up to 4 credits per year

Year: 10th, 11th, 12th

Term: 2 semesters

Career Based Intervention (CBI)

Course #6001

Related Online Academics - Butler Tech

**Students must be enrolled in CBI Co-Op #6002 to select this course.*

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

COLLEGE CREDIT PLUS

The following College Credit Plus (CCP) courses are offered at Colerain High School and/or Northwest High School when adequate student interest exists and when an approved teacher is available to instruct.

CINCINNATI STATE OFFERINGS

CCP English Composition I

Course # 6555

An introduction to college writing focusing on understanding the writing process. Topics include: identifying audiences; developing a strong thesis; providing sufficient evidence for claims; and writing essays with grammatical, mechanical, and stylistic correctness.

Cincinnati State Course Number ENG 101 (3 credits)

This class is offered on the CHS campus.

Prerequisite: Acceptance by Cincinnati State

Credit: 1 HS credit

CCP English Composition II

Course # 6556

A continuation of ENG 101. Topics include: critical reasoning; argumentation; the research process and the research paper; and reading, synthesizing, and responding critically to policy-driven research. Cincinnati State Course Number ENG 102 (3 college credits)

This class is offered on the CHS campus.

Prerequisite: Acceptance by Cincinnati State

Credit: 1 HS credit

CCP Democracy in Action: Making Your Vote Count

Course # 6558

An introduction to the role of citizens in a democracy. Topics include: the history of voting in the United States, participation in electoral processes, local and state government, and how voters can make changes in their community. Cincinnati State Course Number POL 100 (3 college credits)

This class is offered on the NWHS campus.

Prerequisite: Acceptance by Cincinnati State

Credit: 1 HS credit

CCP Beginning American Sign Language

Course # 6502

An introductory course on American Sign Language. Topics include: ASL vocabulary, Deaf culture, ASL grammatical features, and beginning ASL conversational comprehensive and expressive skills. Cincinnati State Course number ASL 101. (3 college credits)

This class is offered on the CHS campus.

Prerequisite: Acceptance by Cincinnati State

Credit: 1 HS credit

COLLEGE CREDIT PLUS (cont.)
CINCINNATI STATE OFFERINGS

CCP Introduction to American Government

Course # 6559

Study of the American political system at the national level. Topics include: democratic theory and principles, the Constitution, civil liberties, and citizen rights. Cincinnati State Course Number POL 101 (3 college credits)

Prerequisite: Acceptance by Cincinnati State

Credit: 1 HS credit

CCP History of Cincinnati

Course # 6560

A course on the political, social, economic, and cultural development of Cincinnati, from the city's founding to the present. Topics include: the German heritage, the role of a river city, industrialization, and the city's contributions to U.S. history and culture. Cincinnati State Course Number HST 140 (3 college credits)

This class is offered on the NWHs campus.

Prerequisite: Acceptance by Cincinnati State

Credit: 1 HS credit

CCP Introduction to Psychology

Course # 6561

A course on psychology as the scientific study of behavior and mental processes. Topics include: history, experimental psychology, clinical psychology, and human development. Cincinnati State Course Number PSY 110 (3 college credits)

Prerequisite: Acceptance by Cincinnati State

Credit: 1 HS credit

This class is offered on the CHS campus.

CCP Introduction to Education

Course # 6552

Introduction to Education is an introduction to the teaching profession. Topics include: purpose of schools in society; knowledge, dispositions, and performance required to be an effective teacher. Cincinnati State Course Number EDU 105 (3 college credits)

Prerequisite: Acceptance by Cincinnati State

Credit: 1 HS credit

CCP The Developing Child (online)

Course # 6553

The Developing Child is an online course on growth and development of children from birth through age eight. Topics include: characteristics and needs of children for physical, cognitive, language, social and emotional growth and development, and theories of early childhood education. Cincinnati State Course Number ECE 145 (3 college credits)

Prerequisite: Acceptance by Cincinnati State

Credit: 1 HS credit

COLLEGE CREDIT PLUS (cont.)

CCP Introduction to Physics

Course # 6501

A course on fundamentals of physics. Topics include: laboratory procedures, the controlled experiment, methods of measurement, data collection and analysis techniques, and interpreting experimental results. Cincinnati State Course number PHY 150 (3 college credits)

This class is offered on the CHS campus.

Prerequisite: Acceptance by Cincinnati State

Credit: 1 HS credit

CCP Pre Calculus

Course # 6500

A course on concepts and applications of pre-calculus. Topics include: review of linear, exponential, power, polynomial, and rational functions; trigonometric functions; trigonometry; vectors; complex numbers; and parametric equations. Students need a graphing calculator. Cincinnati State Course number MAT 135 (6 college credits)

This class is offered on the CHS campus.

Prerequisite: Acceptance by Cincinnati State

Credit: 1 HS credit

SINCLAIR COMMUNITY COLLEGE OFFERINGS

CCP English Composition I

Course # 6521

In English Composition I students learn reflective, analytical and argumentative writing strategies, incorporating sources and personal experience. Students will negotiate between public and private rhetorical situations and purposes to achieve academic literacy. They will write multiple drafts using a recursive writing process as they work toward fluency in style and mechanics. Sinclair Course Number ENG 1101 (3 credits)

This class is offered on the NWHS campus.

Prerequisite: Acceptance by Sinclair

Credit: 1 HS credit

CCP English Composition II

Course # 6522

In English Composition II students build on the skills in English Composition I, develop rhetorical literacy through research, critical reading and multigenre writing tasks. Through major and minor, cumulative and stand-alone assignments, students construct arguments and analyses, ethically incorporating academic sources while developing their own voices as writers and citizens. Sinclair Course Number ENG 1102 (3 college credits)

This class is offered on the NWHS campus.

Prerequisite: Acceptance by Sinclair

Credit: 1 HS credit

COLLEGE CREDIT PLUS (cont.)
SINCLAIR COMMUNITY COLLEGE OFFERINGS

CCP Introduction to Literature

Course # 6562

Introduction to Literature introduces students to the major literary genres of literature, including narrative fiction, poetry, and drama. Emphasis is placed on literary terminology and interpretation. Upon completion, students should be able to analyze and respond to literature. Students will effectively and ethically argue their interpretations of literary works using textual evidence and Modern Language Association (MLA) documentation. Sinclair Course Number LIT 2220 (3 college credits)

This class is offered on the NWHHS campus.

Prerequisite: Acceptance by Sinclair

Credit: 1 HS credit

CCP Pre-calculus

Course # 6524

In precalculus students will study polynomial, radical, rational, exponential and logarithmic functions and their graphs, roots of polynomial functions, rational and polynomial inequalities, conic sections, systems of linear equations, sequences and series. Trigonometric functions of angles, solving right and oblique triangles, trigonometric identities and equations, vectors, radian measure, graphs of trigonometric functions, inverse trigonometric functions and applications. Sinclair Course Number MAT 1580 (5 college credits)

This class is offered on the NWHHS campus.

Prerequisite: Acceptance by Sinclair

Credit: 1 HS credit

CCP Calculus and Analytic Geometry

Course # 6525

In precalculus and analytic geometry students will study Cartesian coordinate system, functions, limits and continuity of functions, the derivative and its applications, the integral and the Fundamental Theorem of Calculus. Derivatives and integrals involving piecewise, polynomial, rational, algebraic, exponential, logarithmic, trigonometric, inverse trigonometric and hyperbolic functions and their inverses Sinclair Course Number MAT 2270 (5 college credits)

This class is offered on the NWHHS campus.

Prerequisite: Acceptance by Sinclair

Credit: 1 HS credit

CCP United States History I

Course # 6536

In United States History I students will study the development of the people of the United States in political, social, economic, and cultural areas from pre-Columbian America through Reconstruction. Sinclair Course Number HIS 1101 (3 college credits)

This class is offered on the NWHHS campus.

Prerequisite: Acceptance by Sinclair

Credit: 1 HS credit

COLLEGE CREDIT PLUS (cont.)
SINCLAIR COMMUNITY COLLEGE OFFERINGS

CCP United States History II

Course # 6537

In United States History II students will study the development of the people of the United States in political, social, economic and cultural areas from Reconstruction to the present. Sinclair Course Number HIS 1102 (3 college credits)

This class is offered on the NWHS campus.

Prerequisite: Acceptance by Sinclair

Credit: 1 HS credit

CCP Western Civilization I

Course # 6538

Major trends in the development of Western culture, emphasizing political, economic, social and cultural achievements, from prehistory to the seventeenth century. Sinclair Course Number HIS 1111 (3 college credits)

This class is offered on the NWHS campus.

Prerequisite: Acceptance by Sinclair

Credit: 1 HS credit

CCP Western Civilization II

Course # 6539

Major trends in the development of Western culture, emphasizing political, economic, social and cultural achievements from the seventeenth century to the present. Sinclair Course Number HIS 1112 (3 college credits)

This class is offered on the NWHS campus.

Prerequisite: Acceptance by Sinclair

Credit: 1 HS credit

CCP General Chemistry I

Course # 6528

General chemistry I is a university-parallel course in chemistry for the science major. The first half of a comprehensive first-year survey of chemistry. Topics include the basics of matter, atoms and molecules, chemical reactions, bonding, molecular geometry and gases. Students registering for this course should have previously taken high school chemistry or equivalent. Sinclair Course Number CHE 1211/1251 (5 college credits)

This class is offered on the NWHS campus.

Prerequisite: Acceptance by Sinclair

Credit: 1 HS credit

CCP General Chemistry II

Course # 6529

General chemistry II is the second half of a university-parallel course in chemistry for the science or engineering major. Topics include states of matter, solutions, chemical reaction kinetics, chemical equilibrium, acid/base chemistry, electrochemistry and nuclear chemistry. Students registering for this course should have previously taken high school chemistry or equivalent. Sinclair Course Number CHE 1221/1261 (5 college credits)

This class is offered on the NWHS campus.

Prerequisite: Acceptance by Sinclair

Credit: 1 HS credit

COLLEGE CREDIT PLUS (cont.)
SINCLAIR COMMUNITY COLLEGE OFFERINGS

CCP Elementary French I

Course # 6544

Elementary French I is a foundation for gaining basic knowledge of French grammar, speaking, writing, reading and cultural knowledge Sinclair Course Number FRE 1101 (4 college credits)
This class is offered on the NWHS campus.

Prerequisite: Acceptance by Sinclair
Successful in French I, II

Credit: 1 HS credit

CCP Elementary French II

Course # 6545

Elementary French II is a continuation of French grammar skills, verbs in the future conditional and subjunctive tenses, speaking, writing, reading and cultural knowledge. Sinclair Course Number FRE 1102 (4 college credits)
This class is offered on the NWHS campus.

Prerequisite: Acceptance by Sinclair
Successful in Elementary French I/ FRE 1101

Credit: 1 HS credit

CCP Intermediate French I

Course # 6546

Intermediate French I reviews and extends basic principles through composition and conversation, stressing fluency. Work outside of class and/or in the language laboratory is required Sinclair Course Number FRE 2201 (3 college credits)
This class is offered on the NWHS campus.

Prerequisite: Acceptance by Sinclair
Successful in French 1101/2

Credit: 1 HS credit

CCP Intermediate French II

Course # 6547

Intermediate French II continues to review and extend basic principles through composition and conversation, stressing fluency. Work outside of class and/or in the language laboratory is required. Sinclair Course Number FRE 2202 (3 college credits)
This class is offered on the NWHS campus.

Prerequisite: Acceptance by Sinclair,
Successful in French 2201

Credit: 1 HS credit

COLLEGE CREDIT PLUS (cont.)
SINCLAIR COMMUNITY COLLEGE OFFERINGS

CCP Elementary Spanish I

Course # 6540

Elementary Spanish I is a foundation for understanding, speaking, reading and writing Spanish. Work outside of class and/or in the language laboratory is required. Sinclair Course Number SPA 1101 (4 college credits)

This class is offered on the NWHS campus.

Prerequisite: Acceptance by Sinclair
Successful in Spanish I, II

Credit: 1 HS credit

CCP Elementary Spanish II

Course # 6541

Elementary Spanish II is a continuation of the foundation for understanding, speaking, reading and writing Spanish. Work outside of class and/or in the language laboratory is required. Sinclair Course Number SPA 1102 (4 college credits)

This class is offered on the NWHS campus.

Prerequisite: Acceptance by Sinclair
Successful in Elementary Spanish I/ SPA 1101

Credit: 1 HS credit

CCP Intermediate Spanish I

Course # 6542

Intermediate Spanish I reviews and extends basic principles through composition and conversation, stressing fluency. Work outside of class and/or in the language laboratory is required. Sinclair Course Number SPA 2201 (3 college credits)

This class is offered on the NWHS campus.

Prerequisite: Acceptance by Sinclair
Successful in Spanish 1101/2

Credit: 1 HS credit

CCP Intermediate Spanish II

Course # 6543

Intermediate Spanish II reviews and extends basic principles through composition and conversation, stressing fluency. Work outside of class and/or in the language laboratory is required. Sinclair Course Number SPA 2202 (3 college credits)

This class is offered on the NWHS campus.

Prerequisite: Acceptance by Sinclair
Successful in Spanish 2201

Credit: 1 HS credit

COLLEGE CREDIT PLUS (cont.)

UNIVERSITY OF CINCINNATI OFFERINGS

CCPUC Intro to Education

Course#6564

This CCP course is designed to engage students in knowledge construction about, and critical analysis of, the historical development and structure of schooling and teaching in the United States. This introductory course explores the purposes, organization and outcomes of schooling from cultural studies, economic, ethical, historical, legal, philosophical and sociological perspectives. Candidates undertake critical inquiry into teaching as a profession at the state and national level and explore licensure requirements, teacher responsibilities and the accountability of public schools. The exploration of these topics and perspectives is paired with current experiences during a required 10-hour field experience in an instructor-approved diverse setting outside of class. This course was developed by the University of Cincinnati and is being taught through an Articulation Agreement. University of Cincinnati Course Number EDST 1001 (3 college credits)

This class is offered on both the CHS and NWHS campuses.

Prerequisite: Acceptance by UC
Year: 11th, 12th

Credit: 1 HS credit
Term: 2 semesters

Butler Tech Elective Offerings at Northwest & 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.

For descriptions of all the programs at the Butler Tech Campuses please visit <https://www.butlertech.org/teen-education/high-school-programs/> to get detailed descriptions of everything they offer.

Butler Tech Introductory Courses

FAMILY AND CONSUMER SCIENCE

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

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 organizations.

This class is offered on the NWHHS campus.

Prerequisite: None

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

Fee: \$25 (FCCLA)

Credit: .5 credit

Term: 1 semester

Possible Industry Credentials Earned: ServSafe

Butler Tech Introductory Courses

FAMILY AND CONSUMER SCIENCE (cont.)

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 organizations.

Prerequisite: Culinary Fundamentals

Credit: 1 credit

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

Term: 2 semesters

Fee: \$25 (FCCLA)

Possible Industry Credentials Earned: ServSafe

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 organizations.

Prerequisite: Culinary Fundamentals

Credit: 1 credit

Year: 10th, 11th, 12th

Term: 2 semesters

Fee: \$25 (FCCLA)

Possible Industry Credentials Earned: ServSafe

Career and College Readiness (Life after High School)

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 the topics of the course. Students will go on college visits and have guest speakers from colleges available. Students will have the opportunity to be involved in Family, Career and Community Leaders of America (FCCLA) state and national organizations.

Prerequisite: None

Credit: .5 credit

Year: 10th, 11th, 12th

Term: 1 semester

Fee: \$25 (FCCLA)

Butler Tech Introductory Courses

FAMILY AND CONSUMER SCIENCE (cont.)

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 organizations.

Prerequisite: None

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

Fee: \$25 (FCCLA)

Credit: .5 credit

Term: 1 semester

Intro to Interior Design

Course #6205

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 organizations.

This class is offered on the NWHHS campus.

Prerequisite: None

Year: 10th, 11th, 12th

Fee: \$25 (FCCLA)

Credit: 1 credit

Term: 2 semesters

Butler Tech Introductory Courses

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 provides an excellent preview of what is expected in the selected career field. In most cases, introductory courses are designed for 9th and 10th graders.

Exploring Career Pathways

Course #6341

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

Credit: .5 credit

Term: 1 semester

Intro to Financial Foundations

Course #6206

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.

This class is offered on the NWHS campus.

Prerequisite: None

Year: 9th, 10th

Fee: \$20 (BPA)

Credit: 1 credit

Term: 2 semesters

Butler Tech Introductory Courses

INTRODUCTION PATHWAY COURSES (cont.)

Intro to Construction Tech

Course #6207

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

This class is offered on the NWHs campus.

Prerequisite: None

Year: 9th, 10th

Fee: \$15 (Skills USA)

Credit: 1 credit

Term: 2 semesters

Intro to Media

Course #6208

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

This class is offered on the NWHs campus.

Prerequisite: None

Year: 9th, 10th (others considered if space available)

Fee: \$15 (Skills USA)

Credit: 1 credit

Term: 2 semesters

Intro to Nutrition and Wellness

Course #6209

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.

This class is offered on the NWHs campus.

Prerequisite: None

Year: 9th, 10th

Fee: \$35 (HOSA)

Credit: 1 credit

Term: 2 semesters

Butler Tech Introductory Courses

INTRODUCTION PATHWAY COURSES (cont.)

Intro to Healthcare Technologies

Course #6302

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.

This class is offered on the CHS campus.

Prerequisite: None

Credit: 1 credit

Year: 9th, 10th

Term: 2 semesters

Fee: \$35 (HOSA)

Intro to Manufacturing Engineering

Course #6304

This hands on, project based course is 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 on hand tools and machines such as: milling machines, band saw, etc. Projects include balloon cars, spaghetti bridges, egg-drop, straw and paper towers, washer game, CO2 dragster cars, 20 oz. water bottle rockets and 1/8 inch scaled houses to name a few. Safety will be stressed and quizzed on.

This class is offered on the CHS campus.

Prerequisite: None

Credit: 1 credit

Year: 9th, 10th

Term: 2 semesters

Fee: \$15 (TSA)

Intro to Programming and Software

Course #6305

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.

This class is offered on the CHS campus.

Prerequisite: None

Credit: 1 credit

Year: 9th, 10th

Term: 2 semesters

Fee: \$15 (BPA)

Butler Tech Introductory Courses

INTRODUCTION PATHWAY COURSES (cont.)

Intro to Criminal Justice

Course #6306

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.

This class is offered on the CHS campus.

Prerequisite: None

Credit: 1 credit

Year: 9th, 10th

Term: 2 semesters

Fee: \$15 (Skills USA)

Intro to Construction Technologies (Plan Reading)

Course #6207

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 blueprints, 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 Skills USA.

This class is offered on the CHS campus.

Prerequisite: None

Credit: 1 credit

Year: 9th, 10th

Term: 2 semesters

Fee: \$15 (TSA)

Butler Tech Introductory Courses

INTRODUCTION PATHWAY COURSES (cont.)

Intro to Remodeling and Carpentry

Course # 6232

Welcome to HGTV Colerain!!! This course will introduce to students the materials, methods, and equipment used in the 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.

This class is offered on the CHS campus.

Prerequisite: None

Credit: 1 credit

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

Term: 2 semesters

Fee: \$15 (TSA)

Intro to Engineering & Robotics

Course #6308

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.

This class is offered on the CHS campus.

Prerequisite: None

Credit: 1 credit

Year: 9th, 10th

Term: 2 semesters

Fee: None

Butler Tech Introductory Courses

INTRODUCTION PATHWAY COURSES (cont.)

Intro to Diesel Engine Technology

Course #6309

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 Skills USA.

*Students will be required to purchase appropriate safety equipment such as boots.

This class is offered on the CHS campus.

Prerequisite: None

Credit: 1 credit

Year: 9th, 10th

Term: 2 semesters

Fee: \$15 (Skills USA)
*cost based on purchase

Intro to Precision Machining

Course #6340

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.

This class is offered on the CHS campus.

Prerequisite: None

Credit: 1 credit

Year: 9th, 10th

Term: 2 semesters

Fee: \$15 (Skills USA)

Butler Tech Programs

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 an 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 coursed 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.

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? No, students will spend the entire day there.

Can I attend only one year? They are all 2 year programs.

How can I apply? Go 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.

Butler Tech Programs

Butler Tech Programs are designed to give students an opportunity to complete a rigorous career oriented curriculum in a selected field. Many Butler Tech programs lead to students earning an industry credential or certificate that can enhance both college and career opportunities.

Programs are typically 2-3 periods per day, during the junior and senior year, with classes offered at either the Colerain High School or Northwest High School Career Center. Students from both Colerain High School and Northwest High School can enroll in programs offered at either location. Students continue to take academic courses outside of their program through either CHS or NWHS and diplomas are issued from their home high school. **To apply to a Butler Tech Program, please visit: https://hsapplication.butlertech.org/users/sign_in**

Honors Financial Services Program

This college-prep program is 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! Students in this program can earn up to 12 semester hours through Cincinnati State (CCP) as well as industry credentials including Microsoft Certifications.

The Honors Financial Services Program is offered at the Northwest High School Career Center.

JUNIOR YEAR (Two Bells)

Hon. Strategic Entrepreneurship

**Course #6210 or
Course #6210CCP**

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 a brand, setting prices, promoting products, and managing customer relationships will be emphasized.

COLLEGE CREDIT: CCP 3 Semester Hours, Cincinnati State MGT 120 Entrepreneurship

Butler Tech Programs

Honors Financial Services Program (cont.) JUNIOR YEAR (cont.)

Hon. Financial Accounting

**Course #6211or
Course #6211CCP**

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.

COLLEGE CREDIT: CCP 3 Semester Hours, Cincinnati State ACC 101 Financial Accounting

Prerequisite: 2.5 GPA, Passed Algebra I with a C or better,
90% attendance rate

Credit: 2 Credits
Term: 2 semesters

Year: 11th

Fee: \$29 (BPA)

SENIOR YEAR (Two Bells)

Hon. Fundamentals of Financial Services

**Course #6212 or
Course #6212CCP**

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, Cincinnati State Fin - 100 Personal Finance

Butler Tech Programs

Honors Financial Services Program (cont.)

SENIOR YEAR (cont.)

Hon. Corporate Finance

**Course #6213 or
Course #6213CCP**

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.

COLLEGE CREDIT: CCP 3 Semester Hours, Cincinnati State Fin - 150 Business Finance

Prerequisite: Strategic Entrepreneurship

Year: 12th

Fee: \$29 (BPA)

Credit: 2 Credits

Term: 2 semesters

Business Program

The Butler Tech Business Program 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. Courses encourage students to become involved with business problems and concepts, which fosters enthusiasm and interest in the subject. Students utilize active learning strategies to solve business problems. Students in this program can earn up to 9 semester hours through Cincinnati State (CCP) as well as industry credentials including Microsoft Certifications.

The majority of business courses are offered at both Colerain High School and Northwest High School campuses in the Career Centers (unless otherwise noted).

Business Foundations

Course #6101

This is the first course that students will develop fundamental knowledge and skills in business. Students will obtain knowledge and skills in fundamental business activities. They will acquire knowledge of business processes, economics, business ownership and business relationships. Students will use technology to synthesize and share business information. Employability skills, leadership and communications and personal financial literacy will be addressed. Students will acquire an understanding of economic principles such as supply and demand, division of labor and competition. They will identify current trends, issues and conditions impacting business and determine the impact of the global environment on business operations. Innovation, technology, leadership and communications will also be addressed. Students will have the opportunity to participate in DECA or Business Professionals of America (BPA); business and marketing career tech student organizations.

Prerequisite: None

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

Fee: \$29 (BPA/DECA)

Credit: 1 credit

Term: 2 semesters

Butler Tech Programs

Business Program (cont.)

Marketing & Professional Sales

**Course #6102 or
Course #6102CCP**

This course introduces students to Marketing in business specifically digital, sports and entertainment, hospitality and tourism. Students will obtain fundamental knowledge and skills in marketing communications, marketing management, marketing research, merchandising, promotion and professional selling. They will acquire knowledge of marketing strategies, market identification techniques, employability skills, business ethics and law, economic principles and international business. Students will demonstrate sales processes and techniques used in a business-to-business environment. They will develop, grow, and maintain positive business relationships. Students will monitor trends and the business environment to determine the impact on their sales, customers, and competitors. Technology, leadership and communications will be incorporated in classroom activities. Students will have the opportunity to participate in DECA or Business Professionals of America (BPA); business and marketing career tech student organizations.

Prerequisite: Business Foundations

Year: 10th, 11th, 12th

Fee: \$29 (BPA/DECA)

Credit: 1 credit

Term: 2 semesters

COLLEGE CREDIT: CCP MKT 130 Professional and Technical Sales - 3 Semester Hours, Cincinnati State

Personal Financial Management

Course #6103

Students will develop knowledge and skills in personal financial management, including financial services, insurance, budgeting, credit cards and borrowing, earning power, paychecks and taxes, securities and investments (types of stocks, nature of bonds, mutual funds), retirement, consumerism, business law and ethics. Students will learn to analyze financial statements (income statements and balance sheets), and understand the purpose of accounting in a business. They will calculate cash needs using the time value of money and track, record and summarize a business's financial transactions. Technology, employability skills, leadership and communications will be emphasized. Students will have the opportunity to participate in DECA or Business Professionals of America (BPA); business and marketing career tech student organizations.

Prerequisite: Business Foundations

Year: 11th, 12th

Fee: \$29 (BPA/DECA)

Credit: 1 credit

Term: 2 semesters

Butler Tech Programs

Business Program (cont.)

Business Management

**Course # 6104 or
Course #6104CCP**

Students will plan, actualize, and run a small business. They will define their business's mission; develop the business's vision, goals and objectives; and create a business plan. Students will also develop a budget and recruit, interview, select, hire, and manage employees. They will examine legal and ethical issues associated with management as well as management functions, levels and types. Project management technology, tools and processes will also be emphasized. Students will have the opportunity to participate in DECA or Business Professionals of America (BPA); business and marketing career tech student organizations.

COLLEGE CREDIT: CCP 3 Semester Hours, Cincinnati State MGT - 101 Management

Prerequisite: Business Foundations

Credit: 1 credit

Year: 11th, 12th

Term: 2 semesters

Fee: \$29 (BPA/DECA)

Entrepreneurship

**Course # 6107 or
Course #6107CCP**

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 a brand, setting prices, promoting products, and managing customer relationships will be emphasized. Students will have the opportunity to participate in DECA or Business Professionals of America (BPA); business and marketing career tech student organizations.

COLLEGE CREDIT: CCP 3 Semester Hours, Cincinnati State MGT - 120 Entrepreneurship

Prerequisite: Business Foundations

Credit: 1 credit

Year: 11th, 12th

Term: 2 semesters

Fee: \$29 (BPA/DECA)

Butler Tech Programs

Business Program (cont.)

Business Co-op

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 business courses. Students will have the opportunity to participate in DECA or Business Professionals of America (BPA); business and marketing career tech student organizations.

Prerequisite: Must be currently enrolled in a Business course

Credit: 1-3 credits

Year: 11th, 12th

Term: 2 semesters

Fee: \$29 (BPA/DECA)

Medical Office I

Course # 6222

This course focuses on the development and use of a working medical vocabulary. Topics include medical terminology development, business relationships, compliance, and business practices. Students will use medical terminology for transcription, coding, and related medical management processes. Students will also focus on operation of a medical office and office-related skills. Students will participate in (DECA/BPA), Career Tech Student Organizations designed to prepare students for careers in business management, marketing, finance and office administration. This is a foundational course **for students interested in a medical field**

This class is offered on the NWHS campus.

Prerequisite: Junior Level; C+ in Bio and/or A/P,
2.5 GPA

Credit: 1 credit

Year: 11th, 12th

Term: 2 semesters

Fee: \$29 (BPA)

Butler Tech Programs

Business Program (cont.)

Medical Office II

Course # 6235

Students will carry out procedures used to manage people and information in medical offices. Students will code medical procedures in accordance with applicable guidelines as well as use technology to convert patient information to electronic medical records. They will also manage the insurance billing and collection process, utilize a patient scheduling and registration system, and develop a compliance program. Medical office safety and security will be emphasized. Students will participate in (DECA/BPA), Career Tech Student Organizations designed to prepare students for careers in business management, marketing, finance and office administration.

This class is offered on the NWHS campus.

Prerequisite: Business Medical Terminology

Year: 11th, 12th

Fee: \$29 (BPA/DECA)

Credit: 1 credit

Term: 2 semesters

Construction Management Program

Construction is a one-trillion-dollar industry in the U.S. and demand is quickly rising in this field. Construction workers are visionary thinkers who practice great self-control, give attention to detail and have high integrity. From everyday homes to skyscrapers, a career in Construction Management is full of opportunity to build our communities and serve those in the world around us. Industry credentials can be earned through the Construction Management Program, including NCCER CORE and NCCER Level 1.

This program is offered at the Northwest High School Career Center.

JUNIOR YEAR (Two Bells)

Construction-Core Sustainable Construction

Course #6214

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

Structural Systems

Course #6215

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: None

Credit: 2 credits

Term: 2 semesters

Year: 11th

Fee: \$100 for student tool kits, approximate depending on supplier and \$32 (Skills USA)

Butler Tech Programs

Construction Management Program (cont.) SENIOR YEAR (Three Bells)

Structural Coverings and Finishes

Course #6216

This course will address applications of interior and exterior finish work. Students will identify material properties and select appropriate applications. 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.

Remodeling and Renovation

Course #6217

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.

Construction Capstone

Course #6236

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

Prerequisite: Construction-Core Sustainable Construction

Credit: 3 Credits total

Year: 12th

Term: 2 semesters

Fee: \$32 (Skills USA)

Industry Credential: *NCCER Core and Level 1*

Digital Media Program

From social media advertising to big-budget movies, a career in Digital Media is full of opportunity to create and tell stories throughout the world. A successful Digital Media professional blends their creativity with technical skills. They pay close attention to detail and have an undeniable thirst for culture. Industry credentials can be earned through the Digital Media Program, including Adobe Software certifications.

This program is offered at the Northwest High School Career Center.

JUNIOR YEAR (Two Bells)

Recording Arts

Course #6218

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.

Video Production

Course #6219

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: None

Year: 11th

Fee: \$29 (BPA)

Credit: 2 Credits

Term: 2 semesters

SENIOR YEAR (Two Bells)

Entertainment Business

Course #6220

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.

Butler Tech Programs

Digital Media Program (cont.)

SENIOR YEAR (cont.)

Digital Cinema

Course #6221

Inspiration, technique and trends are the focus of this single-camera, cinema-style course. Students engage in creative storytelling through concept development, scriptwriting and storyboarding. They learn to achieve the look of film through lighting and camera technique as well as double-system audio capture. Legal and ethical aspects such as copyright and fair use guidelines are learned.

Prerequisite: Recording Arts

Year: 12th

Fee: \$29 (BPA)

Credit: 2 Credits

Term: 2 semesters

Sports Medicine Program

With a nationwide growing emphasis on the importance of taking care of our health, the field of sports medicine is ever expanding. New technological developments, including activity trackers and smart watches along with new medical innovations, have enhanced the landscape for sports medicine and science professionals. Students in this program can earn up to 12 semester hours through Sinclair Community College (CCP) as well as industry credentials including Physical Therapy Aide.

This program is offered at the Northwest High School Career Center.

JUNIOR YEAR (Two Bells)

Sports Exercise Psychology

Course # 6237

Students apply practical and theoretical information as it relates to the psychology of sport. Students analyze the reciprocal relations among physical activity, exercise behavior, and biochemical and physiological adaptation. Topics include theories of behavior change, exercise psychology interventions, and the relationship between exercise and mental health. Further, students will identify psychosocial determinants and effects associated with adopting and maintaining an exercise program and develop strategies for promoting optimal performance in athletes.

Athletic Injuries and Prevention

Course #6223

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: None

Credit: 2 Credits

Term: 2 semesters

Year: 11th

Fee: \$35 (HOSA)

Butler Tech Programs

Sports Medicine Program (cont.) SENIOR YEAR (Two Bells)

Fitness Evaluation and Assessment

Course #6224

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 the components of physical fitness and communicate how physical activity positively impacts health and wellness. This course includes the option for articulated college credit with a qualifying score on the end of course assessment.

Exercise and Athletic Training

Course #6225

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: None

Year: 12th

Fee: \$35 (HOSA)

Credit: 2 Credits

Term: 2 semesters

Industry Credential: Physical Therapy Aid (PTA)

Cosmetology Program

Become a Licensed Professional Cosmetologist while still in high school! This hands-on program teaches students all aspects of Cosmetology: Hair, Skin, Nails and Make-up Applications. Students run a full service salon senior year. Students in this program earn the following industry credential: State Board of Cosmetology License.

This program is offered at the Northwest High School Career Center.

JUNIOR YEAR (Three Bells)

Microbiology and Infection Control

Course #6226

Students will learn basic bacteriology, infection control, and salon safety practices. Students will be able to recognize infectious disorders and contagious diseases, and learn the dispensary requirements, product storage, and requirements of the laws and rules, which regulate the cosmetology industry in Ohio.

Trichology

Course# 6229

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: None

Credit: 3 Credits

Term: 2 semesters

Year: 11th

Fee: \$250.00 for student kit (Costs are approximate paid directly to supplier) and \$32 (Skills USA)

SENIOR YEAR (Three Bells)

Fundamentals of Hair Cutting and Styling (EMIS code 174125)

Course #6227

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

Butler Tech Programs

Cosmetology Program (cont.) SENIOR YEAR (cont.)

Fundamentals of Chemical Services (EMIS code 174135)

Course #6230

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.

Human Services Capstone

Course # 6231

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 Adv. Chemistry

Credit: 3 Credits
Term: 2 semesters

Year: 12th

Fee: \$150.00 for student kit (Costs are approximate paid directly to supplier)
and \$32 (Skills USA)

Industry Credential: State Cosmetology License

Health Care Science Program

An aging population equals a booming business for healthcare providers. According to the U.S. Bureau of Labor Statistics, healthcare careers are projected to grow 18% by 2026, adding about 2.4 million new jobs in the field. Use your instincts for analytical thinking, problem-solving and caring for others in an exciting and meaningful career in caregiving. Students in this program earn the following industry credential: State Tested Nursing Assistant (STNA).

This program is offered at the Colerain High School Career Center.

JUNIOR YEAR (Two Bells)

Patient Centered Care

Course #6314

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

Health Science and Technology

Course #6315

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: None

Credit: 2 Credits

Term: 2 semesters

Year: 11th

Fee: \$35 (HOSA)

Butler Tech Programs

Health Care Science Program (cont.) SENIOR YEAR (3 Bells)

Principles of Allied Health

Course #6316

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

Patient Centered Care and Diagnostics

Course #6317

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 lifespan and common diseases found in the aging population. 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). Pre-requisite Courses: Patient Centered Care, Health Science and Technology.

Health Science Capstone

Course #6339

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

Prerequisite: Patient Centered Care and Health
Science and Tech

Credit: 3 Credits

Term: 2 semesters

Year: 12th

Fee: \$35 (HOSA)

Industry Credential: *STNA*

Programming and Game Design

Careers in Programming and Game Design related jobs are in very high demand. From software developers and programmers to game designers, web developers and database administrators, a career in programming with game and web design will place you on the cutting edge of constantly changing technology trends affecting all areas of business and life. Students in this program can earn up to 12 credits from Cincinnati State (CCP).

This program is offered at the Colerain High School Career Center.

JUNIOR YEAR (Two Bells)

Game Design

Course #6351

This course will prepare students to design and program games using commercial and open source programs and applications. Students will learn industry standard programming language constructs to write programs that integrate classes, class methods, and class instances. Students will learn input method handling, animation, collision detection, game physics, and basic artificial intelligence.

Web Design

**Course #6319 or
Course #6319CCP**

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.

COLLEGE CREDIT: CCP 3 Semester Hours, Cincinnati State - 111 Web Development 1

Prerequisite: None

Year:

11th

Fee:

\$32 (Skills USA)

Credit: 2 Credits

Term: 2 semesters

SENIOR YEAR (Two Bells)

Programming

**Course #6320 or
Course #6320CCP**

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.

COLLEGE CREDIT: CCP 3 Semester Hours, Cincinnati State - 100 Comp. Programming Found.

Butler Tech Programs

Programming with Game and Web Design (cont.)

Object Oriented Programming

**Course #6321 or
Course #6321CCP**

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++.

COLLEGE CREDIT: CCP 3 Semester Hours at Cincinnati State IT - 101 Programming 1

Prerequisite: Game and Web design

Credit: 2 Credits

Year: 12th

Term: 2 semesters

Fee: \$32 (BPA)

Programming Capstone

Course #6356

The capstone course provides opportunities for students to apply knowledge, attitudes and skills that were learned in their information technology 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: Game and Web Design

Credit: 1 credit

Year: 12th

Term: 2 semesters

Criminal Justice and Forensics Program

Whether on the beat or in a forensic lab, public safety officials are ready to protect and serve the public. The Criminal Justice and Forensics Academy includes a wide variety of occupations: law enforcement, forensics and criminal investigations and the judicial system. If you pay attention to details, have a strong sense of morality and remain calm in crisis, consider the Criminal Justice and Forensics Academy. Students in this program can earn up to 6 credits from Sinclair Community College (CCP) and earn industry credentials, including: NIMS 100, 200, and 700 certifications.

This program is offered at the Colerain High School Career Center.

JUNIOR YEAR (Two Bells)

The American Criminal Justice System

Course #6322

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.

Correctional System and Services

Course #6323

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

Credit: 2 Credits

Term: 2 semesters

Year: 11th

Fee: \$32 (Skills USA)

SENIOR YEAR (Two Bells)

Police Work and Practice in Public Safety

Course #6324 or

Course #6324CCP

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.

Butler Tech Programs

Criminal Justice and Forensics Program (cont.)

Investigations and Forensics in Criminal Investigations

**Course #6325 or
Course #6325CCP**

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,
Correctional System and Services

Credit: 2 Credits

Term: 2 semesters

Year: 12th

Fee: \$32 (Skills USA)

Industry Credentials: NIMS 100,200,700

Certifications: ASP, Pepper Spray, Drone

Criminal Justice Capstone

Course #6357

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

Prerequisite: The American Criminal Justice System,
Correctional System and Services

Credit: 1 Credits

Term: 2 semesters

Year: 12th

Diesel Truck and Equipment Program

The diesel truck and equipment industry is an evolving industry. As trucks and heavy equipment become more computerized and sophisticated, the need for qualified technicians are in demand. Students in this program can earn up to seven different student ASE Certifications (industry credentials).

This program is offered at the Colerain High School Career Center.

JUNIOR YEAR (Three Bells)

Truck Diesel Engines

Course #6329

Students will inspect, diagnose, and repair diesel truck engines. Students will learn the principles of valve train assemblies, lubrication, intakes, 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.

Truck Braking, Suspension, and Steering Systems

Course #6328

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

Credit: 3 Credits

Term: 2 semesters

Year: 11th

Fee: \$32 (Skills USA)

Butler Tech Programs

Diesel Truck and Equipment Program (cont.)

Ground Transportation Maintenance

Course #6326

In this first course, students will apply the 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.

Ground Transportation Electrical/ Electronics

Course #6327

Students 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

Credit: 2 Credits
Term: 2 semesters

Year: 12th
Fee: \$32 (Skills USA)

Industry Credential: Student ASE certifications

Diesel Truck Capstone

Course # 6358

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

Engineering Program

Earn an Associate's Degree in Mechanical Engineering Technology! Complete an apprenticeship in Mechatronics through FESTO/Sinclair Community College. Design, build and compete in international robotics competition! Students in this program can earn significant college credit through Sinclair Community College as well the following industry credentials: Certified SolidWorks Associate.

This program is offered at the Colerain High School Career Center.

JUNIOR YEAR (Three Bells)

CCP Engineering Design

**Course #6330 or
Course #6330CCP**

Learn the Engineering Design Process. Topics include work-processes, optimization methods, design optimization, and risk management tools. Use 2D and 3D modeling software to design solutions to solve proposed problems, document work, and communicate solutions. Interpret industry prints, and create working drawings from functional models.

CCP Engineering Principles

**Course #6344 or
Course #6344CCP**

Development of student understanding of the engineering and engineering technology fields through applied math, science and technology principles. Introduction into the applied learning of mechanics, strength of materials, free body diagrams and forces.

CCP Computer Integrated Manufacturing

**Course # 6345 or
Course #6345CCP**

An introduction to the manufacturing processes used in the tooling and machining industry. This course will cover machine safety, mechanical hardware, hand tools, metrology, engine lathe, and milling. Setup and operation of computer numerical control (CNC) milling machines.

Prerequisite: 3.0 GPA; Passed Algebra I,
at least 90% attendance rate

Credit: up to 6 Credits
Term: 2 semesters

Year: 11th
Fee: No Fee

Butler Tech Programs

Engineering Program (cont.)

SENIOR YEAR (Three Bells)

CCP Mechanisms and Drives

**Course #6332 or
Course #6332CCP**

Learn the principles and practices of machine operation and machine applications. Learn how machine components such as gears, belts, sprockets, bearings, clutches, couplings, springs, etc. contribute to the application for which the machine is designed. Examine the basic drives of such mechanisms as electric motors and fluid power actuators.

CCP Robotics

**Course #6333 or
Course #6333CCP**

Apply knowledge and skills necessary to program and operate robots, using programmable controllers as the main interface point. Students will learn robotic operations, implement sensors for intelligent systems. Code, compile, and debug programs using various robotic programming languages.

CCP Engineering Capstone

**Course #6346 or
Course #6346CCP**

Assessment of achievement by Mechanical Engineering Technology students in attaining program outcomes by completing a project demonstrating principles and practice of the major. Teamwork on projects will be emphasized.

Prerequisite: Completed all Junior Engineering Courses

Year: 12th

Fee: No Fee

Credit: up to 6 Credits

Term: 2 semesters

Precision Machining Program

Anything with parts - from delicate circuitry to automobiles, military equipment and beyond - is made possible by Precision Machining careers. Professionals in this field create the pieces that move the world around us. As technology advances, the need for more sophisticated machinery and operators becomes essential. Use your hands and analytical and creative skills in an exciting future in Precision Machining. Students in this program can earn the following Industry Credential: NIMS Certifications.

This program is offered at the Colerain High School Career Center.

JUNIOR YEAR (Three Bells)

Machine Tools

Course #6334

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.

Machining with Industrial Milling Machines

Course #6335

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 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, 90% attendance rate

Credit: 3 Credits

Term: 2 semesters

Year: 11th

Fee: \$32 (Skills USA)

Butler Tech Programs

Precision Machining Program (cont.)

SENIOR YEAR (Two Bells)

Machining with Industrial Lathes

Course #6336

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.

Computer Numerical Control Technology with Industrial Mills and Lathes

Course #6337

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

Prerequisite: Machine Tools
Machining with Industrial Milling Machines
Year: 12th
Fee: \$32 (Skills USA)

Credit: 2 Credits
Term: 2 semesters