Moving Forward

Bullitt County Public Schools

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Shepherdsville, Kentucky 40165

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www.bullittschools.org

TO: Jesse Bacon, Superintendent

FROM: Lee Barger, Director of College and Career Readiness/Innovative Programs

DATE: January 14, 2019

RE: Curriculum Guide Approval

A revision to the College/Career Handbook and Curriculum guide is requested to include changes for the 2019-2020 school year. The changes have been reviewed by High School Principals, CCR Coaches, and High School Counselors. Each SBDM council has reviewed and approved their course offerings.

This document continues to be electronic and is accessible for our high school students via the Access 24 Chromebooks. Hard copies will be available per requests.

BCPS policy 0.8113 states that all curriculum guides will be board approved each January. This is a working document for student scheduling and informational purposes. An addendum may be needed to meet the needs of each school and students.

To highlight the major changes:

- Updated School Leadership
- Transition Readiness Changes
- Career Pathway Offering Changes

A link to the document: CCR Handbook

URL:
https://docs.google.com/presentation/d/1uyEUN8B4AgPVG7lvAkjZxhNUT1kbi3JCEUMYS5kgnLE/edit#slide=id.g1b86c42f9a_0_75

Permission is requested to approve to the College/Career Handbook and Curriculum Guide at the January 28th Board Meeting.

1.14.19

BULLITT COUNTY PUBLIC SCHOOLS
COLLEGE AND CAREER HANDBOOK

Bullitt
County Public Schools

Moving Forward

THE LEADER IN EDUCATIONAL EXCELLENCE!

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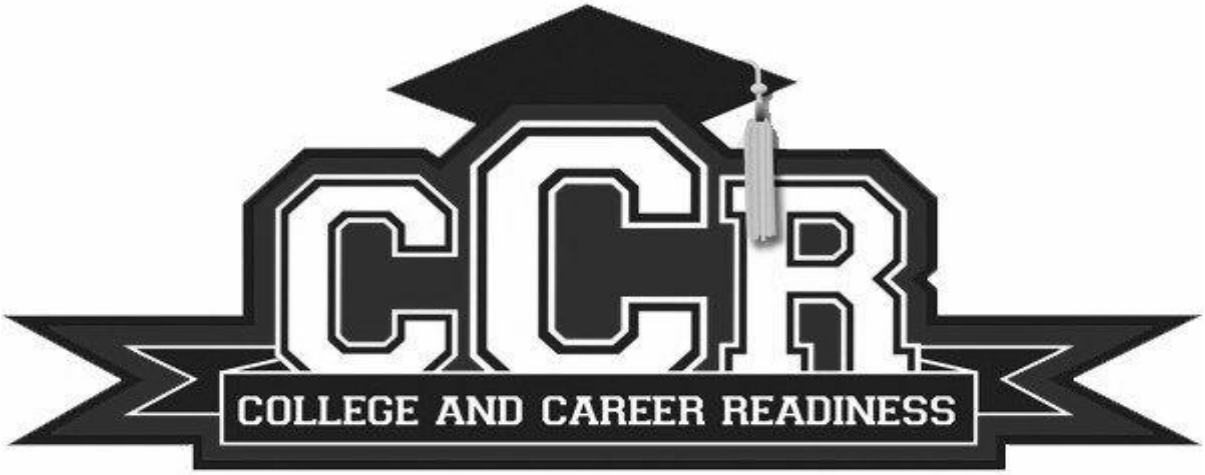

BCPS VISION:

Bullitt County Public Schools:

The leader in educational excellence.

BCPS MISSION:

The Bullitt County Public Schools learning community will educate all students to high levels of academic performance as measured by state and national standards by creating and maintaining a positive learning environment with a comprehensive system of support.

THE WHY

BEHIND OUR WHAT

(Click above link)

WE BELIEVE:

All children can learn.

Higher expectations will yield higher results.

Excellence is attainable.

All people need a safe environment, both physically and emotionally.

Family and community support is essential.

All people are responsible for their own choices.

Relationships are the foundation of a positive culture.

COLLEGE AND CAREER READY HIGH SCHOOL LEADERSHIP

BULLITT CENTRAL HIGH SCHOOL

Principal:	Assistant Principals:	Counselors:	CCR Coach:
Erik Huber	Joe Pat Lee Christy Burden Chad Foster	Emily Cottongim Clay Harned Tonia Wiggins	Kristie Walls

BULLITT EAST HIGH SCHOOL

Principal:	Assistant Principals:	Counselors:	CCR Coach:
Chris Mason	Cynthia Bell Tim Ridley Kari Stewart	Crystal Barr Savannah Richardson Dana Steinmetz	Ann Murphy

NORTH BULLITT HIGH SCHOOL

Principal:	Assistant Principals:	Counselors:	CCR Coach:
Joni Britt	Nick Sutherland Jessica Sturgeon Lindsey Wegley	Chelsea Mullennex April Walker Melissa Speakman	Jennifer Abnee

RIVERVIEW OPPORTUNITY CENTER

Principal:	Assistant Principals:	Counselor:	CCR Coach:
Shannon Hall	Rich Watson	Rick Dawson	Shannon Rickard

BULLITT COUNTY AREA TECHNOLOGY CENTER

Principal:	CCR Coach:
Darrell Vincent	Shannon Rickard

COLLEGE AND CAREER READY MIDDLE SCHOOL LEADERSHIP

BULLITT LICK MIDDLE SCHOOL		BERNHEIM MIDDLE SCHOOL	
Principal: Kevin Connors	Assistant Principal: Raymond Yaksic Counselor: Christy Fenwick	Principal: Katie Stephens	Assistant Principal: Jennifer Harrison Counselor: Karen Smith
EASTSIDE MIDDLE SCHOOL		**MT WASHINGTON MIDDLE SCHOOL**	
Principal: Troy Wood	Assistant Principal: Kyle Buege Counselor: Bryan Bates	Principal: Shawn Pickett	Assistant Principal: Carl Curtsinger Counselor: Cynthia Hanson
HEBRON MIDDLE SCHOOL		**ZONETON MIDDLE SCHOOL**	
Principal: Kelland Garland	Assistant Principal: Elizabeth Starnes Counselor: Michele Taylor	Principal: Ann Ford	Assistant Principal: Fin Burton Counselor: Debbie Buford

COLLEGE AND CAREER READY ELEMENTARY LEADERSHIP

BROOKS ELEMENTARY	CEDAR GROVE ELEMENTARY	CROSSROADS ELEMENTARY	FREEDOM ELEMENTARY
Principal: Kevin Fugate Assistant Principal: Betty Jo Davis Counselor: Marla Squires-Interim	Principal: Bryan Flachbart Counselor Casey Newberry	Principal: Julie Skeens Counselor: Lauren Manion	Principal: Matthew Treadway Counselor: Laurie Todd
LEBANON JUNCTION ELEMENTARY	**MARYVILLE ELEMENTARY**	**MT WASHINGTON ELEMENTARY**	**NICHOLS ELEMENTARY**
Principal: Daniel Mulllins Counselor: Kevin Weihe	Principal: Ann Hance Counselor: Kaet Barron	Principal: Julie Leston Assistant Principal: Dionne Bickley Counselor: Alicia Franklin	Principal: Anne Marie Landry Counselor: Lauren Clark
OLD MILL ELEMENTARY	**OVERDALE ELEMENTARY**	**PLEASANT GROVE ELEMENTARY**	**ROBY ELEMENTARY**
Principal: Les McIntosh Counselor: Kim Bleemel	Principal: Dana Brown Counselor: Tina Anderson	Principal: Beau Johnston Counselor: Elizabeth Barnett	Principal: Tonya Hill Counselor: Geneva Lyons
SHEPHERDSVILLE ELEMENTARY			
Principal: Patrick Durham			

ELEMENTARY: CCR AWARENESS

MIDDLE: CCR EXPLORATION

HIGH: CCR PREPARATION

Schools utilize a **structured & deliberate guidance and advisement system** which includes a belief that all students can be middle school ready, high school ready, and College and Career Ready. Advisors work with students to set goals and prepare for rigorous courses K-12 and on into college. Individual learning plans using Naviance set academic goals, course selection, educational planning, and personal growth. CCR expectations are embedded at all levels and integrated into classroom instruction, hallways, rituals, and celebrations. *IT'S A WAY OF LIFE!*

We strive to prepare our students to be college ready, career ready, and prepared to be leaders in our community!

GROWTH MINDSET

We encourage students to foster a growth mindset mentality when pursuing their college and career ready goals in BCPS. The notion of learning from failure, celebrating others, and taking healthy risks is paramount to ensuring that our mission of college, career, and work ethic is a reality for all students. Please keep the notion of growth mindset in mind when considering the following pieces:

SCHEDULING

All students will be required to take a full slate of courses during the school year. Scheduling will take place early in the spring semester for the following school year. Each school reserves the right to cancel courses due to insufficient requests/enrollment.

After the school year begins, course changes will only be made for unique circumstances. EXAMPLES: To recoup a required course, to add a graduation requirement, to correct duplication of a course, to correct inappropriate placement of a student, or to balance class size. It is imperative that course selections be given serious consideration. The following schedule is recommended for HS students in our district.

Freshman: English I, Social Studies I, Science, Math, Health/PE, 1 or 2 electives
Sophomore: English II, Social Studies II, Biology, Math, Visual Performing Arts, 1 or 2 electives
Junior: English III, US History, Chemistry, Math, 2 or 3 electives
Senior: English IV, Math, 4 or 5 electives

ADVANCED PLACEMENT

Advanced Placement courses are highly recommended for students planning to attend a four year college or university. Students in Advanced Placement courses have the opportunity to earn high school credit and can earn college credit if they meet criteria on the AP Exam. Performing well on an AP Exam means more than just successful completion of a course; it is a gateway to success in college. Research consistently shows that students who score a 3 or higher on AP Exams typically experience greater academic success in college and have higher graduation rates than compared to non-AP peers. While colleges and universities are responsible for setting their own credit and placement policies, AP scores signify how qualified students are to receive college credit or placement.

- AP Score Qualification: 5—Extremely well qualified, 4—Well qualified, 3—Qualified, 2—Possibly qualified, 1—No recommendation.
- AP Specific Participation: AP students are required to take the AP exam in order for the credit to be posted on academic transcripts. If the student does not take the exam then the course will be listed as the general education equivalent.
- AP courses are weighted on 5 point weighted GPA scale.

We strive to prepare our students to be college ready, career ready, and prepared to be leaders in our community!

DUAL CREDIT

Dual credit courses may be offered to BCPS students through agreements with participating colleges/universities. The cost per course varies as do the course offerings each semester dependent on the college/university. Students will be expected to cover the cost of both the course and the textbook. Dual credit courses differ from Advanced Placement courses in that potential for earning college credit is not contingent upon an exam score. Students will earn college and high school credit for a passing grade of D or better. Students will be advised of their options during the scheduling process, if available, or at the beginning of each semester.

BCPS GRADUATION REQUIREMENTS 2019-2020

- 4 English credits (English I, II, III, & IV)
- 4 Math Credits (to include Algebra I, Algebra II, & Geometry)
- 3 Social Studies credits (U.S. History, Economics, Government, World Geography and World Civilization.)
- 3 Science credits (chemistry/physics, biology, and chemistry or physics to incorporate life, physical, or earth science.)
- 1 Visual & Performing Arts credit* (see below), with remaining credits to come from elective course offerings.
- One CCR Unit to include employability, or financial literacy or ILP.
- .5 Health credit/.5 PE credit
- Minimum of Five Electives
- Civics Assessment-Score of 60% or higher
- Meet Transition Readiness Graduation requirements

PREPARATION FOR COLLEGE ADMISSION TIME TABLE

Graduation Honors:
Magna Cum Laude – Weighted GPA of 4.0 - 4.249
Summa Cum Laude – Weighted GPA of 4.25 or above

Effective with the graduating class of 2015, students must meet college or career readiness standards as adopted by the Kentucky Board of Education in order to graduate. Principals will disseminate these readiness standards to students through the guidance program and inclusion in student handbooks and in the Individual Learning Plan (ILP). Exceptions to this requirement shall be made for qualified students with disabilities as determined by the Admissions and Release and/or 504 committee or who have petitioned the Principal under Board approved guidelines established by the SBDM Council to present his or her reasons for non-attainment. If approved, the school team shall develop a rigorous and meaningful program encompassing a minimum of a twenty-four (24) clock-hour college and career readiness project to be verbally presented to a five (5) member school-based panel. The panel shall then make a recommendation on whether or not to award the diploma.

Pre-College Curriculum: It is recommended that all students who plan on attending a four year college/university and earning a bachelor's degree earn two credits in the same foreign language.

Freshman Year
1. Follow pre-college curriculum.
2. Maintain high grade point average.
3. Update ILP.
4. Take CERT Test and use remediation tool for ACT improvement
5. Become involved in school and community.

Sophomore Year
1. Follow pre-college curriculum.
2. Maintain high grade point average.
3. Take CERT Test and use remediation tool for ACT improvement
4. Update ILP.
5. Continue school and community involvement

Junior Year
1. Follow pre-college curriculum.
2. Take PSAT/NMQT in October.
3. Begin to consider college choices
4. Determine required college entrance tests and requirements.
5. Attend College Fair.
6. Take CERT Test and use remediation tool for ACT improvement
4. Take the ACT/SAT in March.
5. Visit college campuses.
6. Complete 30+ hours in online ACT Prep Program.
7. Update ILP.

Senior Year
1. Any student who did not take the ACT/SAT during his/her junior year should take the first test given in the fall. Retakes should be considered to improve your score.
2. Begin writing any essays required for admissions; write a resume and keep copies.
3. Attend College Fair and sessions with college representatives.
4. Finalize college applications and housing forms.
5. Be constantly aware of announcements concerning scholarships.
6. Attend financial aid workshop, and apply for financial aid.
7. Update ILP.

PREPARATION FOR COLLEGE ADMISSION TIME TABLE

KEES SCHOLARSHIP PROGRAM

The Kentucky Educational Excellence Scholarship (KEES) offers cash for good grades. Based on grades, Kentucky high school students can earn money that can be used to help pay tuition expenses at a Kentucky college, university, or technical school for four full years. The amount of money earned is based on each year's GPA, and a bonus will be given based on ACT composite score. At the end of each year, students will receive a letter stating the amount they are eligible to receive based on that year's grades. Students can check their accounts online at https://www.kheaa.com/apps/registration/signin Registration through ZIP Access is required.

GPA	Amount (each year)
2.50	$125
2.60	$150
2.70	$175
2.75	$187
2.80	$200
2.90	$225
3.00	$250
3.10	$275
3.20	$300
3.25	$312
3.30	$325
3.40	$350
3.50	**$375**
3.60	$400
3.70	$425
3.75	$437
3.80	$450
3.90	$475
4.00	$500

ACT Bonus Award Amounts

You can earn a bonus award for an ACT score of 15 or above. For example, a KEES-eligible student who has a score of 25 would earn an additional $393 for each year of college.

ACT Score	Bonus
15	$36
16	$71
17	$107
18	$143
19	$179
20	$214
21	$250
22	$286
23	$321
24	$357
25	**$393**
26	$428
27	$464
28+	$500

Transition Readiness 2019-2020

We promote the notion of "career readiness" across the K-12 experience in order to help students to begin thinking and planning for their college and career aspirations. Our focus on pathways within BCPS speaks to our commitment to prepare college and career ready students before or upon high school graduation. Students are encouraged to identify pathways of interest that align with their future story goals and plans. Pathways are listed in this handbook with corresponding courses which may lead to college or career readiness. Students are considered a career preparatory student by having completed two courses in a pathway and being enrolled in a third. Career preparatory students are eligible to take the End of Program Assessment or earn industry certification. Students who are preparatory before their senior year may be eligible for a cooperative education experience. Students achieve career completer status after they complete a fourth course in the pathway.

Student Expectations for Transition Readiness – High School

High School Diploma
Earn a high school diploma by meeting/exceeding the Kentucky Minimum High School Graduation Requirements
NOTE: Essential skills and attendance are reflected in the Opportunity and Access indicator.

AND
Meet Requirements of ONE type of Readiness

Academic Readiness	Career Readiness	Required for English Learners (only) English Language Readiness
✓ Benchmarks, determined by Council on Postsecondary Education (CPE) on a college admissions exam; OR ✓ A grade of B or higher in each course on 6 or more hours of KDE-approved dual credit; OR ✓ A score of 3+ on exams in 2 or more Advanced Placement courses; OR ✓ A score of 5+ on 2 exams for International Baccalaureate courses; OR ✓ Benchmarks on 2 or more Cambridge Advanced International examinations; OR ✓ Completing a combination of academic readiness indicators listed above. Demonstration of academic readiness shall include one quantitative reasoning or natural sciences and one written or oral communication, or arts and humanities, or social and behavioral sciences learning outcomes.	✓ Benchmarks on Industry Certifications *(Approved by the Kentucky Workforce Innovation Board on an annual basis)*; OR ✓ Scoring at or above the benchmark on the Career and Technical Education End-of-Program Assessment for articulated credit; OR ✓ A grade of B or higher in each course on 6 or more hours of KDE-approved Career and Technical Education dual credit; OR ✓ Completing a KDE/Labor Cabinet-approved apprenticeship; OR ✓ Completing a KDE-approved alternate process to verify exceptional work experience.	✓ Meeting criteria for English language proficiency for any student who received English Language services during high school.

INDIVIDUAL LEARNING PLANS

Our district utilizes the concept of an "Individual Learning Plan" or I.L.P. to help our students select careers that interest them and complete the necessary courses to prepare them for that career. Students will complete their ILPs each year beginning in 6th grade using a career platform solution called Naviance. From there, the ILP will be a crucial component of advisement, planning, and scheduling.

HIGH SCHOOL WORK ETHIC

Bullitt County Chamber of Commerce, Spencer County Chamber of Commerce, Bullitt County Public Schools and Spencer County Public Schools have partnered to develop work ready communities. Students will have the opportunity to earn work ethic certificates during each year in high school.

REQUIREMENTS:

1) A student must obtain no more than 2 unexcused absences
2) A student must have zero behavior incidents
3) A student must have no grades lower than a C on quarter or final grades posted on report card
4) Participate in 2 of the following: School Team/Community Sport, School/ Community extra-curricular activity, part-time job, or 10 community service hours
5) Sign up for voluntary drug screenings each year with no positive result
6) Score in-progress or met progress on essential skills each nine weeks

Essential Skills

Adaptability
Diligence
Initiative
Knowledge
Remaining Drug Free
Reliability
Working Well With Others

Part of the mission in education is to prepare students for the transition from school to work and life beyond the classroom. It is essential that students be taught essential skills necessary to be successful in the world of work. The Work Ethic Certification will demonstrate to employers that a student recognizes the importance of work ethic and has been trained to succeed in the workplace. A student earning the Work Ethic Certification both their Junior and Senior years will earn a seal on his/her diploma and a cord to be worn at graduation, and be guaranteed an interview with participating businesses for jobs.

BAMS:

Bullitt Advanced Math and Science Program

Want to learn more?
Click HERE for our website.

Bullitt County Public Schools
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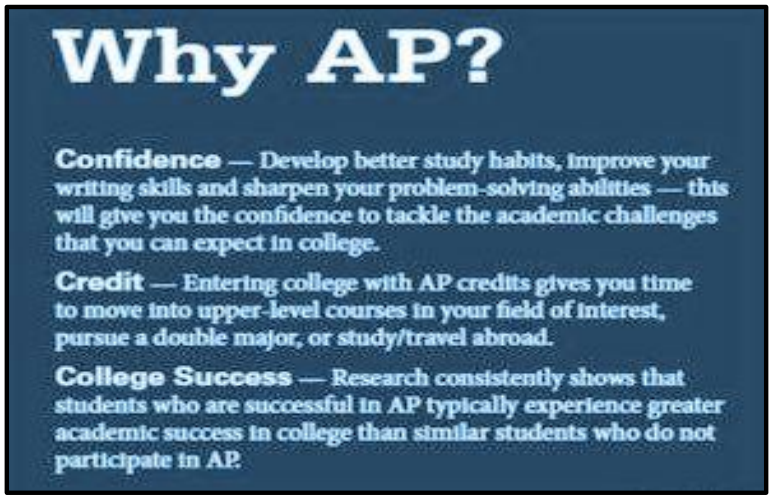
Jefferson Community & Technical College

ADVANCED PLACEMENT



The College Board Advanced Placement Program is designed to provide students with analytical skills and factual knowledge necessary to deal critically with problems and materials in college. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year college courses. Students taking Advanced Placement classes with a BCPS High School are expected to set high goals and work diligently to attain these goals. In addition, students and parents must understand that an AP course takes an unwavering commitment and work ethic.

While colleges and universities are responsible for setting their own credit and placement policies, AP scores signify how qualified students are to receive college credit or placement. Search college and university credit policies to determine credit and/or placement offered for qualifying AP exam scores.

AP Score Qualification

5—Extremely Well Qualified
4—Well Qualified
3—Qualified
2—Possibly Qualified
1—No Recommendation

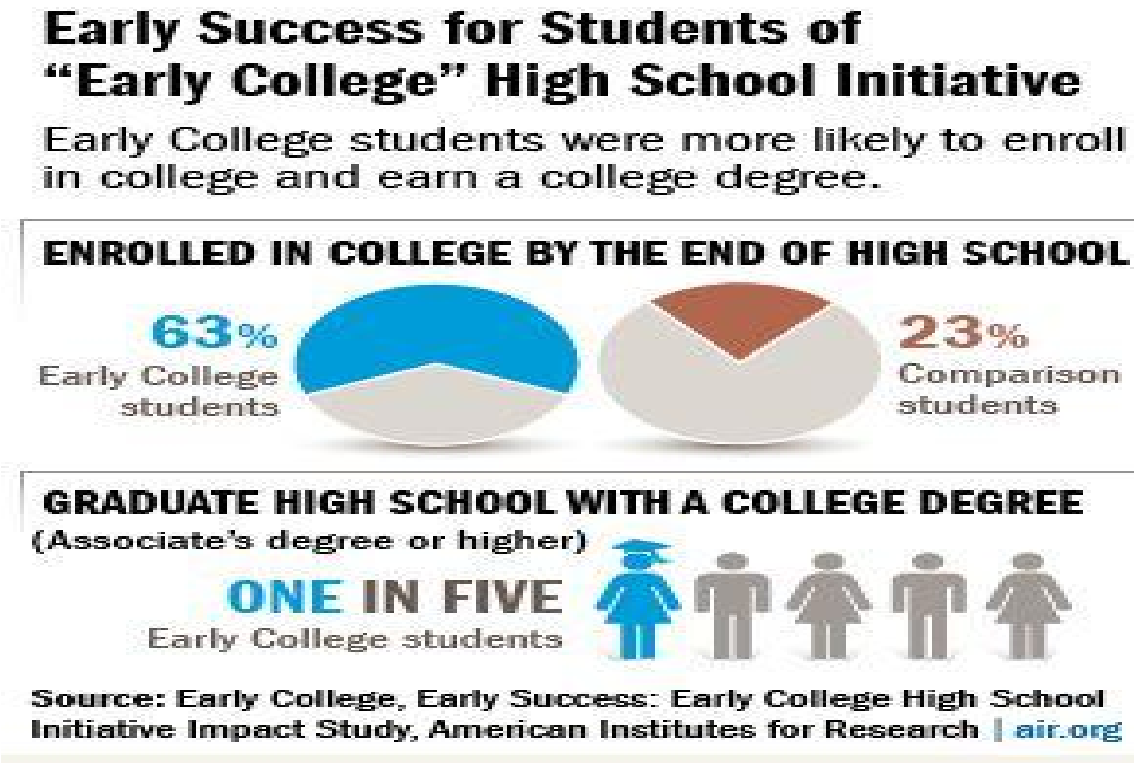
AP Course Offerings in BCPS

AP Biology
AP Calculus AB
AP Calculus BC
AP Chemistry
AP Computer Science Principles
AP Computer Science A
AP English Language and Composition
AP English Literature and Composition
AP Environmental Science
AP European History
AP Human Geography
AP Music Theory
AP Physics
AP Psychology
AP Spanish Language
AP Statistics
AP Studio Art
AP US History
AP US Government
AP World History

Exams fees have increased to **$94.** Currently, students that qualify for free and reduced lunch services do not have an exam fee cost. Click here for AP exam dates.

Advanced Placement Course Policy - AP students are required to take the AP exam in order for the weighted credit to be posted on academic transcripts. If a student does not take the exam then the course will be listed as the AP course title, but will be posted to the transcript as an unweighted grade.

DUAL CREDIT



In partnership with colleges and universities, BCPS offers students opportunities to enroll in college coursework and earn both high school and college credit. Dual credit courses differ from Advanced Placement courses in that potential for earning college credit is not contingent upon an exam score. Students are typically awarded college credit with a grade of C or higher. High school credit is awarded provided the student earns a passing grade in the course.

Dual Credit courses require a level of independence from the student. Since courses are taught through the college, students are responsible for application to the college, registration for courses and costs associated with the course. Additionally, students should be comfortable communicating with classmates, professors, academic advisor and/or dual credit coordinator as these are general expectations in a college course.

On Campus - BCPS Partners with various post-secondary institutions to offer college courses to our students during the school day. BCPS partners with Elizabethtown Community and Technical College, Jefferson Community and Technical College, Morehead State University, Spalding University, and the University of Louisville.

Off Campus - Juniors and Seniors with flexibility in their course schedule can choose to take college courses at local colleges or universities. Students are responsible for providing verification of their schedule as well as semester grades for inclusion on their high school transcript.

Dual Credit course cost varies based upon the affiliated college as do course offerings each semester. Students are expected to cover all costs associated with dual credit courses, including application fees, tuition, textbooks and travel.

Dual Credit Scholarship Program

The Dual Credit Scholarship provides assistance for Kentucky high school and home school students who are taking dual credit classes at a participating Kentucky college or university. Eligible students may receive scholarships for up to two classes.

- **Student must:**
  - Be a Kentucky resident; and
  - Be enrolled in a Kentucky public or private high school, or Kentucky home school, in grades 11 or 12; and
  - Be enrolled, or approved for enrollment, in an approved dual credit class at a participating Kentucky college or university; and
  - Complete a 30-minute college success counseling session each year a scholarship is awarded.
- **Award:**
  - Equal to dual credit class amount charged by the participating college or university.
  - Limited to two dual credit classes.
  - May not be used for developmental, remedial or repeated classes.
- **Participating colleges and universities have agreed to**:
  - Charge no more than the dual credit tuition ceiling rate, which is 1/3 of the KCTCS hourly tuition rate ($56 per credit hour for the 2018-2019 year), for all dual credit classes taken by Kentucky high school and home school students regardless of scholarship eligibility.
  - Charge no additional fees to dual credit students including, but not limited to, lab fees, special equipment and admission/application fees.
- **Application:**
  - Kentucky public and private high school students:
    - The student's high school will send information to KHEAA identifying the students taking dual credit. KHEAA will, in turn, contact students to obtain college and semester preferences for scholarship use.
  - Kentucky home school students:
    - Complete and submit the Dual Credit Scholarship Application.
- **Other:**
  - KHEAA will notify all applicants of their award or denial status.
  - Scholarship funds will be disbursed by KHEAA to the student's participating college or university upon receipt of enrollment verification.

Work Ready Kentucky Scholarship program for high school students

- **A high school student must:**
  - Be a Kentucky resident
  - Be enrolled in a Kentucky high school
  - Not be eligible for, or have exhausted eligibility for, the Dual Credit Scholarship program
  - Be enrolled, or accepted for enrollment in, an approved dual credit course at an eligible institution
    - Approved dual credit courses for the Work Ready Kentucky Scholarship are limited to Career and Technical Education coursework that is in a career pathway approved by the Kentucky Department of Education as leading to an industry-recognized credential
- **Application:**
  - The student's high school will send information to KHEAA identifying the students who enrolled in Career and Technical Education coursework. KHEAA will, in turn, contact students to have them submit their preferences for college and semester of scholarship use.
  - Funds are awarded on a first-come, first-served order based on the date students submit their scholarship preferences.
- **Award:**
  - Equal to the dual credit course amount charged by an eligible college or university
  - Limited to two dual credit courses
- **Participating colleges and universities have agreed to:**
  - Charge no more than the dual credit tuition ceiling rate, which is 1/3 of the KCTCS hourly tuition rate ($56 per credit hour for the 2018-2019 year), for all dual credit courses taken by Kentucky high school students regardless of scholarship eligibility
  - Charge no additional fees to dual credit students including, but not limited to, lab fees, special equipment and admission/application fees.
- **Eligibility:**
  - Expires when the first of the following conditions is met:
    - Receipt of scholarship funding for four academic terms;
    - Receipt of the scholarship for 60 credit hours of enrollment;
    - Receipt of a first associate's degree

WORK-BASED LEARNING

School Based Enterprise is school-based enterprise (SBE) is a simulated or actual business conducted within a school. It is designed to replicate a specific business or segment of an industry and assist students in acquiring work experience related to their chosen career cluster.

Shadowing is learning through observation and is a way to form partnerships between employers and the local schools. Shadowing is an opportunity for a student to spend a limited amount of time with an individual in a chosen occupation in order to become familiar with the duties associated with that occupation, the physical setting of the occupation, and the compatibility of the occupation with his or her own career goals. Students should provide evidence of career shadowing as part of their senior project.

Internships give students opportunities to explore careers via workplace learning experiences. Internships can be paid or un-paid, short-term work-based learning experience. One of the major purposes of internship is the opportunity to gain exploration experiences in one or more careers. Internships are longer than job shadowing, but are not considered long-term paid cooperative education placements.

Cooperative Education is a paid educational program consisting of in-school instruction combined with program related on-the-job work experience in an authentic business or industrial establishment. A Co-op position places a student for a longer period of time (semester or year-long) while a student may receive up to two credits in an approved career pathway. The fundamental purpose of cooperative education is to provide opportunities for students to learn within authentic work conditions and to develop occupational competencies (attitudes, technical skills, and knowledge) needed to be successful in their chosen career.

Apprenticeship / TRACK program is a partnership between The Office of Career and Technical Education and The Kentucky Labor Cabinet to provide pre-apprenticeship opportunities to secondary students. This is a SKILLS TRADE industry-driven program to create a pipeline for students to enter post-secondary apprenticeship training. The unique feature of the apprenticeship concept is that on-the-job training is supplemented with technical classroom instruction. Apprentices work under the supervision of qualified journey workers to develop their chosen trade or skill and learn the techniques, materials, and equipment associated with that trade. An agreement between the Kentucky Department of Education and global human resource agency Adecco will pave the way for Kentucky high school students to gain valuable work experience through cooperative education opportunities and pre-apprenticeship programs.

Clinical experiences are unpaid field experiences typically in our health occupations/pathways and are designed to integrate meaningful work-site experiences with prior knowledge. A BCPS teacher will be on-site with the students. The student receives a grade for the experience as a component of the related health class. The teacher and the affiliating agency coordinator complete the records for evaluation and attendance. An example would be a health student completing related experience at a hospital during school hours and is being supervised by a hospital employee.

School to Work Program is a paid or unpaid work experience for seniors that are in good academic standing, are on track to graduate, and have met the college and/or career ready requirements or are in an CCR intervention program as assigned by the school level staff. BCPS values real –world experiences and opportunities to develop occupational skills, knowledge, resilience and work ethic.

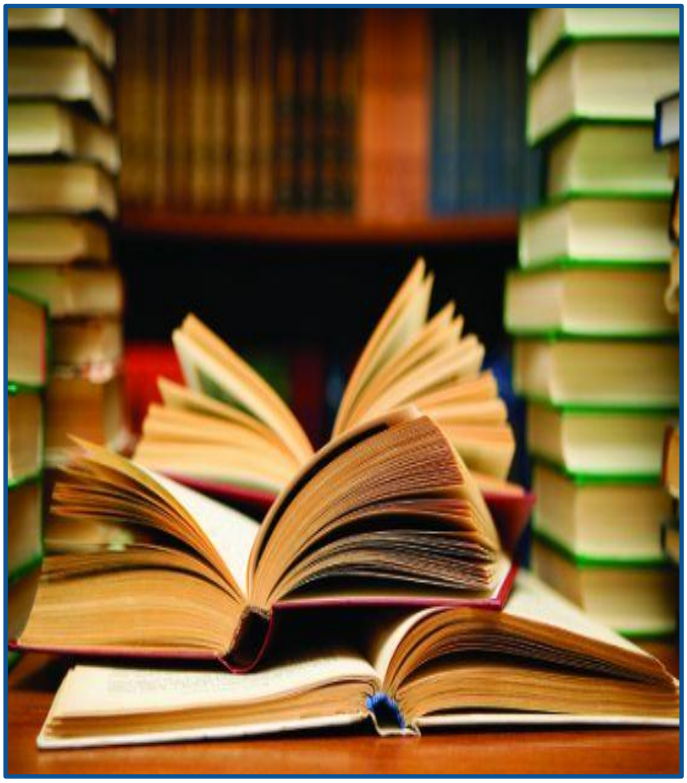
ENGLISH LANGUAGE ARTS

English 1
1 credit, Grade 9

This course emphasizes reading, speaking, listening, writing, research, and thinking skills with assignments designed to challenge each student at his or her level of ability. Literature studied at this level is organized thematically and selected to reflect America's cultural diversity. ***Course required for graduation.**

English 1, Pre-Advanced Placement (Pre-AP),
1 credit, Grade 9

This course is designed for students who wish to develop the critical thinking, reading and writing skills required for success in college. The four areas of emphasis in this course are developing critical thinking and reading skills through an intensive reading program of novels, short stories, poetry, drama, and non-fiction; building competency in grammar; improving vocabulary knowledge; developing analytical, narrative, expository and imaginative writing skills. A summer reading assignment may be assigned after registration. ***This course may be taken in place of English I as the graduation requirement.**



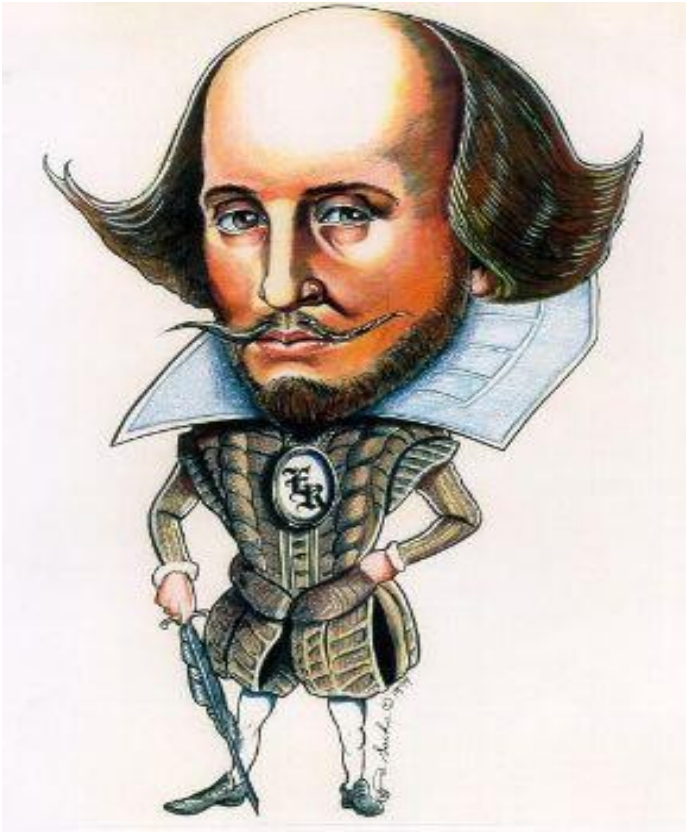
English 2
1 credit, Grade 10

This course emphasizes reading, speaking, listening, writing, research, and thinking skills with assignments designed to challenge each student at his or her level of ability. Curriculum will also focus on preparing students for the End of Course Assessment (EOC) taken as the final exam. ***Course required for graduation.**

English 2, Pre-Advanced Placement (Pre-AP),
1 credit, Grade 10

English II Pre AP builds on the reading, writing, listening, and thinking skills fostered in English I Pre AP through a study of literary genres that come predominantly from American literature, through a study of grammar and through class discussions, projects, presentations, independent reading, research and writing. Curriculum will also focus on preparing students for the End of Course Assessment (EOC) taken as the final exam. ***This course may be taken in place of English II as the graduation requirement.**

ENGLISH LANGUAGE ARTS



English 4
1 credit, Grade 12

This course emphasizes reading, speaking, listening, writing, research, and thinking skills with assignments designed to challenge each student at his or her level of ability. Literature studied at this level is organized thematically and selected to reflect America's cultural diversity. ***Course required for graduation.**

AP English 4
(AP Literature & Composition)
1 credit, Grade 12

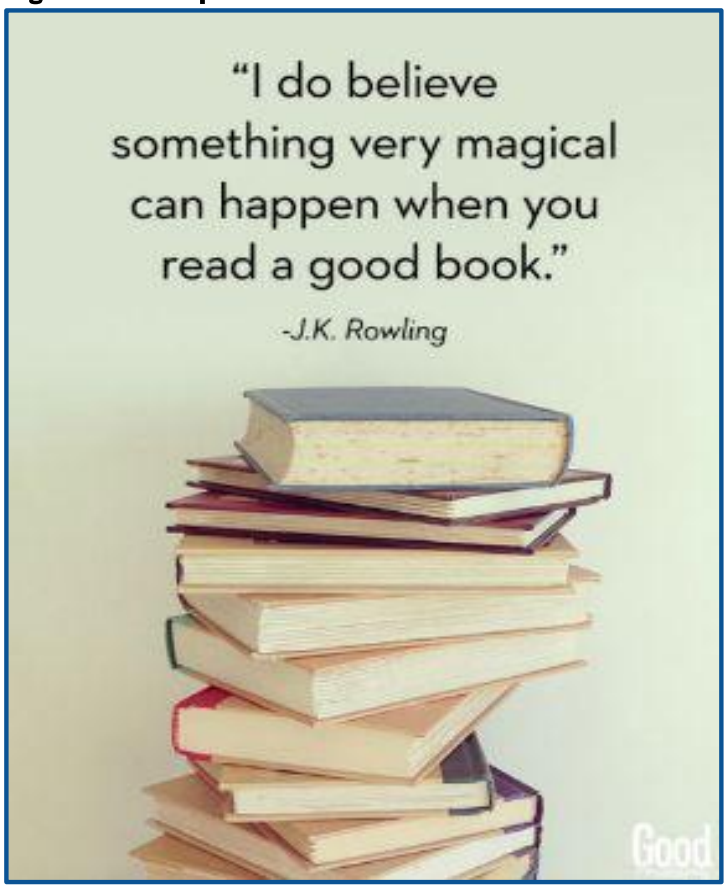
AP English students can earn credit for English IV and prepare to take the Advanced Placement English Literature and Composition Exam for college credit. Literature is organized thematically and includes works from several cultures. The major focus of the course is literary analysis. The workload is substantially greater than English IV and includes a summer reading requirement. ***This course may be taken in place of English IV as the graduation requirement.**

English 3
1 credit, Grade 11

This course emphasizes reading, speaking, listening, writing, research, and thinking skills with assignments designed to challenge each student at his or her level of ability. Literature studied at this level is organized thematically and selected to reflect America's cultural diversity. ***Course required for graduation.**

AP English 3
(AP Language & Composition)
1 credit, Grade 11

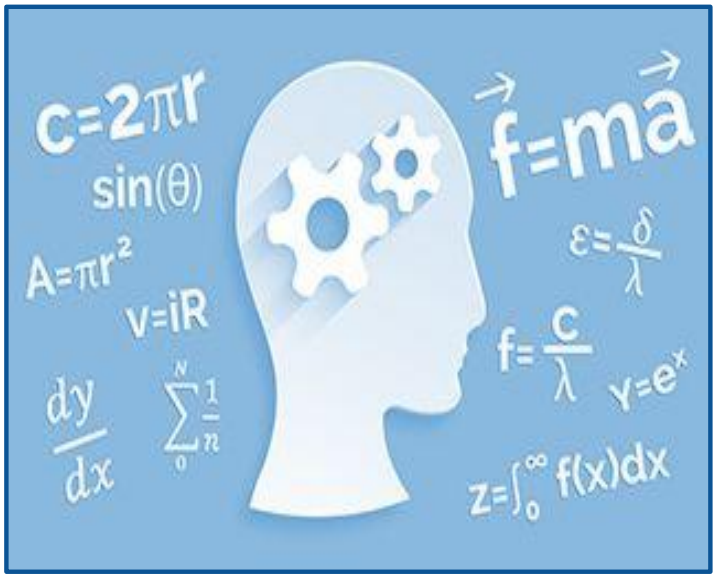
This course is designed to be a preparatory class for students intending to take the AP Language & Composition exam. College credit can be earned for an acceptable score on the AP Language and Composition test given through the College Board. The curriculum focus of AP English III will be writing, American literature, and nonfiction prose analysis. ***This course may be taken in place of English III as the graduation requirement.**



MATHEMATICS

Algebra 1
1 credit, Grade 9

This course is designed so students can attain all the concepts contained in the Kentucky Core Academic Standards in order to earn the high school graduation credit for Algebra 1. ***Course required for graduation.**

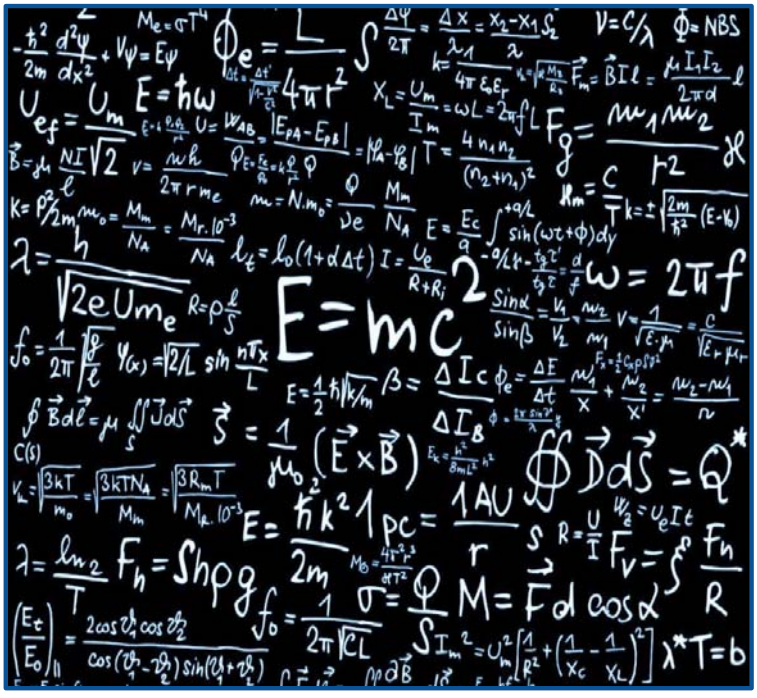


Algebra 1: Pre-Advanced Placement (Pre-AP),
1 credit, Grade 9

This Algebra I course will cover the same standards as Algebra I but at more rigorous level and accelerated pace by providing extensions and enrichment. ***This course may be taken in place of Algebra I as the graduation requirement.**

Geometry,
1 credit, Grades 9-11

Geometry is a branch of mathematics that deals with the measurement, properties, and relationships of points, lines, angles, surfaces, and solids. This course is designed so the students can develop skills and concepts in the Kentucky Core Academic Standards for Mathematics in order to earn the high school graduation credit for Geometry. ***Course required for graduation.**



Geometry: Pre-Advanced Placement (Pre-AP),
1 credit, Grades 9-11

This course will cover the same standards as Geometry but at a more rigorous level and accelerated pace by providing extensions and enrichment. ***This course may be taken in place of Geometry as the graduation requirement.**

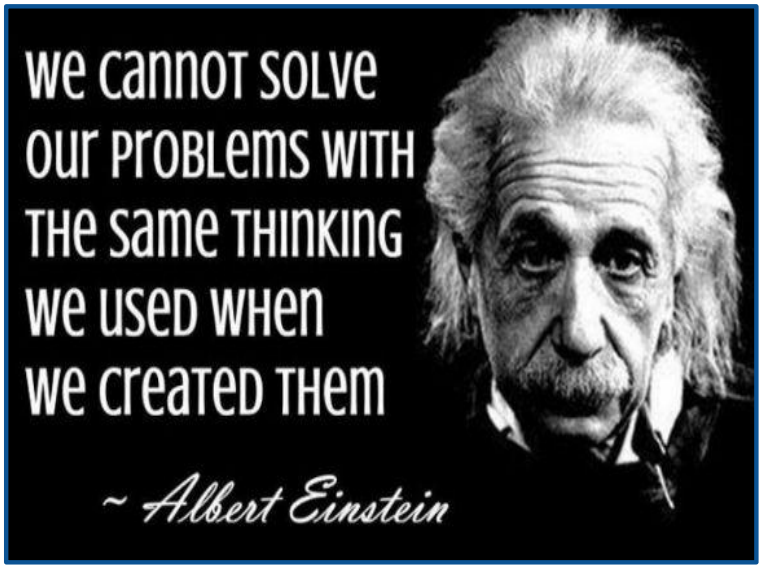
Algebra 2
1 credit, Grades 9-11

This course is designed so students develop the relevant skills and concepts from the Kentucky Core Academic Standards beyond Algebra 1 and then builds on those skills and concepts in a rigorous manner.. ***Course required for graduation.**

Algebra 2: Pre-Advanced Placement (Pre-AP),
1 credit, Grades 9-11

This course will cover the same standards as Algebra II but at a more rigorous level and accelerated pace by providing extensions and enrichment. ***This course may be taken in place of Algebra II as the graduation requirement.**

MATHEMATICS



Algebra 3, 1 credit, Grades 11-12
This course is designed for students who are intending to attend college and in need of additional preparation in order to be successful in credit-bearing College Algebra, or for students who feel in need of additional preparation to take College Algebra. The content goes beyond a traditional Algebra 2 course.

Pre-Calculus, 1 credit, Grades 10-12
This course is designed for students to attain the concepts necessary to be successful in a Calculus course, an AP Calculus course or a College Calculus course.

AP Calculus AB, 1 credit, Grades 11-12
This course is designed to address all the concepts delineated in the College Board guidelines for the AB Calculus examination.

AP Calculus BC, 1 credit, Grades 11-12
This course is designed to address all the concepts delineated in the College Board guidelines for the BC Calculus examination.

AP Statistics, 1 credit, Grades 11-12
Any student who has completed Algebra II is eligible to take AP Statistics, though college-bound students will benefit the most from it. This course offers students the opportunity to use math to do the type of high-level thinking and analysis that is required by a growing number of today's more desirable careers. Statistics is unique, exciting, and unlike any other math class. AP Statistics covers the following four areas:

- Exploring Data: Describing patterns and departures from patterns
- Sampling and Experimentation: Planning and . conducting a study
- Anticipating Patterns: Exploring random phenomena using probability and simulation
- Statistical Inference: Estimating population parameters and testing hypotheses

High School MATH 1, 1 credit, Grade 9

Freshmen will be placed into this math course based on 8th grade MAP score and other benchmark criteria.

High School MATH 2, 1 credit, Grade 10

This sophomore course is a continuation of Integrated Math 1 and will cover Geometry curriculum and review Algebra curriculum.

High School MATH 3, 1 credit, Grade 11

Juniors will be placed into this math course based pm MAP scores and other benchmark criteria.

High School MATH 4, 1 credit, Grade 12

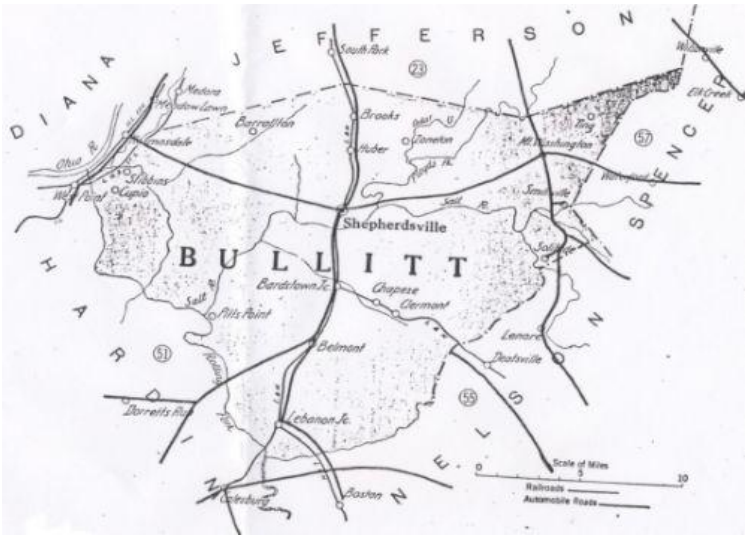
This senior math course is a continuation of Integrated Math 3. This is the conclusion of Algebra 2 curriculum.

SOCIAL STUDIES

Integrated Social Studies, 1 credit, Grade 9
This course is designed for freshman students. Approximately one-third of the course will be focused on Civics Core Content i.e. Democratic Governments, Distribution of Power, and Conflicting Rights. The second-third of the course will focus on Economics Core Content i.e. Scarcity, Economic Systems, Supply and Demand, and Productivity. The final portion of the course will focus on Geography Core Content i.e. Geographic Analysis, Geography and Culture, Human Migration, Overcoming the Environment, and Natural Resources. ***Course required for graduation.**

Integrated Social Studies: Pre-Advanced Placement (Pre-AP)
1 credit, Grade 9
This Pre-AP course will cover the same standards as Integrated SS. However the content, will be covered at more rigorous level and accelerated pace by providing extensions and enrichment. ***This course may be taken in place of Integrated SS as the graduation requirement.**

AP Human Geography, 1 credit, Grades 9-12
The purpose of AP Human Geography is to introduce students to the systematic study of patterns and processes that have shaped our human understanding, use, and alteration of Earth's surface. Students will employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. Students will also learn about the methods and tools geographers use in their science and practice.



World Civilization,
1 credit, Grades 9-12
Get ready to go global! Welcome to World History! This course takes you through 10,000 years of history to examine how the world became what it is today. This course will change your perspective on our global society because we take a look at the world as a whole with many small parts. You will investigate, analyze, and synthesize your understandings of the world.

AP World History,
1 credit, Grades 9-12
To global citizenship and beyond! Advanced Placement World History is a survey of the history of the world focusing on social, cultural, and political aspects; ancient and modern history; the study of western and non-western civilizations; and current events. College credit earned with successful completion of the AP exam.

SOCIAL STUDIES

U.S. History, 1 credit, Grades 9-12
For beautiful, for spacious skies, for amber waves of grain! Our U.S. History course is a whirlwind study of what makes America beautiful. We will start with the colonization of the New World and working through 239 years of American History. This course will provide you with an overview of government institutions, important dates in American History, and how it all relates to the country we're living in today. This course will also prepare you to take the required QualityCore End of Course Assessment in the Spring semester.
***Course required for graduation.**

AP U.S. History, 1 credit, Grades 9-12
What is the nature of human conflict? What caused the American Civil War? Does industrialization and progress cause immorality? How is history impacted by social, political and economic change? These are some of the questions you will encounter in AP U.S. History. This college-level class is an overview of American History from colonization to present day. You will be able to deal critically with the problems and materials in U.S. history through analyzing and interpreting historical documents and events. You can earn college credit with successful completion of AP exam. You will also be prepared for the End of Course Assessment (EOC) taken as the final exam. Students may be required to take the QualityCore End of Course (EOC) exam for U.S. History if they take AP U.S. History for U.S. History credit. ***This course may be taken in place of U.S. History as the graduation requirement.**

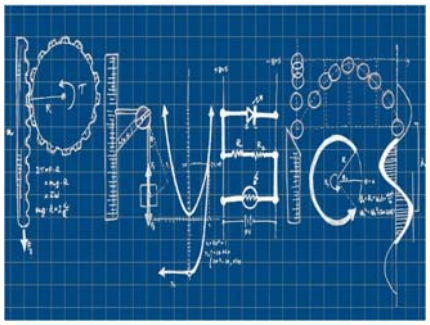
Bullitt County Public Schools

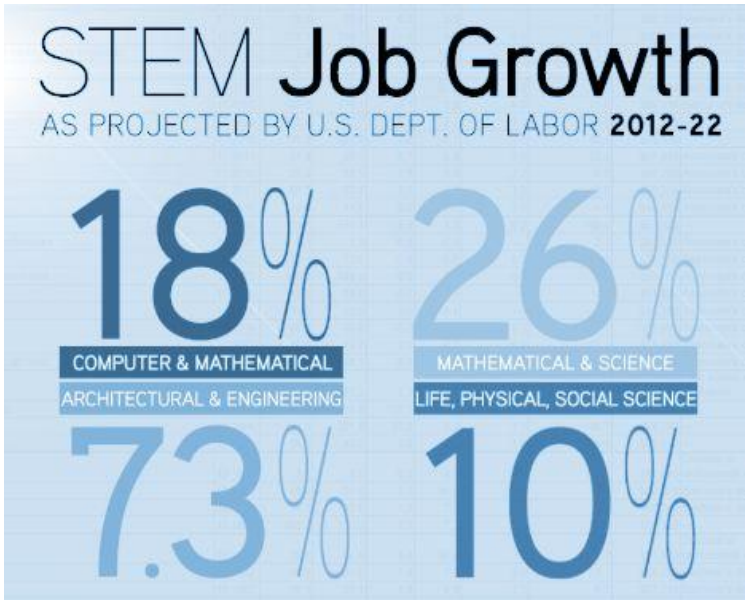
C C R ! !

Psychology, 1 credit, Grades 9-12
What makes people tick? Is the "teen brain" really under construction? This course will engage your critical thinking skills to analyze the study, behavior, and mental processes that influence your everyday life. The best part of this course will be your role in the driver's seat! Your curiosities in Psychology will be surveyed and used to help shape this course.

AP Psychology, 1 credit, Grades 9-12
Advanced Placement Psychology is designed to introduce you to the systematic and scientific study of the behavior and mental processes of human beings and other animals. This course will focus on two main essential questions: What makes people tick? What is normal? You will be exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. **College credit may be earned with successful completion of the AP exam.**

THE SCIENCES





Integrated Science, 1 credit, Grades 9-12
Students develop a conceptual understanding of physics and Earth/space science content through the use of scientific inquiry. They experience physics and Earth/space science concepts such as motions and forces, conservation of energy and the increase in disorder, interactions of energy and matter, and energy in the Earth system. A scientific inquiry approach uses concrete hands-on experiences that require students to apply critical thinking skills.

Integrated Science, **Pre Advanced Placement (Pre AP)**, 1 credit, Grades 9-12
This course will accelerate concepts from Integrated Science will prepare science learners for future AP Science Courses.

AP Environmental Science, 1 credit, Grade 9-10
This AP course focuses on earth systems & resources, the living world, population, land & water use, energy resources and consumption, pollution and global change. A scientific inquiry approach uses concrete hands-on experiences that require students to apply critical thinking skills.

Biology I,
1 credit, Grades 9-12

Students develop a conceptual understanding of life science, as outlined in Kentucky's Program of Studies, through the use of scientific inquiry. They experience life science concepts such as the cellular organization; molecular basis of heredity; biological change; interdependence of organisms; matter, energy and organization in living systems; and behavior of organisms. A scientific inquiry approach uses concrete, hands-on experiences that require students to apply critical-thinking skills. ***Course required for graduation.**

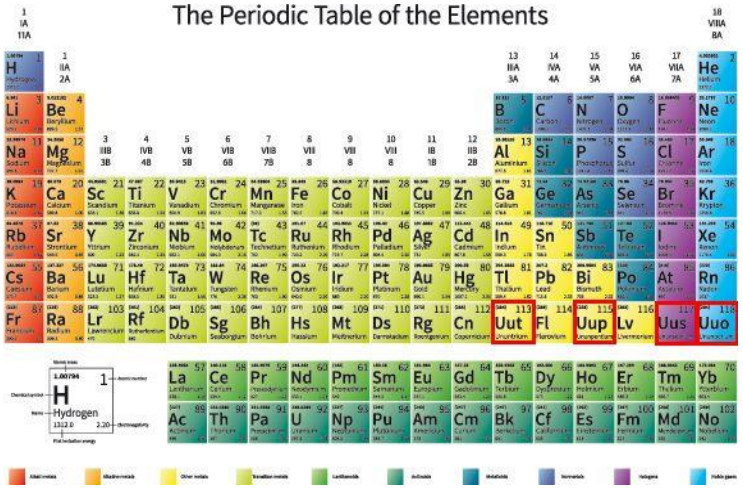
Biology I: Pre Advanced Placement (Pre AP),
1 credit, Grades 9-12

This course allows students to attain all the concepts contained in the description for Life Science/Biology, with the opportunity to progress at an accelerated pace and a more rigorous level. Curriculum will also focus on preparing students for the End of Course Assessment (EOC) taken as the final exam. ***This course may be taken in place of Biology as the graduation requirement.**

THE SCIENCES

AP Biology, 1 credit, Grades 9-12
AP Biology is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. It aims to provide students with the conceptual framework, factual knowledge and analytical skills necessary to deal critically with the rapidly changing science of biology. The two main goals of AP Biology are to help students develop a conceptual framework for modern biology and to help students gain an appreciation of science as a process. The ongoing information explosion in biology makes these goals even more challenging. Essential to this conceptual understanding are the following: a grasp of science as a process rather than as an accumulation of facts; personal experience in scientific inquiry; recognition of unifying themes that integrate the major topics of biology; and application of biological knowledge and critical thinking to environmental and social concerns. AP Biology is representative of the topics covered by the AP exam. ***This course may be taken in place of Biology as the graduation requirement.**

AP Environmental Science, 1 credit, Grade 9-10
This AP course focuses on earth systems & resources, the living world, population, land & water use, energy resources and consumption, pollution and global change. A scientific inquiry approach uses concrete hands-on experiences that require students to apply critical thinking skills.



Chemistry I,
1 credit, Grades 10-12
This course focuses on problem solving techniques; bonding; equilibrium; equations. Students develop a conceptual understanding of chemistry content, included in the Program of Studies, through the use of scientific inquiry. Chemistry I is a required course for those wanting to take AP Chemistry and AP Biology their junior or senior year.

Chemistry 1: Pre-Advanced Placement (Pre-AP)
1 credit, Grades 10-12
This Pre-AP course will cover the same standards as Chemistry 1. However the content, will be covered at more rigorous level and accelerated pace by providing extensions and enrichment. ***This course may be taken in place of Chemistry 1 as the graduation requirement.**

AP Chemistry,
1 credit, Grades 11-12 PREREQUISITES: Chemistry, Algebra II
AP Chemistry is the equivalent to a general Chemistry course usually taken in the first year of college. It is designed to comply with College Board recommendations to prepare students for an AP Exam in Chemistry. The course helps build students' understanding of the nature and reactivity of matter. The course begins with the structure of atoms, molecules, and ions; then students explore how that structure lets us predict and quantify the chemical reactions that substances undergo. AP Chemistry will enable you to develop an understanding of chemical concepts and become skilled at solving quantitative chemical problems through a combination of instructional activities. AP Chemistry is a full credit, two-semester course. ***This course is intended for those students who plan to study science, medicine, or engineering in college.**

THE SCIENCES

PHYSICS, 1

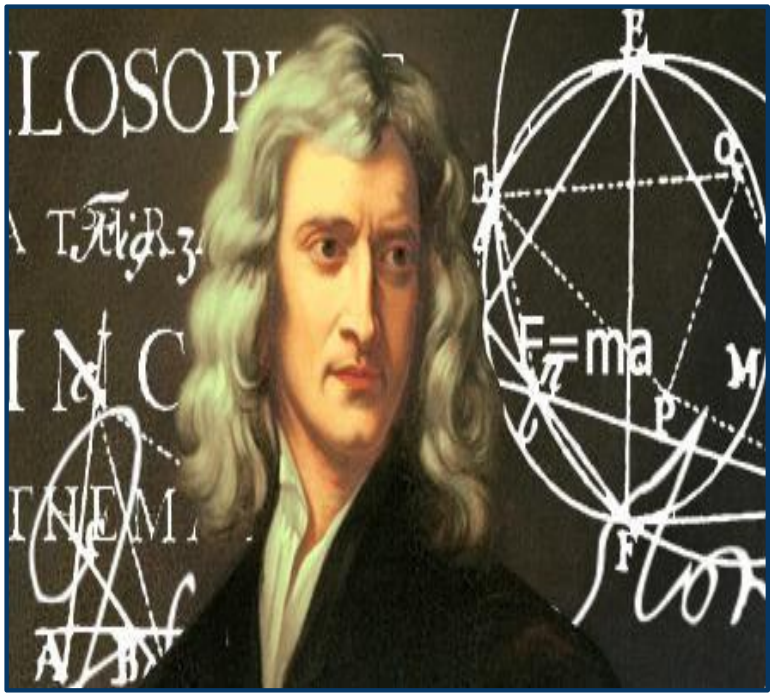
1 Credit Grades 10-12

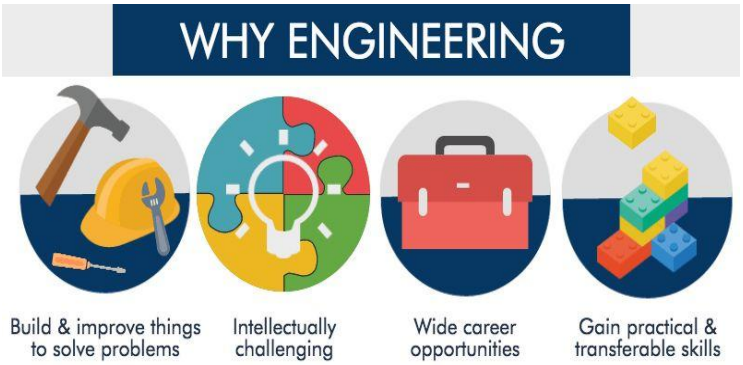
Prerequisite: Biology and Geometry or Algebra 2. Recommended for juniors and seniors. This course focuses on the main concepts involved in mechanics such as speed, accelerated motion, relativity, and Newton's laws of motion. These focuses will be laboratory based making use of some of the newest computer and calculator technologies. The course will also include some topics in magnetism, nuclear physics, and modern physics. By using appropriate technology throughout, the student will gain a working knowledge of physics through real-life experiences.

***AP PHYSICS 1,**

1 Credit, Grades 10-12

Prerequisite: Physics Recommended. This course is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, power; mechanical waves and sound; and introductory, simple circuits. This course is a must for anyone pursuing post-secondary studies in engineering or medical fields.





Integrated Science 2,
1 credit, Grades 10 - 12

Students develop a conceptual understanding of both physics and chemistry content through the use of scientific inquiry. Students will experience chemistry and physics concepts such as motions and forces, conservation of energy and the increase in disorder, interactions of energy and matter, and energy in the Earth system. A scientific inquiry approach uses concrete hands-on experiences that require students to apply critical thinking skills.

WELLNESS

Health Education I,
1 credit, Grade 9

Health I addresses the topics of mental health, drugs, alcohol and tobacco, sex education, sexually transmitted diseases, infectious diseases, safety and first aid, cardiopulmonary resuscitation, (CPR), nutrition, consumer health and non-infectious diseases. ***Course required for graduation.**

Physical Education I,
1 credit, Grade 9

Physical Education I involves the teaching of lifetime leisure sports, individual sports and team sports. Skills learned will be reinforced and advanced skills will be introduced. ***Course required for graduation.**

Mr. Dennis Minnis - NBHS
2016 KY PE Teacher of the Year

Athletic Conditioning, 1 credit, Grades 9-12
This course emphasizes improvement in flexibility, strength, and endurance. Weight training fundamentals are included with safety highlighted throughout the course. Periodic assessments are made so students can see progress.

Advanced Physical Education, 1 credit, Grades 10-12
PREREQUISITE: Physical Education I
Physical Education II is designed for students who desire to develop advanced skills in selected games and sports including physical fitness, individual sports, team sports, and lifelong health. The main emphasis of this class is on lifetime sports that promote overall good health and fitness. Advanced Physical Education is designed for students who have a genuine desire to develop their interest and skills to an advanced level to enjoy the physical activities and to pursue a career interest.

WORLD LANGUAGES

TWO YEARS OF THE SAME FOREIGN LANGUAGE ARE RECOMMENDED FOR MOST COLLEGES.

Spanish I,
1 credit, Grades 9-12
Spanish I introduces listening, speaking, reading and writing language skills within a cultural context. Included in the instruction of the Spanish language will be an overview of the art, music, history, geography, and elements of daily life in Spanish speaking countries.

Spanish II,
1 credit, Grades 10-12 PREREQUISITE: Spanish I
Spanish II reinforces and builds on listening, speaking, reading and writing language skills within a cultural context. Students develop insight into their own language and culture.

Spanish III, 1 credit, Grades 10-12 PREREQUISITE: Spanish II
Spanish III further develops listening, speaking, reading and writing language skills within a cultural context, with a greater emphasis on reading and writing. Another focus is fostering independent work and practice in the fundamentals of translating, conversing, and writing. Hispanic literature will be introduced.

Spanish IV, 1 credit, Grade 12 PREREQUISITE: Spanish III
This course prepares students to perform interpersonal, interpretive and presentational communicative tasks within the intermediate range on the ACTFL Proficiency scale; interpret, exchange, and present, information, concepts and ideas both within the classroom and beyond on a variety of topics including connections to other subject areas; and understand the relationship among the products, practices and perspectives of other cultures.

AP Spanish Language & Culture,
1 credit, Grades 11-12 PREREQUISITE: Spanish III
Prepares students for the Advanced Placement exam. Prepares students to understand and use the complexities of the Spanish language fluently and accurately to perform communicative tasks. The course engages students in an exploration of culture in contemporary and historical contexts, developing students' awareness and appreciation of tangible and intangible products, practices and perspectives.

DEPARTMENT OF WORLD Languages

WORLD LANGUAGES

French I, 1 credit, Grades 9-12
French I introduces listening, speaking, reading and writing language skills within a cultural context. Included in the instruction of the French language will be an overview of the art, music, history, geography, and elements of daily life in French speaking countries.

French II, 1 credit, Grades 10-12
PREREQUISITE: French 1
French II reinforces and builds on listening, speaking, reading and writing language skills within a cultural context. Students develop insight into their own language and culture.

French III, 1 credit, Grades 10-12 PREREQUISITE: French II
French III further develops listening, speaking, reading and writing language skills within a cultural context, with a greater emphasis on reading and writing. Another focus is fostering independent work and practice in the fundamentals of translating, conversing, and writing. French literature will be introduced.

German I, 1 credit, Grades 9-12

German I introduces listening, speaking, reading and writing language skills within a cultural context. Included in the instruction of the German language will be an overview of the art, music, history, geography, and elements of daily life in German speaking countries.

German II, 1 credit, Grades 10-12
PREREQUISITE: German 1

German II reinforces and builds on listening, speaking, reading and writing language skills within a cultural context. Students develop insight into their own language and culture.

TWO YEARS OF THE SAME FOREIGN LANGUAGE ARE RECOMMENDED FOR MOST COLLEGES.

FINE ARTS

Art History and Appreciation,
1 Credit, Grades 9-12
This course meets the requirements for graduation from high school. A study of the humanities through the arts (dance, drama, music, and visual art). Addresses the structures, humanities, purposes, creative processes and interrelationships of the visual and performing arts.

Introduction to Theater,
1 Credit, Grades 9-12
This course is designed to develop a knowledge of theatrical concepts and techniques that will enable students to create new theater pieces, perform existing theater works and respond to both studio exercises and performances. Theatre covers multiple styles of dramatic literature and uses a variety of connections to historical and cultural contexts.

Advanced Theater,
1 Credit, Grades 10-12
Prerequisite: Intro to Theater. This course is designed to develop knowledge of theatrical concepts and techniques that will enable students to create new theater pieces, perform existing theatre works and respond to both studios exercises and performances at a proficient level.. The course builds on the foundational skills of Intro to Theater engaging students with a deeper level of exploration of acting and directing skills.

Visual Art 1-4,
1 Credit Each, Grades 9-12

Visual Arts courses provide students with knowledge and opportunities to explore a variety of art forms and to create individual works of art. Courses address design elements and principles, language, materials, and processes used to produce various kinds of visual arts. As students advance they are encouraged to develop their own creative styles. Although the focus of most of these courses is on production of art, study of the structures, purposes, humanities, processes, are included. Career opportunities in visual art are also explored.

AP Studio Art,
1 Credit, Grades 10-12

The Drawing Portfolio is designed to address a very broad interpretation of drawing issues and media. Light and shade, line quality, rendering of form, composition, surface manipulation, and illusion of depth are drawing issues that can be addressed.

FINE ARTS

Concert Band, 1 Credit, Grades 9-12
The Concert Band is an instrumental ensemble comprised of students in grades 9-12. This course is specifically designed to promote students' playing technique for brass and woodwind instruments, and cover a variety of musical styles primarily for concert performances. This course covers the structures, humanities, purposes, processes, and interrelationships of the arts as they apply to music.

Symphonic Band, 1 Credit, Grades 10-12
The Symphonic Band is comprised of students in grades 10-12 whose musical commitment is the performance of quality wind band music at an extraordinary performance level. This course seeks to enhance and encourage each student's understanding of instrumental musical concepts and terms with an emphasis on rehearsals and performances combined with group methods and instruction. This course covers the structures, humanities, purposes, processes, and interrelationships of the arts as they apply to music.

Percussion Ensemble, 1 Credit, Grades 9-12
Prerequisite: Students must have taken band and/or played percussion in middle school. The purpose of this course is for its participants to improve musical proficiency in the area of percussion performance, expand upon knowledge and principles of music and musicianship, provide a performance experience in percussion, experience literature for percussion ensemble, and build musicianship and technique through small ensemble performance. This course covers the structures, humanities, purposes, processes, and interrelationships of the arts as they apply to music.

Vocal Ensemble,
1 Credit, Grades 9-12

Class time will be split between choral rehearsal and instruction in the components involved in creating vocal music.

Advanced Vocal Ensemble,
1 Credit, Grades 10-12

Students in advanced chorus develop musicianship and specific performance skills through ensemble singing. Activities in this class create the development of quality repertoire in the diverse styles of choral music appropriate in difficulty and range for the students. The repertoire for this choir is of the highest caliber and ranges from classical to Broadway show tunes to pop. Emphasis is placed on a cappella singing, advanced sight-reading and listening skills. The chorus provides instruction in vocal technique and music reading skills. Students develop the ability to understand and convey the composer's intent in order to connect the performer with the audience. Students have the opportunity to experience live performances by professional and quality music groups during and outside of the school day.

Music Theory,
1 Credit, Grades 9-12

This course is designed for students interested in learning the basics in music notation, melody, rhythm, and how music is constructed. Students with some background in music will learn how to read music, the proper method to write, read, and listen to music. The course introduces students to musicianship, theory, musical materials, and procedures. It will emphasize
aspects of music, such as harmony; and integrates aspects of melody, texture, rhythm, form, musical analysis, elementary composition, history, and style. The student's ability to read and write musical notation is fundamental to such a course.

JUNIOR RESERVE OFFICER TRAINING CORPS (JROTC)

The JROTC program engages students in the practice of basic citizenship customs, traditions and in the exploration of opportunities for non-military and military national service. Orients students to the purpose of the JROTC programs and to their roles as cadets. Develops student leadership potential through the application of principles, values, and strategies. Prepares students to work effectively as team members and leaders. Emphasizes the role of the leader in promoting equal opportunity, addressing prejudice, and preventing sexual harassment and assault. Builds essential skills students need to maximize learning potential and future success, and lays the groundwork for service learning.

Recognizing the value of their varied learning styles and multiple intelligences, students apply learning strategies to improve critical thinking, study, problem solving, and communication skills. Students will need to take responsibility for physical and mental wellness. Students assess their personal status and develop plans for improving nutrition/exercise habits and for controlling stress. Program also helps students make responsible choices about substance use and to prevent substance abuse. Students develop global awareness, as they compare physical, political, economic, and cultural elements of continents, regions and countries, and examine the global nature of environmental issues. Students actively engage in the We The People curriculum to explore the origins, structure, rights, and responsibilities of the American constitutional government. **Course offerings and pathway completion does not count towards transition readiness requirements.**

JROTC Level 1, 1 credit

JROTC Level 2, 1 credit

JROTC Level 3, 1 credit

JROTC Level 4, 1 credit

AGRICULTURE CAREER PATHWAYS

Agricultural Power and Structural, Technical Systems CIP 01.0201.00

BCHS (19-20)

Complete (1-2) ONE - TWO CREDITS from the following:

- Principles of Agricultural Science and Technology
  (BC) 030715
- Agriscience
  (BC) 030711

May Substitute ONE Credit Below for Pathway Courses:

- Agriculture Employability Skills
  (BC) 010121
- Agribusiness and Farm Management
  (BC) 010131

ILP Related Careers:
Agricultural Engineer
Welder
Mechanical Engineer
Diesel Technician
Electrical Engineer
Farm Equipment Technician
Small Engine Mechanic
End of Program Assessment/Industry Certifications

Animal Science Systems CIP 01.0901.00

BCHS / BEHS / NBHS (19-20)

Complete (1-2) ONE - TWO CREDITS from the following:

- Principles of Agricultural Science and Technology
  (BC, BE, NB) 030715
- Agriscience
  (BC, BE) 030711

Choose (2-3) TWO - THREE CREDITS from the following:

- Animal Science
  (BC) 020502
- Equine Science
  (BC) 02510
- Small Animal Technology
  (NB) 020503
- Veterinary Science
  (BC, BE) 020511

May Substitute ONE Credit Below for Pathway Courses:

- Agribusiness and Farm Management
  (BC) 010131
- Agriculture Employability Skills
  (BC, BE, NB) 010121

ILP Related Careers:
Veterinarian
Animal Scientist
Marine Biologist
Zoologist
Horse Trainer
Animal Breeder
Veterinary Technician
End of Program Assessment/Industry Certifications

AGRICULTURE
CAREER PATHWAYS

Agribusiness Systems
CIP 01.0101.00
BCHS / BEHS / NBHS (19-20)

Complete (1-2) ONE - TWO CREDITS from the following:

- Principles of Agricultural Science and Technology
  (BC, BE, NB) 030715
- Agriscience
  (BC, BE) 030711

Choose (2) TWO CREDITS from the following:

- Agribusiness/Farm Management
  (BC) 010131
- Agriculture Employability Skills
  (BC, BE, NB) 010121

May Substitute ONE CREDIT Below for Pathway Courses:

- Greenhouse Technology
  (BC, BE) 010621
- Small Animal Technology
  (NB) 020503

ILP Related Careers:
Entrepreneur
Photojournalist
Agriculture Lawyer
Sales Representative
Independent Business Owner
Editor
Retail Salesperson
End of Program Assessment/Industry Certifications

Horticulture and Plant Science Systems
CIP 01.1101.00
BCHS / BEHS (19-20)

Complete (1-2) ONE - TWO CREDITS from the following:

- Principles of Agricultural Science and Technology
  (BC, BE) 030715
- Agriscience
  (BC, BE) 030711

Choose (2) TWO CREDITS from the following:

- Greenhouse Technology
  (BC, BE) 010621
- Landscaping/Turf Mgt
  (BC) 010631

May Substitute ONE Credit Below for Pathway Courses:

- Agribusiness/Farm Management
  (BC, BE) 010131
- Agriculture Employability Skills
  (BC, BE) 010121

ILP Related Careers:
Horticulturist
Agronomist
Landscaper
Farmer
Scientist
Landscape Architect
Nursery / Greenhouse Grower
End of Program Assessment/Industry Certifications

AGRICULTURE
CAREER PATHWAYS

Agribiotechnology Systems CIP 26.1200.00 BCHS (19-20)	Food Science and Processing Systems CIP 01.1001.00 BCHS (19-20)
Complete (1-2) ONE - TWO CREDITS from the following: • Principles of Agricultural Science and Technology **(BC) 030715** • Agriscience **(BC) 030711**	**Complete (1-2) ONE - TWO CREDITS from the following:** • Principles of Agricultural Science and Technology **(BC) 030715** • Agriscience **(BC) 030711**
Complete (1-2) TWO CREDITS from the following: • Agriculture Employability Skills **(BC) 010121** • Veterinary Science **(BC) 020511**	**Choose (2) TWO CREDITS from the following:** • Veterinary Science **(BC) 020511** • Agriculture Employability Skills **(BC) 010121**
End of Program Assessment/Industry Certifications	End of Program Assessment/Industry Certifications

AGRICULTURE

CAREER PATHWAYS

Environmental Science and Natural Resources
CIP 03.0101.00
BCHS (19-20)

Complete (1-2) ONE - TWO CREDITS from the following:

- Principles of Agricultural Science and Technology
  (BC) 030715
- Agriscience
  (BC) 030711

Choose (2) TWO CREDITS from the following:

- Agriculture Employability Skills
  (BC) 010121
- Greenhouse Technology
  (BC) 010621

End of Program Assessment/Industry Certifications

BUSINESS AND MARKETING EDUCATION CAREER PATHWAYS

Accounting (19-20)
CIP 52.0301.00
BCHS / BEHS

Complete (2-3) TWO-THREE CREDITS from the following:

- Accounting & Finance Foundations
  (BC, BE) 060122
- Financial Management
  (BC) 070122
- Advanced Accounting
  (BE) 070125

Choose (1-2) ONE-TWO CREDITS from the following:

- Personal Finance (CTE Credit)
  (BC, BE) 060170
- Personal Finance (Math Credit)
  (BE) 0807719
- Microsoft Office Specialists (MOS/MCAS)
  (BC, BE) 070750
- Business and Marketing Essentials
  (BC) 060111
- Business Education Co-op
  (BC, BE) 060107
- Digital Literacy
  (BC, BE) 060112, CIT 105 online (JCTC) - dual credit offering
- Ethical Leadership **(BC) 060109**

Industry Certifications/End of Program Assessment

Administrative Support (19-20)
CIP 52.0401.00
BCHS / BEHS / NBHS

Complete (2-3) TWO-THREE CREDITS from the following:

- Digital Literacy
  (BC, BE, NB) 060112, CIT 105 online (JCTC) - dual credit offering
- Computer Literacy
  (BE) 110110
- Accounting & Finance Foundations
  (BC, NB) 060122
- Business Communications
  (NB) 060155

Choose (1-2) ONE-TWO CREDITS from the following:

- Microsoft Office Specialist (MOS/MCAS)
  (BC, BE) 070750
- Business and Marketing Essentials
  (BC) 060111
- Medical Terminology (.5-1 credit)
  (BC, BE, NB) 170131
- Emergency Procedures (.5 credit)
  (BC, BE, NB) 170141
- Business Education Co-op
  (BC, BE, NB) 060107
- Ethical Leadership
  (BC) 060109

May substitute ONE credit below for Accounting and Finance Foundations course: BE must choose one for top category.

- Personal Finance (CTE Credit)
  (BC, BE) 060170
- Personal Finance (Math Credit)
  (BC, BE) 060170
- Advanced Accounting
  (BE) 070125
- Financial Management
  (BC) 070125

Industry Certifications/End of Program Assessment

BUSINESS AND MARKETING EDUCATION CAREER PATHWAYS

E-Commerce
CIP 52.0208.02
BCHS / BEHS / NBHS (19-20)

Complete (2-3) TWO-THREE CREDITS from the following:

- Digital Literacy
  (BC, BE, NB) 060112, CIT 105 online (JCTC) - dual credit course
- Marketing Principles
  (BC, BE, NB) 080716
- Advertising and Promotion
  (BC) 081511
- Multimedia Publishing
  (NB) 060751
- Web Page Design **(BC) 060199 OR** Fundamentals of Social Media Marketing **(BC) 081310**

Choose (1-2) ONE-TWO CREDITS from the following:

- Principles of Entrepreneurship
  (BC, NB) 080310
- Business and Marketing Essentials
  (BC) 060111
- Marketing Applications
  (BC, NB) 080717
- Retail Marketing
  (BC, BE, NB) 081411
- Advanced Multimedia Publishing
  (NB) 0670761
- Promotional Applications and Media
  (BC, BE) 080712
- Business Education Co-op
  (BC, BE, NB) 060107
- Marketing Co-op
  (BE, NB) 080707
- Microsoft Office Specialist (MOS/MCAS)
  (BE) 070750
- Ethical Leadership **(BC) 060109**

Industry Certification/End of Program Assessment

Financial Services
CIP 52.1908.00
BCHS / BEHS (19-20)

Complete (1-3) One-Three CREDITS from the following:

- Personal Finance (CTE Credit)
  (BE) 060170 or Personal Finance (Math Credit) **080719**
- Financial Services I
  (BE) 060311
- Accounting and Finance Foundations
  (BC, BE) 060122

Choose (1-3) ONE-THREE CREDITS from the following:

- Financial Services II
  (BE) 060351
- Business and Marketing Essentials
  (BC) 060111
- Business Education Co-op
  (BC, BE) 060107
- Marketing Principles
  (BC, BE) 060111
- Ethical Leadership
  (BC) 060109

Industry Certification/End of Program Assessment

BUSINESS AND MARKETING EDUCATION

CAREER PATHWAYS

Marketing
CIP 52.1401.01
BCHS / BEHS / NBHS (19-20)

Complete (1-2) ONE-TWO CREDITS from the following:

- Marketing Principles
  (BC, NB, BE) 080716
- Marketing Applications
  (BC, NB) 080717

Choose (2-3) TWO-THREE CREDITS from the following:

- Advertising and Promotion
  (BC) 081511
- Sports and Events Marketing
  (BC) 081121
- Retail Marketing
  (BC, NB, BE) 081411
- Principles of Entrepreneurship
  (BC, NB) 080310
- Promotional Applications and Media
  (BC, BE) 081512
- Accounting and Finance Foundations
  (BC, NB, BE) 060122
- Personal Finance (CTE Credit)
  (BC, BE) 060170
- Business and Marketing Essentials
  (BC) 060111
- Marketing Education Co-op
  (BC, NB, BE) 080707
- Ethical Leadership
  (BC) 060109

Industry Certification/End of Program Assessment

Management & Entrepreneurship
CIP 52.0701.00
BCHS / BEHS / NBHS (19-20)

Choose (1-3) ONE-THREE CREDITS from the following:

- Business and Marketing Essentials
  (BC) 060111
- Accounting and Finance Foundations
  (BC, BE, NB) 060122
- Introduction to Management
  (NB) 060411
- Principles of Entrepreneurship
  (BC, NB) 080310

Choose (1-3) ONE-THREE CREDITS from the following:

- Digital Literacy
  (BC, BE, NB) 060112, CIT 105 online (JCTC) - dual credit offering
- Business Education Co-op
  (BE) 060107
- Marketing Principles
  (BC, BE, NB) 080716
- Microsoft Office Specialists (MOS/MCAS)
  (BE) 070750
- Ethical Leadership
  (BC) 060109
- Business Education Co-op
  (BC, BE, NB) 060107
- Marketing Co-op
  (BE, NB) 080707

May substitute (1) ONE CREDIT below for Accounting and Finance Foundations course:

- Advanced Accounting
  (BE) 070125
- Financial Management
  (BC) 070122
- Personal Finance (CTE Credit)
  (BC) 060170

Industry Certification/End of Program Assessment

BUSINESS AND MARKETING EDUCATION

CAREER PATHWAYS

Retail Services
CIP 52.1803.00
BCHS (19-20)

Complete (2-3) THREE CREDITS:

- Retail Marketing
  (BC) 081411
- Marketing Applications
  (BC) 080717

Complete (1-2) ONE-TWO CREDITS:

- Principles of Entrepreneurship
  (BC) 080310
- Marketing Principles
  (BC) 08716
- Promotional Applications and Media
  (BC) 081512
- Advertising and Promotion
  (BC) 081511
- Fundamentals of Social Media
  (BC) 081310
- Accounting and Finance Foundations **(BC) 060122** or Personal Finance (CTE Credit) (**BC**) **060170**
- Ethical Leadership
  (BC) 060109

ILP Related Careers:
Early Childhood Educator
Psychologist
Pediatrician
Midwife
Child and Youth Worker

Industry Certifications/End of Program Assessment

EDUCATION AND TRAINING CAREER PATHWAYS

Teaching and Learning
NBHS / BEHS / BCHS

Complete (3) THREE CREDITS from the following:

- The Learning Community
  (BC, BE, NB) 331030 EDTP 201 (UofL)
- The Learner-Centered Classroom
  (BC, BE, NB) 331030 EDTP 328 (UofL)
- The Professional Educator
  (BC, BE, NB) 331032 EDTP 215 (UofL)

ILP Related Careers
Teacher
Administrator
Counselor
Instructional Coach
Curriculum Specialist
Curriculum Writer
Curriculum Consultant
School Psychologist
Curator
Professor
Policy Advisor
Tutor
Assessment Specialist

ENGINEERING CAREER PATHWAYS

Electrical/Electronics Engineering
CIP 14.1001.00
BCHS / BEHS (19-20)

Complete (3) THREE CREDITS from the following:

- Engineering I (Introduction to Engineering Design PLTW)
  (BC, BE) 210221
- Engineering II (Principles of Engineering PLTW)
  (BC, BE) 210222
- Electrical/Electronics Engineering (Digital Electronics PLTW)
  (BC, BE) 210232

Choose (1-2) ONE-TWO CREDITS from the following:

- Unmanned Aircraft Systems
  (BC, BE) AVN 170 (EKU) - dual credit course offering
- Engineering Capstone
  (BE) 210110

ILP Related Careers:
Engineering Technology Instructor
Production Woodworker
Manufacturing Manager
Manufacturing Worker
Electronics Assembler
Industrial Engineer
Industrial Technician
Quality Controller
Architect
Aerospace Engineer
Interior Designer
Nuclear Engineer
Electrical Engineer
Electronics Engineer
Civil Engineer

Industry Certifications/End of Program Assessment

ENGINEERING CAREER PATHWAYS

Aerospace Engineering
CIP 14.0201.01
BCHS / BEHS (19-20)

Complete (3) THREE CREDITS:

- Engineering I (Introduction to Engineering Design PLTW) **(BC, BE) 210221**
- Engineering II (Principles of Engineering PLTW) **(BC, BE) 210222**
- Unmanned Air System **AVN 170 (EKU) - dual credit offering**

Choose (1-2) ONE-TWO CREDITS from the following:

- Electrical/Electronics Engineering (Digital Electronics PLTW) **(BC, BE) 210232**
- Engineering Capstone (Engineering Design and Development PLTW) **(BE) 210110**

ILP Related Careers:

Aerospace Engineer
Aeronautical Engineer
Astronaut
Engineering Tech

Industry Certification/End of Program Assessment

Automotive Engineering
CIP 15.0803.00
BCHS / BEHS (19-20)

Complete (2) TWO CREDITS:

- Engineering I (Introduction to Engineering Design PLTW) **(BC, BE) 210221**
- Electrical/Electronics Engineering (Digital Electronics PLTW) **(BC, BE) 210232**

Complete (4) CREDITS:

- 470507 Auto Maintenance & Light Repair Section A **(ROC, BC, BE) 470507**
- 470509 Auto Maintenance & Light Repair Section B **(ROC, BC, BE) 470509**
- 470511 Auto Maintenance & Light Repair Section C **(ROC, BC, BE) 470511**
- 470513 Auto Maintenance & Light Repair Section D **(ROC, BC, BE) 470513**

ILP Related Careers:

Automotive Engineer
Service Manager

Industry Certification/End of Program Assessment

ENGINEERING CAREER PATHWAYS

Electrical Construction Engineering
CIP 15.0303.00
BCHS / BEHS (19-20)

Complete (2) TWO CREDITS:

- Engineering I (Introduction to Engineering Design PLTW) **(BC, BE) 210221**
- Electrical/Electronics Engineering (Digital Electronics PLTW) **(BC, BE) 210232**

Complete (2) THREE CREDITS:

- Circuits I **(ROC, BC, BE) 460316**
- Circuits II **(ROC, BC, BE) 470507**

ILP Related Careers:

Electrical Engineer
Electrical Engineering
Tech Electrician
Industry Certification

Industry Certifications/End of Program Assessment

Welding Engineer
CIP 15.0614.00
BCHS / BEHS (19-20)

Complete (2) TWO CREDITS:

- Engineering I (Introduction to Engineering Design PLTW) **(BC, BE) 210221**
- Engineering II (Principles of Engineering PLTW) **(BC, BE) 210222**

Complete (3) THREE CREDITS:

- Blueprint Reading for Welding **(ROC, BC, BE) 480505**
- Cutting Process **(ROC, BC, BE) 480501**
- Gas Metal Arc Welding **(ROC, BC, BE) 480522**
- Shielded Metal Arc Welding (SMAW) **(ROC, BC, BE) 480521**

ILP Related Careers:

Pipe Welder
Certified Welding Inspector (CWI)
Certified Welding Educator (CWE)
Welding Engineer
Structural Engineer
Mechanical Engineer

Industry Certifications/End of Program Assessment

FAMILY CONSUMER SCIENCE CAREER PATHWAYS

Culinary and Food Services (CIP 12.0500.00) BCHS / BEHS / NBHS (19-20)

Complete (3) THREE CREDITS from the following:

- Foods & Nutrition **(BC, BE, NB) 200441**
- Culinary Arts I **(BC, BE, NB) 200411**
- Culinary Arts II **(BC, BE, NB) 200412**

Choose (1) ONE CREDIT from the following:

- FACS Essentials **(BC, BE, NB) 200113** AND/OR FACS Essentials Health (.5 credit)
- Advanced Foods & Nutrition (.5 or 1 credit) **(BC, BE) 200442**
- Co-op: Culinary Arts **(BC, BE) 200409**

ILP Related Careers:

Industry Certification/End of Program Assessment

Consumer and Family Management CIP 19.0403.00 BCHS / BEHS (19-20)

Choose (3) THREE CREDITS from the following:

- FACS Essentials **(BC) 200113** AND/OR FACS Essentials Health (.5 credit) (BE) **200161** **(BC) 200171**
- Consumer Economics within Social Studies **(BE) 201105**
- Foods & Nutrition **(BC, BE) 200441**
- Relationships (.5 or 1 credit) **(BC, BE) 200171**

Choose (1) ONE CREDIT from the following:

- Co-op: Consumer and Family Management (BC)
- Parenting (.5 or 1 credit) **(BE) 200173**

ILP Related Careers:
Marriage and Family Therapist
Family and Consumer Scientist
Gerontologist
Abuse/Crisis Counselor
Personal Financial Planner

Industry Certification/End of Program Assessment

FAMILY CONSUMER SCIENCE CAREER PATHWAYS

Food Science and Dietetics
(CIP 51.3199.00)
BCHS (19-20)

Complete (3) THREE CREDITS from the following:

- Foods & Nutrition
  (BC, BE, NB) 200441
- Culinary Arts I
  (BC, BE, NB) 200411
- Culinary Arts II
  (BC, BE, NB) 200412

ILP Related Careers
Fashion Designer
Chef/Cook
Baker
Entrepreneur
Food Inspector
Butcher

Industry Certification/End of Program Assessment

Fundamentals of Teaching
CIP 13.1308.00
BCHS (19-20)

Choose (3) THREE CREDITS from the following:

- Early Lifespan
  (BC) 200223
- FACS Essentials
  (BC) 200113
- Relationships
  (BC) 200171

ILP Related Careers
Marriage and Family Therapist
Family and Consumer Scientist
Gerontologist
Abuse/Crisis Counselor
Personal Financial Planner

Industry Certification/End of Program Assessment

FAMILY CONSUMER SCIENCE CAREER PATHWAYS

Early Childhood Education
CIP 13.1210.00
BCHS / BEHS / NBHS (19-20)

Complete (3) THREE CREDITS:

- Early Lifespan Development
  (BC, BE, NB) 200223
- Child Development Services I
  (BC, BE, NB) 200261
- Child Development Services II
  (BC, BE, NB) 200262

Choose (1) ONE CREDIT:

- FACS Essentials
  (BC, BE, NB) 200113 AND/OR FACS Essentials Health (.5 credit) 200161
- Principles of Teaching 331020
- Relationships (.5 or 1 credit)
  (BC, BE) 200171
- Parenting (.5 or 1 credit)
  (BE, NB) 200173
- Co-op: Early Childhood Education
  (BE) 200201

ILP Related Careers:
Early Childhood Educator
Psychologist
Pediatrician
Midwife
Child and Youth Worker

Industry Certifications/End of Program Assessment

Hospitality, Travel, Tourism and Recreation
CIP 52.1910.00
BCHS (19-20)

Complete (2) TWO CREDITS:

- Marketing Principles
  (BC) 080716
- Marketing Application
  (BC) 080717

Complete (2) TWO CREDITS:

- Principles of Entrepreneurship
  (BC) 080310
- Advanced Foods and Nutrition
  (BC) 200442
- Foods and Nutrition **(BC) 200441 or** FACS Essentials **(BC) 200113**
- Ethical Leadership
  (BC) 060109

Industry Certifications/End of Program Assessment

HEALTH SCIENCE
CAREER PATHWAYS

EKG Technology/Technician
CIP 51.0902.01
NBHS (19-20)

Complete (3) THREE CREDITS from the following:

- Principles of Health Science **(NB) 170111**
- Emergency Procedures (.5 credit) **(NB) 170141** AND Medical Terminology (.5 or 1 credit) **(NB) 170131**
- EKG Technician **(NB) 170555**

Choose (1) ONE CREDIT from the following:

- Body Structures and Functions OR Anatomy **(NB) 302631**
- Medical Math (.5 or 1 credit) **(NB) 170169**
- Internship: Allied Health **(NB) 170550**

ILP Related Careers:
Diagnostic Medical Sonographer
Medical Assistant
Medical Lab Tech
Nurse
Radiologist

Industry Certifications/End of Program Assessment

Pre-Nursing
CIP 51.2699.01
BCHS (19-20)

Complete (3) THREE CREDITS from the following:

- Principles of Health Science **(BC) 170111 HST 102 & HST 103 (JCTC) dual credit offering**
- Emergency Procedures (.5 credit) **(BC) 170141** AND Medical Terminology (.5 or 1 credit) **(BC) 170131 AHS 115 (JCTC) dual credit offering**
- Medicaid Nurse Aide **(BC) 170631 NAA 100 (JCTC) dual credit offering**

Choose (1) ONE CREDIT from the following:

- Body Structures and Functions **(BC) 170167** OR Anatomy (Science course)
- Medical Math (.5 or 1 credit)
- Co-op (Nursing)
- Internship: Allied Health

ILP Related Careers:
Licensed Practical Nurse
Nurse
Nurse Practitioner
Nursing Assistant
Physician's Assistant
Doctor

Industry Certifications/End of Program Assessment

HEALTH SCIENCE
CAREER PATHWAYS

Pharmacy Technician
CIP 51.0805.01
BCHS (19-20)

Complete (3) THREE CREDITS:

- Principles of Health Science
  (BC) 170111 HST 102 & HST 103 (JCTC)
  dual credit offering
- Emergency Procedures (.5 credit) **(BC) 170141** AND Medical Terminology (.5 or 1 credit)
  (BC) 170131 AHS 115 (JCTC)
  dual credit offering
- Pharmacy Technician
  (BC) 170558

Choose (1) ONE CREDIT from the following:

- Body Structures and Functions **(BC) 170167** OR Anatomy

ILP Related Careers

Pharmacy Technician

Industry Certifications/End of Program Assessment

Patient Care Technician
CIP 51.1614.00
BEHS / NBHS (19-20)

Complete (3) THREE CREDITS:

- Principles of Health Science
  (BE, NB) 170111 HST 102 & HST 103 (JCTC)
- Emergency Procedures (.5 credit) **(BE, NB) 170141** AND Medical Terminology (.5 or 1 credit) **(BE, NB) 170131 AHS 115 (JCTC)**
- Acute Care Basic Skills
  (BE, NB) 170502

Choose (1) ONE CREDIT from the following:

- Body Structures and Functions **(NB) 170167 OR** Anatomy **(BE, NB) 302631**
- Medical Math (.5 or 1 credit)
  (NB) 170169
- Co-op (Nursing)
- **(BE, NB) 170601**
- Internship: Allied Health
  (NB) 170550

ILP Related Careers:
Licensed Practical Nurse
Nurse
Nurse Practitioner
Nursing Assistant
Physician's Assistant
Doctor

Industry Certifications/End of Program Assessment

HEALTH SCIENCE
CAREER PATHWAYS

Allied Health
CIP 51.0000.01
NBHS / BEHS / BCHS (19-20)

Complete (3) THREE CREDITS:

- Principles of Health Science
  (BE, BC, NB) 170111
- Emergency Procedures (.5 credit) **(BC, BE, NB) 170141 AND** Medical Terminology (.5 or 1 credit) **(BE, BC, NB) 170131**
- Allied Health Core Skills
  (BE, BC, NB) 170501

Choose (1) ONE CREDIT from the following:

- Body Structures and Functions **(BC, NB) 170167** OR Anatomy **(BE, NB) 302631**
- Medical Math (.5 or 1 credit)
  (NB) 170169
- Internship: Allied Health
  (NB) 170550

ILP Related Careers

Doctor
Nurse
Pharmacist
Psychologist
Radiologist
Surgeon
Veterinarian

Industry Certifications/End of Program Assessment

INFORMATION TECHNOLOGY CAREER PATHWAYS

Computer Science
CIP 11.0701.01
NBHS (19-20)

Complete (3) THREE CREDITS from the following:

- Digital Literacy **(NB) 060112, CIT 105 online (JCTC) - dual credit offering**
- AP Computer Science Principles **(NB) 110711**
- AP Computer Science A **(NB) 110701**

ILP Related Careers:
Computer Software Engineer
Database Developer
Computer Hardware Engineer
Computer Network Specialist
Computer Scientist
Web Developer
Information Security Analyst
Computer Programmer
IT Project Manager

Industry Certification/End of Program Assessment

Digital Design and Game Development
CIP 36.0113.00
BEHS (19-20)

Complete (4) FOUR CREDITS from the following:

- Digital Literacy **(BE) 060112, CIT 105 online (JCTC) dual credit offering**
- Game Design and Development Principles **(BE) 113605**
- Introduction to Digital Game Graphics **(BE) 113601**
- Advanced 3D Game Development **(BE) 113603**

ILP Related Careers:
IT Project Manager
Computer Animator
Cartoonist
Game Designer
Game Design Analyst
Webmaster
Web Developer

Industry Certification/End of Program Assessment

INFORMATION TECHNOLOGY CAREER PATHWAYS

Computer Programming
CIP 11.0201.01
Riverview Opportunity Center (19-20)

Complete (2) TWO CREDITS:

- Digital Literacy
  (ROC) 060112, CIT 105 online (JCTC)
  dual credit offering
- Computational Thinking
  (ROC) 110251, CIT 120 online (JCTC)
  dual credit offering

Complete (2) TWO CREDITS from the following:

- Introduction to Programming
  (ROC) 110252
- Project-Based Programming
  (ROC) 110226
- Information Technology Co-Op
  (ROC) 110918

ILP Related Careers:
Computer Software Engineer
Database Developer
Computer Hardware Engineer
Computer Network Specialist
Computer Scientist
Web Developer
Information Security Analyst
Computer Programmer
IT Project Manager

Industry Certification/End of Program Assessment

Network Administration
CIP 11.0901.01
Riverview Opportunity Center(19-20)

Complete (4) FOUR CREDITS:

- Digital Literacy
  (ROC) 060112, CIT 105 online (JCTC)
- Computer Hardware and Software Maintenance **(ROC) 110101, CIT 111 online (JCTC)**
- Computational Thinking **(ROC) 110251, CIT 120 online (JCTC)**
- Introduction to Networking Concepts (non-vendor)
  (ROC) 110901, CIT 160 online (JCTC)

All courses in this pathway are dual credit offerings.

Certifications earned through JCTC with completion of coursework.

- Computer Tech Basic
- A+ Prep

ILP Related Careers:
IT Project Manager
Computer Animator
Cartoonist
Game Designer
Game Design Analyst
Webmaster
Web Developer

Industry Certification/End of Program Assessment

INFORMATION TECHNOLOGY CAREER PATHWAYS

Network Security
CIP 11.1003.00
Riverview Opportunity Center (19-20)

Complete (4) FOUR CREDITS:

- Digital Literacy
  (ROC) 060112, CIT 105 online (JCTC)
- Computer Hardware of Software Maintenance
  (ROC) 110101, CIT 111 online (JCTC)
- Introduction to Networking Concepts (non-vendor)
  (ROC) 110901, CIT 160 online (JCTC)
- Security Fundamentals
  (ROC) 110912, CIT 180 online (JCTC)

All courses in this pathway are dual credit offerings.

Certifications earned through JCTC with completion of coursework.

- Computer Technician
- Computer Tech Basic
- A+ Prep
- Security Fundamentals Certificate

ILP Related Careers

Doctor
Nurse
Pharmacist
Psychologist
Radiologist
Surgeon
Veterinarian

Industry Certifications/End of Program Assessment

LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY CAREER PATHWAYS

Law Enforcement Services
CIP 43.0107.00
BEHS (19-20)

Complete (4) FOUR CREDITS:

- Introduction to Criminal Justice
  (BE) 461044
- Law Enforcement
  (BE) 461045
- Health and Well-Being for Law Enforcement
  (BE) 461018
- Criminal Investigation
  (BE) 461043

ILP Related Careers:
Correctional Officer
Crime Scene Investigator
Criminologist
Detective
Police Officer
Private Investigator
Probation/Parole Officer
Security Guard

Industry Certification/End of Program Assessment

MEDIA ARTS CAREER PATHWAYS

Graphic Design
CIP 50.0401.00
BEHS (19-20)

Complete (4) four credits from the following:

- Introduction to Media Arts
  (BE) 48901
- Two-Dimensional Media Design
  (BE) 48920
- Digital Imaging
  (BE) 480921
- Advanced Production Design
  (BE) 480922
- 480950 Media Arts Co-op
  (BE) 480950

ILP Related Careers

Industry Certifications/End of Program Assessment

BULLITT COUNTY
AREA TECHNOLOGY CENTER

A shuttle program allows students to remain in their home high school for traditional core courses and take a shuttle from BEHS and NBHS to the Area Technology Center for a skills trade pathway class. Students from BCHS and ROC are able to walk to the ATC for programming.

Students in grades 9-12 may apply to any program. Space is limited in all programs and students may not be selected for first year or choice.

BCATC Website: CLICK HERE

AREA TECHNOLOGY CENTER

Pathway Name:
Automotive Maintenance & Light Repair Technician
CIP 47.0604.01(ATC 480110X)

Pathway Courses:
470507 Maintenance and Light Repair A and Lab

470509 Maintenance and Light Repair B and Lab

470511 Maintenance and Light Repair C and Lab

470513 Maintenance and Light Repair D and Lab

470501 Automotive CO-OP

Industry Certification:
ASE Student Certification - Auto Maintenance and Light Repair

Industry Certification

AUTOMOTIVE

What Automotive Service Technicians and Mechanics Do: Automotive service technicians and mechanics, often called service technicians or service techs, inspect, maintain, and repair cars and light trucks.

Work Environment: Most automotive service technicians and mechanics work in well-ventilated and well-lit repair shops. Although automotive problems often can be identified and fixed with computers, technicians perform many tasks with greasy parts and tools, sometimes in uncomfortable positions.

How to Become an Automotive Service Technician or Mechanic: A high school diploma or the equivalent is typically the minimum requirement to work as an automotive service technician or mechanic. Because automotive technology is becoming increasingly sophisticated, some employers prefer automotive service technicians and mechanics who have completed a formal training program in a postsecondary institution. Industry certification usually is required once the person is employed.

Pay: The median annual wage for automotive service technicians and mechanics was $39,550 in May of 2017.

Job Outlook: Employment of automotive service technicians and mechanics is projected to grow 6 percent from 2016 to 2026, about as fast as the average for all occupations. Job opportunities for qualified job seekers should be very good.

Bullitt County Public Schools

$37,850

AREA TECHNOLOGY CENTER

Pathway Name:
Diesel Brake Repair
CIP 47.0605.01

Pathway Courses:
DIT 180-181 ECTC (ATC 470422) Brakes (Diesel) and Lab

ADX 120-121 ECTC (ATC 470556X) Basic Automotive Electricity and Lab OR Special Problems I Diesel

DIT 190-191 (ATC 470425) Electrical Systems for Diesel Equipment and Lab

DIT 100 (ATC 470406) Mechanical Concepts*AND
DIT 103 ECTC (ATC 470403) Preventive Maintenance and Lab*

Note: (*) Indicates half-credit course

Program Location:
Elizabethtown Community and Technical College

Industry Certification:
ASE Student Certification - Diesel Breaks or Diesel Electrical Electronic System
Industry Certification

DIESEL BRAKE REPAIR

What Diesel Brake Repairers Do: Common duties of someone working in diesel brake repair include performing diagnostic tests and determining common brake problems, repairing and replacing brakes, and performing routine brake maintenance.

Work Environment: Brake repair technicians may find job opportunities at automotive shops, automobile dealers, and auto parts stores.

How to Become a Diesel Brake Repairer: Employers typically seek brake repair technicians who hold a certificate or an associate's degree in automotive service technology from a vocational-technical school or community college. Certificate programs typically last about six months to one year, while an associate's degree program usually takes two years to complete. Courses include automotive brake systems, steering and suspension, electrical systems, maintenance, and basic auto service. In addition to coursework, brake repair technicians may complete hands-on training through cooperative work or internship programs. Automotive Service Excellence (ASE) certification is also available in brakes. To earn certification, students must pass a brakes test, which is one of eight tests available from ASE for automobiles and light trucks.

Pay: The median annual wage is $37,850 (2015)

Job Outlook: The U.S. Bureau of Labor Statistics (BLS,) projected average growth in the employment of automotive service technicians from 2014 to 2024, an increase of 5%, noting that those with the most training and/or experience will more easily compete for jobs (*www.bls.gov*). The BLS published the median annual salary of automotive repair technicians, including specialists such as brake repair technicians, as $37,850 in May 2015.

All courses in this pathway are dual credit offerings through ECTC.

Bullitt County Public Schools

AREA TECHNOLOGY CENTER

Pathway Name:
Flight and Aeronautics
CIP 49.0102.00

Pathway Courses:
210226 Introduction to Aerospace

210233 Fundamentals of Aviation Science

210234 Aviation Science OR
210234X Introduction to Aviation AVN 150 (EKU) - online dual credit

210237 Commercial Aviation Science OR
210237X Unmanned Air Systems AVN 170 (EKU) - online dual credit

Industry Certification:
FAA Private Pilot Written Exam
OR
FAA Unmanned Air Systems

Industry Certification

AVIATION

Flight and Aeronautics Pathway: Students will complete what is considered the first phase of aviation training leading to a commercial pilot license. They will gain technical knowledge and skills to the flying and/or navigation of commercial passenger and cargo, agricultural, public service, corporate aircraft flight systems and controls, flight crew operations and procedures, radio communications, navigation procedures and systems, airways safety and traffic regulations, and governmental rules and regulations pertaining to piloting aircraft. Students will also study the increasing role of Unmanned Air Systems (Drones) on our society and Industry. Many other careers in aviation will be explored in this pathway from Aviation maintenance to Aerospace Engineering.

Work Environment: The work environment varies with occupation from the pilots seat to the aviation hangar for maintenance and repair. Aerospace engineers work in assembly area and offices where they design the latest aerospace technologies.

How to Become an Aerospace Engineer, Pilot, or an Aviation Mechanic: Aerospace engineers must have a bachelor's degree in aerospace engineering or another field of engineering or science related to aerospace systems. Many aircraft and avionics equipment mechanics and technicians learn their trade at an FAA-approved aviation maintenance technician school. Pilots attend a FAA approved flight school and must pass examinations and flight hours for licensure.

Pay: The median annual wage for aerospace engineers was $105,380 in May 2014. Many corporate pilots make in excess of $100,000. The median annual wage for aircraft and avionics equipment mechanics and technicians was $56,980 in May 2014.

AREA TECHNOLOGY CENTER

Pathway Name:
Aircraft Maintenance Technician - CIP 47.0607.00
(All Dual Credit at JCTC)

Pathway Courses:
ATE 102 (JCTC) Introduction to Aviation Maintenance I
(ATC 210226X)

ATE 104 (JCTC) Introduction to Aviation Maintenance II
(ATC 210139)

ATE 106 (JCTC) Introduction to Aviation Maintenance III
(ATC 210234X)

ATE 108 (JCTC) Introduction to Aviation Maintenance IV
(ATC 210110P)

ATE 100 (JCTC) Aviation Math
(ATC 210290P)

Program Location:
Jefferson Community and Technical College

Industry Certification:
FAA - Airframe and Power Plant General Written Exam

Industry Certification

AIRCRAFT MAINTENANCE

What Aircraft Maintenance Technicians Do:
Aircraft maintenance technicians are trained to adjust aircraft engines and pneumatic systems, remove and install aircraft components and diagnose problems. Some of their duties include checking electrical systems, repairing pilot static systems and performing regular preventive inspections. Technicians examine aircraft fuselage (the aircraft's main body) and landing gear for cracks or leakage. They repair or replace defective aircraft parts and check completed work to ensure that it meets quality standards.

Work Environment:
Mechanics and technicians work in hangars, in repair stations, or on airfields. They must meet strict deadlines while following safety standards. Most mechanics and technicians work near major airports. Mechanics may work outside on the airfield, or in climate-controlled shops and hangars. Civilian mechanics employed by the U.S. Armed Forces work on military installations.

How to Become an Aircraft Maintenance Technician:
Some aircraft mechanics and service technicians enter the occupation with a high school diploma or equivalent and receive on-the-job training to learn their skills and to be able to pass the FAA exams. Aviation maintenance personnel who are not certified by the FAA work under supervision until they have enough experience and knowledge and become certified.

Pay: Median annual salary is $60,270 per year in May of 2017.

Job Outlook: Overall employment of aircraft and avionics equipment mechanics and technicians is projected to grow 5 percent from 2016 to 2026, about as fast as the average for all occupations.

All courses in this pathway are dual credit offerings through JCTC.

AREA TECHNOLOGY CENTER

Pathway Name:
Residential Carpenter Assistant
CIP 46.0201.02
AND/OR
Skilled Trades Commercial Carpentry TRACK
CIP 46.0201.99

Pathway Courses:
460201 Introduction to Construction Technology

460212 Floor and Wall Framing

460213 Ceiling and Roof Framing

460219 Exterior and Interior Finish

460214 Site Layout and Foundations (TRACK)

Industry Certification:
NCCER Core Curriculum and Construction Carpentry (Level 1) and OSHA 10 AND/OR KY TRACK Pre-Apprenticeship Certification and OSHA 10

Industry Certification

CARPENTRY TRACK

What Carpenters Do: Carpenters construct and repair building frameworks and structures—such as stairways, door frames, partitions, and rafters—made from wood and other materials. They also may install kitchen cabinets, siding, and drywall.

Work Environment: Because carpenters are involved in many types of construction, from building highways and bridges to installing kitchen cabinets, they work both indoors and outdoors. The work is sometimes strenuous, and carpenters have a higher rate of injuries and illnesses than the national average.

How to Become a Carpenter: Although most carpenters learn their trade through an apprenticeship, some learn on the job, starting as a helper.

Pay: The median annual wage for carpenters was $45,170 in May 2017.

Job Outlook: Employment of carpenters is projected to grow 8 percent from 2016 to 2026, about as fast as the average for all occupations. Increased levels of new homebuilding and remodeling activity will require more carpenters.

Click HERE for TRACK Program information.

Bullitt County Public Schools

AREA TECHNOLOGY CENTER

Pathway Name:
Industrial Electrician Assistant
CIP 46.0302.02
AND/OR
Skilled Trade Construction
Electrical Track
CIP 46.0302.99

Pathway Courses:
460316 Circuits 1

460312 Electrical Construction 1

460331 Electrical Motor Controls

460313 Electrical Construction 2 (TRACK)

Industry Certification:
NCCER Core Curriculum and Electrician Tech (Level 1) and OSHA 10 AND/OR KY TRACK Pre-Apprenticeship Certification and OSHA 10

Industry Certification

ELECTRICAL TRACK

What Electricians Do: Electricians install and maintain electrical power, communications, lighting, and control systems in homes, businesses, and factories.

Work Environment: Electricians work indoors and outdoors, in nearly every type of facility. Almost all electricians work full time, which may include evenings and weekends. Although the work is not as dangerous as other construction occupations, potential injuries include electrical shocks and burns, cuts, and falls.

How to Become an Electrician: Although most electricians learn through an apprenticeship, some start out by attending a technical school. Most states require electricians to be licensed.

Pay: The median annual wage for electricians was $54,110 in May 2017.

Job Outlook: Employment of electricians is projected to grow 20 percent from 2012 to 2022, faster than the average for all occupations. As homes and businesses require more wiring, electricians will be needed to install the necessary components. Electricians with the widest variety of skills should have the best job opportunities.

Click HERE for TRACK Program information.

Bullitt County Public Schools

AREA TECHNOLOGY CENTER

Pathway Names:
Automotive Engineering
CIP 15.0803.00

Pathway Courses:
210221 Engineering 1 at BCHS or BEHS

210232 Electrical/Electronics Engineering at BCHS or BEHS

470507 Maintenance and Light Repair A and Lab

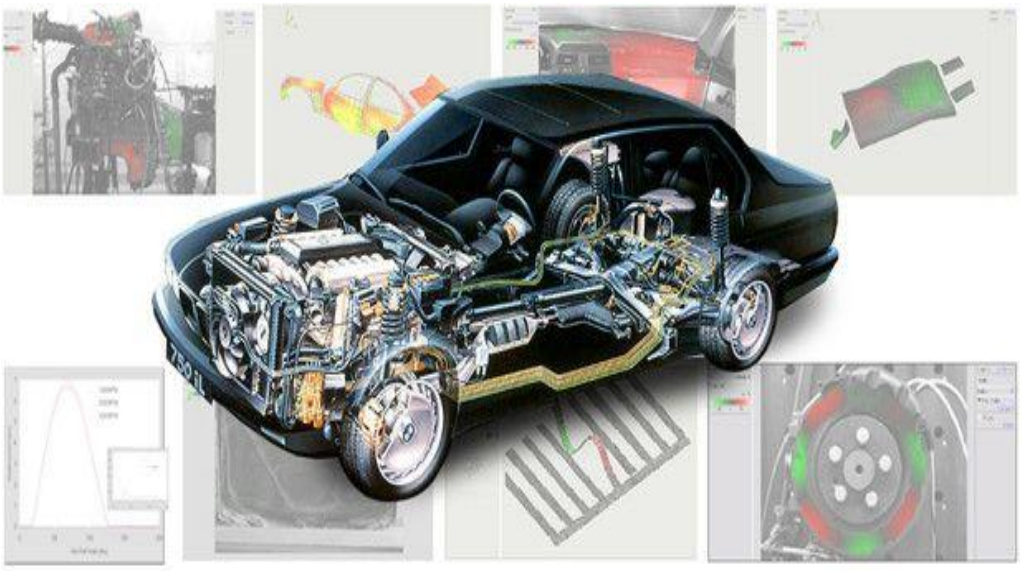
470509 Maintenance and Light Repair B and Lab

470511 Maintenance and Light Repair C and Lab

470513 Maintenance and Light Repair D and Lab

Industry Certification:
REC-Foundation Pre-Engineering Cert and
ASE Automotive Maintenance and Light Repair

Industry Certification



ENGINEERING HYBRID AUTOMOTIVE

What is the Automotive Engineering Hybrid? This pathway provides the opportunity to blend Career and Technical Education (CTE) courses with Engineering courses to help students apply technical skills along with Science, Technology, Engineering, and Math (STEM) skills to solve real-world problems. This pathway prepares individuals to apply engineering principles and technical skills in support of engineers and other professionals engaged in developing, manufacturing, and testing self-propelled ground vehicles and their systems. It includes instruction in vehicular systems technology, design and development testing, prototype and operational testing, inspection and maintenance procedures, instrument calibration, test equipment operation and maintenance, and report preparation.

Automotive Engineering Job Growth: Automotive engineers also known as mechanical engineers, is projected to grow 5 percent to 2022. This is a little slower than the average for most occupations. The need for design on the next generation of vehicles such as electric cars and vehicle systems will keep the career in demand. The mean annual salary is around $64,570 per year. To stay appealing to potential companies, engineering candidates should stay up-to-date with the latest software in the industry.

AREA TECHNOLOGY CENTER

Pathway Names:
Electrical Construction Engineering CIP 15.0303.00

Pathway Courses:
210221 Engineering 1 at BCHS or BEHS

210232 Electrical/Electronics Engineering at BCHS or BEHS

460316 Circuits 1

460331 Electrical Motor Controls

460319 Circuits 2

Industry Certification:
REC-Foundation Pre-Engineering Cert and OSHA 10
AND/OR
NCCER Core Curriculum and Electrician Tech (Level 1) and OSHA 10

Industry Certification

ENGINEERING HYBRID ELECTRICAL

What is the Electrical Construction Engineering Hybrid? This pathway provides the opportunity to blend Career and Technical Education (CTE) courses with Engineering courses to help students apply technical skills along with Science, Technology, Engineering, and Math (STEM) skills to solve real-world problems. This pathway prepares individuals to apply technical knowledge and skills to install, operate, maintain, and repair electric apparatus and systems such as residential, commercial, and industrial electric-power wiring; and DC and AC motors, controls, and electrical distribution panels. It includes instruction in the principles of electronics and electrical systems, wiring, power transmission, safety, industrial and household appliances, job estimation, electrical testing and inspection, and applicable codes and standards.

Electrical/Electronics Engineering Job Outlook: Electrical and electronics engineering technicians typically need an associate's degree.The median annual wage for electrical and electronics engineering technicians was $63,660 in May 2017. Electrical and electronics engineers must have a bachelor's degree. Employers also value practical experience, such as internships or participation in cooperative engineering programs. The median annual wage for electrical engineers was $95,060 in May 2017. The median annual wage for electronics engineers, except computer was $102,180 in May 2017.

Bullitt County Public Schools

AREA TECHNOLOGY CENTER

Pathway Names:
Welding Engineering
CIP 15.0614.00

Pathway Courses:
210221 Engineering 1 at BCHS or BEHS

210222 Engineering 2 at BCHS or BEHS

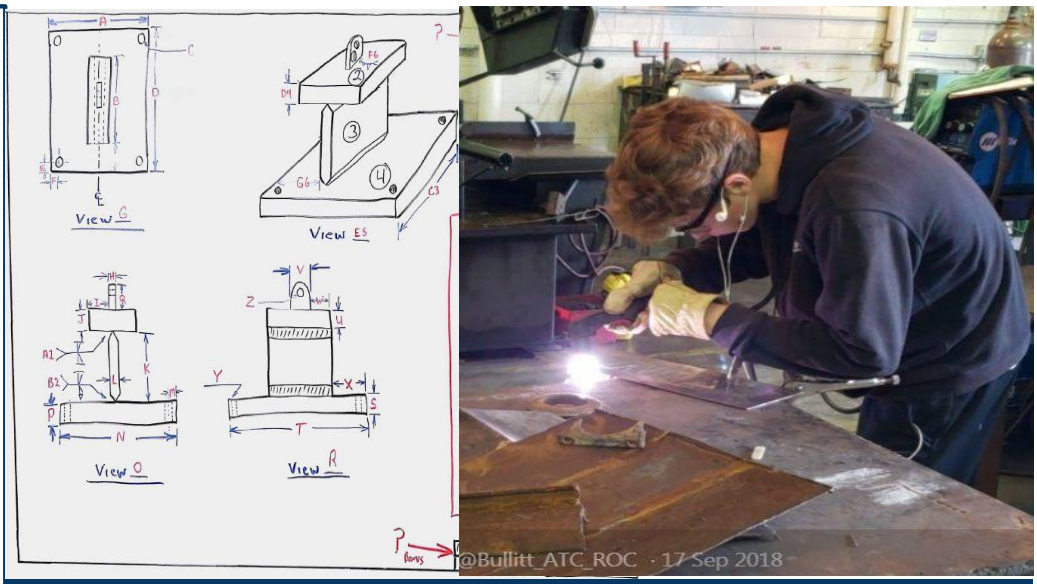
480505 Blueprint Reading for Welding

480501 Cutting Processes

480521 Shielded Metal Welding (SMAW)

Industry Certification:
REC-Foundation Pre-Engineering Cert and 2-F (AWS) Welding

Industry Certification



ENGINEERING HYBRID WELDING

What is the Welding Engineering Hybrid?
This pathway provides the opportunity to blend Career and Technical Education (CTE) courses with Engineering courses to help students apply technical skills along with Science, Technology, Engineering, and Math (STEM) skills to solve real-world problems. Welding Engineers design and develop metal components for products for the pipeline, automotive, boiler making, ship building, aircraft and mobile home industry. Welding Engineers must have knowledge of cutting processes and gas metal arc welding procedures for efficient development of these industrial processes.

Welders Job Outlook: Employment of welders, cutters, solderers, and brazers is projected to grow 6 percent from 2016 to 2026, about as fast as the average for all occupations. The nation's aging infrastructure will require the expertise of welders, cutters, solderers, and brazers to help rebuild bridges, highways, and buildings.The median annual wage for welders, cutters, solderers, and brazers was $40,240 in May 2017. Employment of mechanical engineering technicians is projected to grow 5 percent from 2016 to 2026, about as fast as the average for all occupations. There should be opportunities for those who can master new software and technology in addition to traditional manual skills.The median annual wage for mechanical engineering technicians was $55,360 in May 2017.

Bullitt County Public Schools

AREA TECHNOLOGY CENTER

Pathway Name:
Patient Care Technician
CIP 51.1614.00

Pathway Courses:
170111 Principles of Health Science

170141 Emergency Procedures (.5 credit)

170131 Medical Terminology (.5 credit)

302631 Anatomy (taken as a BEHS class)

170502 Acute Care Basic Skills

Program Location:
Bullitt East High School

Industry Certification:
CPCT - Certified Patient Care Technician

Industry Certification

PATIENT CARE TECH

What Patient Care Tech's Do: Patient Care Technicians help doctors, nurses and other medical professionals by taking care of ill or injured patients under their care by taking notes, taking vital signs, and assisting patients with everyday tasks.

Work Environment: Patient Care Technicians will usually work full time in hospitals, doctor's' offices, nursing homes or extended care facilities..

How to Become a Patient Care Technician: Patient Care Technicians must complete a 8-12 month career training program. Students are trained in patient care, vital signs measurement, dialysis, patient assistance and phlebotomy.

Pay: The potential annual wage for a Patient Care Technician is $32,000.

AREA TECHNOLOGY CENTER

Pathway Name:
Allied Health
CIP 51.0000.01

Pathway Courses:
170111 Principles of Health Science

170141 Emergency Procedures (.5 credit)

170131 Medical Terminology (.5 credit)

302631 Anatomy (taken as a BEHS class)

170501 Allied Health Core Skills

Program Location:
Bullitt East High School

Industry Certification:
NOCTI - Healthcare Core

Industry Certification

Allied Health

Healthcare Occupations:
Employment of healthcare occupations is projected to grow 18 percent from 2016-2026, much faster that the average for all occupations, adding about 2.4 million new jobs. Healthcare occupations are projected to add more jobs than any of the other occupational groups. This projected growth is mainly due to an aging population, leading to greater demand for healthcare services.

Pay:
The medium annual wage for healthcare practitioners and technical occupations (such as registered nurses, physicians and surgeons, and dental hygienists) was $64,770 in May 2917, which was higher than the median annual wage for all occupations in the economy of $37,690.

Healthcare support occupations (such as home health aides, occupational therapy assistants, and medical transcriptionists) had a median annual wage of $28,710 in May 2017.

Explore different healthcare occupations and find out more information.
Click Link

AREA TECHNOLOGY CENTER

Pathway Name:
Environmental Control System Technician
CIP 47.0201.05

Pathway Courses:
460828 Refrigeration Fundamentals

460817 HVAC Electricity

460826 Electrical Components

460820 Heating and Humidification

Industry Certification:
EPA Section 608 Certification

Industry Certification

HVAC TECH

What HVAC Mechanics and Installers Do: Heating, air conditioning, and refrigeration mechanics and installers—often called heating, ventilation, air conditioning, and refrigeration (HVACR) technicians—work on heating, ventilation, cooling, and refrigeration systems that control the temperature and air quality in buildings.

Work Environment: HVACR technicians work mostly in homes, schools, hospitals, office buildings, or factories. Their worksites may be very hot or cold because the heating and cooling systems they must repair may not be working properly and because some parts of these systems are located outdoors. Working in cramped spaces and during irregular hours is common.

How to Become a HVAC Tech: Because HVACR systems have become increasingly complex, employers generally prefer applicants with postsecondary education or those who have completed an apprenticeship. Some states and localities require technicians to be licensed.

Pay: The median annual wage for heating, air conditioning, and refrigeration mechanics and installers was $47,100 in May 2017.

Job Outlook: Employment of heating, air conditioning, and refrigeration mechanics and installers is projected to grow 15 percent from 2016 to 2026, much faster than the average for all occupations. Commercial and residential building construction is expected to drive employment growth, and job opportunities for HVACR technicians are expected to be good.

Bullitt County Public Schools

AREA TECHNOLOGY CENTER

Pathway Name:
IMT Advance MFG & Robotics
CIP 47.0303.01

Pathway Courses:
499920 Basic Blueprint Reading (.5 credit)

499925 Basic Troubleshooting (.5 credit)

470318 Maintaining Industrial Equipment

470322 Industrial Maintenance Electrical Principles

470351 Robotics and Automation

Industry Certification:
NCCER Core Curriculum and Industrial Maintenance Mechanic (Level 1) and OSHA 10

Industry Certification

IMT ADVANCED MFG & ROBOTICS

What Industrial Machinery Mechanics, Machinery Maintenance Workers, and Millwrights Do: Industrial machinery mechanics and machinery maintenance workers maintain and repair factory equipment and other industrial machinery, such as conveying systems, production machinery, and packaging equipment. Millwrights install, dismantle, repair, reassemble, and move machinery in factories, power plants, and construction sites. IMT's increasingly are working on repairing, maintaining, and programming robots for automation of manufacturing processes.

Work Environment: Workers in this occupation must follow safety precautions and use protective equipment, such as hardhats, safety glasses, and hearing protectors. Most work full time in factories, refineries, food-processing facilities, or power plants, or at construction sites. However, they may be on call and work night or weekend shifts. Overtime is common.

How to Become an Industrial Machinery Mechanic, Machinery Maintenance Worker, or Millwright: Industrial machinery mechanics, machinery maintenance workers, and millwrights typically need a high school diploma. However, industrial machinery mechanics need a year or more of training either on the job or through a technical school, whereas machinery maintenance workers typically receive on-the-job training that lasts up to a year. Most millwrights go through a 4-year apprenticeship.

Pay: The median annual wage for industrial machinery mechanics, machinery maintenance workers, and millwrights was $50,440 in May 2017.

Job Outlook: Employment of industrial machinery mechanics, machinery maintenance workers, and millwrights is projected to grow 16 percent from 2014 to 2024, much faster than the average for all occupations. The need to keep increasingly sophisticated machinery functioning and efficient will drive demand for these workers.

AREA TECHNOLOGY CENTER

Pathway Name:
Computer Numerical Control (CNC) Operator -
CIP 48.0503.04
(All Dual Credit at JCTC)

Pathway Courses:
CMM 110 (JCTC) Fundamentals of Machine Tools A (ATC 470913X)

CMM 112 (JCTC)
Fundamentals of Machine Tools B (ATC 470914X)

CMM 130 (JCTC)
Manual Programming
(ATC 470915X)

BRX 112 (JCTC)
Blueprint Reading for Machinist (470921X)

CAD 100 (JCTC)
Introduction to Computer Aided Design
(ATC 480110X)

Program Location:
Jefferson Community and Technical College

Industry Certification:
Autodesk Inventor Certified User and OSHA10

Industry Certification

Computer Numerical Control (CNC) Operator

What Computer Numerical Control Operators Do:
Machinists and tool die makers set up and operate a variety of computer-controlled and mechanically controlled machine tools to produce precision metal parts, instruments, and tools.

Machinists typically do the following:

- Read blueprints, sketches, or computer-aided design (CAD) and computer-aided manufacturing (CAM) files
- Set up, operate, and disassemble manual, automatic, and computer numerically controlled (CNC) machine tools
- Turn, mill, drill, shape, and grind machine parts to specifications
- Use CAD software to design parts and G-code for CNC machines

Work Environment:
Because machinists and tool and die makers work around machine tools that may present hazards, these workers must follow precautions to avoid injuries. For example, workers must wear protective equipment, such as safety glasses, to shield against bits of flying metal, earplugs to dampen the noise produced by machinery, and masks to limit their exposure to fumes.

How to Become a Computer Numerical Control Operator:
JCTC has a 2-year program that trains students to become machinists or tool and die makers.

Pay: Median annual salary is $42,600 per year

Job Outlook:
Employment of machinists is projected to grow 2 percent from 2016-2026. With improvements in technologies, such as computer numerically controlled (CNC) machines, autoloaders, high-speed machining, and lights-out manufacturing, machinists will still be required to set up, monitor, and maintain these systems.

AREA TECHNOLOGY CENTER

Pathway Name:
Bricklayer Assistant
CIP 46.0101.01 AND/OR
Skilled Trades Masonry TRACK
CIP 46.0101.99

Pathway Courses:
499930 Industrial Safety
(.5 Credit)

499920 Basic Blueprint Reading
(.5 Credit)

460112 Introduction to Masonry

460116 Intermediate Masonry

460113 Advance Masonry
(TRACK)
OR
460180 Co-op Masonry
OR
460183 Internship Masonry

Industry Certification:
NCCER Core Curriculum and Masonry (Level 1) and OSHA 10
AND/OR KY TRACK -
Pre-Apprenticeship Certification and OSHA 10

Industry Certification

MASONRY TRACK

What Brickmasons, Blockmasons, and Stonemasons Do: Brickmasons, blockmasons, and stonemasons (or, simply, masons) use bricks, concrete blocks, and natural and man-made stones to build fences, walkways, walls, and other structures.

Work Environment: The work is physically demanding because masons lift heavy materials and often must stand, kneel, and bend for long periods. They usually work outdoors, so poor weather conditions may reduce work activity. Most masons work full time.

How to Become a Brickmason, Blockmason, or Stonemason: Although most masons learn through an apprenticeship, some learn on the job. Others learn through 1- or 2-year mason programs at technical schools.

Pay: In May 2012, the median annual wage for brickmasons and blockmasons was $46,440. The median annual wage for stonemasons was $37,350 in May 2012.

Job Outlook: Employment of masons is projected to grow 34 percent from 2012 to 2022, much faster than the average for all occupations. Population growth will result in the construction of more schools, hospitals, homes, and other buildings. Workers with a good job history and with experience in masonry and construction should have the best job opportunities.

Click HERE for TRACK Program information.

Bullitt County Public Schools

AREA TECHNOLOGY CENTER

Pathway Name:
Welder Entry Level
CIP 480505

Pathway Courses:
480505 Blueprint Reading for Welding

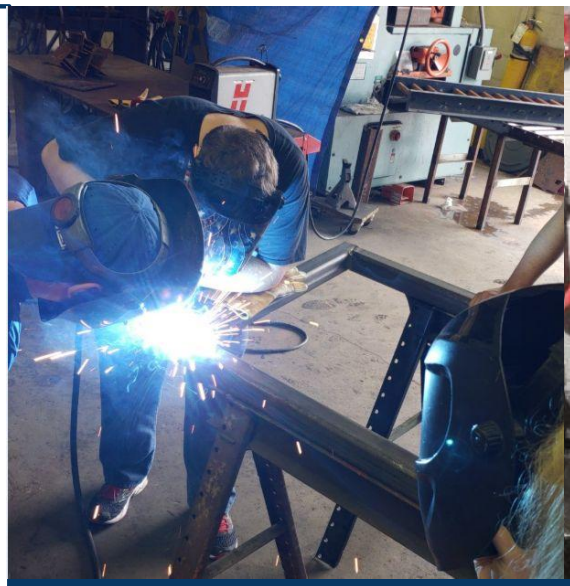
480501 Cutting Processes

480521 Shielded Metal Arc Welding (SMAW)

480522 Gas Metal Arc Welding

Industry Certification:
AWS - Sense Cert. (Level 1)
OR
2-F AWS Qualification Cert
OR
3-G KY Dept. of Transportation and OSHA 10

Industry Certification



WELDING

What Welders, Cutters, Solderers, and Brazers do: Welders, cutters, solderers, and brazers use hand-held or remotely controlled equipment to join or cut metal parts. They also fill holes, indentations, or seams in metal products. Sometimes welders help in the fabrication of new parts as well.

Work Environment: Workers in this occupation must follow safety precautions and use protective equipment, such as hardhats, safety glasses, and hearing protectors. Workers may work outdoors, often in inclement weather, or indoors, sometimes in a confined area. They may work on a scaffold, high off the ground, and they occasionally must lift heavy objects and work in awkward positions. Most work full time and overtime is common..

How to Become an Welder Solderer or Brazer: A high school diploma or equivalent, combined with technical and on-the-job training, is typically required for anyone to become a welder, cutter, solderer, or brazer.

Pay: The median annual wage for industrial machinery mechanics, machinery maintenance workers, and millwrights was $40,240 in May 2017.

Job Outlook: Employment of welders, cutters, solderers, and brazers is projected to grow 10 percent from 2016 to 2026, faster than average for all occupations. The nation's aging infrastructure will require the expertise of welders, cutters, solderers, and brazers to help rebuild bridges, highways, and buildings.

Bullitt
County Public Schools

CAREER READINESS CENTER

Riverview Opportunity Center
383 High School Drive
Shepherdsville, KY 40165

"Riverview Opportunity Center (ROC) is a small school setting designed to give students more access to the Bullitt County Area Technology Center (ATC). Students learn in a non-traditional academic setting and have the opportunity to learn a variety of trades by having more access to the ATC. Due to the flexible schedule, ROC students have opportunities to graduate early, co-op, and or work release in a job that coincides with the trade(s) they are studying. Students from North Bullitt, Bullitt East and Bullitt Central attend our programs. Although these students are considered Riverview students, they maintain dual enrollment with their home school which allows them the opportunity to participate in sports, clubs, and other after school activities within their home schools. Transportation to and from ROC is provided by BCPS. Students are bused to and from each day for these programs. In addition to having more access to the ATC, Riverview Opportunity Center also houses an innovative Informational Technology program with opportunities for a co-op position in the IT field. Students can attend Riverview full time for this program or be shuttled from their home school for 2 periods a day. Space for each program is limited and students are required to apply to each program for selection. To obtain an application please see your school counselor or call Riverview at (502)869-6600.

CAREER READINESS CENTER

Pathway Names:
Computer Programming
CIP 11.0201.01

Pathway Courses:
060112 Digital Literacy

110251 Computational Thinking

110252 Intro to Programming

110226 Project Based Programming

Industry Certification:
MTA: Intro to Programming Using Python
MAT: Software Development Fundamentals 98-361

Industry Certification

Computer Programming

Within the computer programming pathway students will be prepared to design and create apps, as well as troubleshoot the latest programming languages used in industry.

BCPS is currently in the second year of a pre-apprenticeship partnership with the technology solutions company Interapt. Students that take project based programming have an opportunity to interview to be accepted into the apprenticeship program at Interapt after he or she completes high school graduation requirements.

https://www.youtube.com/watch?v=k7NU_WmR1pA&feature=youtu.be

https://www.youtube.com/watch?v=-V--ahdWw-k&feature=youtu.be

Click HERE for TRACK Program information.

CAREER READINESS CENTER

Pathway Names:
Network Administration
CIP 11.0901.01
(All Online Dual Credit with JCTC)

Pathway Courses:
CIT 105 JCTC Introduction to Computers

CIT 120 JCTC Computational Thinking

CIT 120 JCTC Computer Hardware and Software

CIT 160 JCTC Intro to Networking Concepts

Program Location:
Riverview Opportunity Center

Industry Certification:
Computer Tech Basic JCTC
A+ Prep JCTC

Industry Certification

Network Administration

The network administration pathway will help students learn new administration support skills or upgrade existing computer information systems skills. Students will be able to properly install and manage networking software, effectively troubleshoot and fix networking problems.

Riverview Opportunity Center is partnering with Jefferson Community and Technical College to provide dual credit to the ROC students. Utilizing the Work Ready KY scholarship program from KHEAA students are able to take up to two years of college courses at no cost to the student.

CAREER READINESS CENTER

Pathway Names:
Network Security
CIP 11.1003.00
(All Online Dual Credit with JCTC)

Pathway Courses:
CIT 105 JCTC Introduction to Computers

CIT 111 JCTC Computer Hardware and
Software Maintenance

CIT 160 JCTC Intro to Networking Concepts

CIT 180 JCTC Security Fundamentals

Program Location:
Riverview Opportunity Center

Industry Certification:
Computer Technician JCTC
Computer Tech Basic JCTC
A+ Prep JCTC
Security Fundamentals Certificate JCTC

Industry Certification

Network Security

The Network Security pathway will help students to be able to properly design and install a wired and wireless LAN system, including all network devices, physically connect servers and desktop computers.

Riverview Opportunity Center is partnering with Jefferson Community and Technical College to provide dual credit to the ROC students. Utilizing the Work Ready KY scholarship program from KHEAA students are able to take up to two years of college courses at no cost to the student.

Bullitt County Public Schools

HIGH SCHOOL READY

BCPS Middle Schools utilize a system to track and monitor every student to be "High School ready" as indicated by Measure of Academic Progress (MAP) assessments in Reading, and Math. Middle School Leaders will track 6-8 grade progress for each student to meet the following benchmarks:

READING BENCHMARKS:
6TH GRADE - Beginning Year 220 / End of Year 224
7TH GRADE - Beginning Year 223 / End of Year 230
8TH GRADE - Beginning Year 227 / End of Year 231

MATH BENCHMARKS:
6TH GRADE - Beginning Year 228 / End of Year 235
7TH GRADE - Beginning Year 235 / End of Year 240
8TH GRADE - Beginning Year 241 / End of Year 248

HIGH SCHOOL READY

Key Components of Successful Transition Programs:

1. Provide parents and students with essential information about the new school.

Possible activities could include:

- Tours and/or Shadow Days
- HS Student Panel Discussions
- HS Counselor Visits
- Summer Transition Camps
- 8th Grade involvement in social or athletic events
- Infinite Campus Messenger, Remind Accounts, School Websites, Social Media

2. Provide opportunities for social support and peer interactions with current students.

This allows students to begin building new relationships, obtain reliable information from "insiders" and feel welcomed to the high school community. Possible activities:

- Orientation and mentoring programs. (Pair small groups of incoming students with upperclassmen for support)
- Open house for 8th graders, hosted by current 9th graders
- Student-Friendly Orientation Days before school starts.

3. Provide opportunities for communication between middle school and high school teachers, counselors, administrators and support staff.

This will help insure that both groups have a realistic understanding of the programs, requirements and expectations at each level, so that a sense of articulation and alignment can be encouraged. Possible activities:

- Create a "transition team" of teachers at each level who meet regularly for discussion and revision of the transition program
- Invite middle school teachers to team or department meetings, Teacher Planning Day Events, etc.
- Schedule an annual joint faculty meeting to identify concerns and successes
- Create departmental liaison positions
- Vertical curriculum planning meetings

4. Provide opportunities for parent involvement.

Although possibly one of the most challenging pieces to facilitate at the high school level, studies have shown that parental involvement and support in a child's education can be an essential factor in student success. Possible activities:

- Seek parent volunteers to be involved in daily school activities
- Develop a 9th grade newsletter that parents begin to receive when their child is still in 8th grade
- Invite parents to spend a day at the high school
- Involve parents in planning and implementing articulation activities
- Provide conversation opportunities for parents of new students with parents of current students
- Arrange increased phone contact, (quarterly, monthly, etc.) so parents feel more informed and involved
- Create learning opportunities for parents and children to engage in together, such as computer training, college planning, etc.
- Middle school teachers and counselors inform parents about transition activities and encourage them to get involved

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MS WORK ETHIC CERTIFICATION

Coming Together For Learning & Earning

Middle School Work Ethic Certification

Part of the mission of education is to prepare students for the transition from school to work and life beyond the classroom. It is essential that students be taught essential skills necessary to be successful in the world of work. The Work Ethic Certification will demonstrate to employers that a student recognizes the importance of work ethic and has been trained to succeed in the workplace.

Bullitt County Chamber of Commerce, Spencer County Chamber of Commerce, Bullitt County Public Schools and Spencer County Public Schools have partnered to develop work Ready communities. Students will have the opportunity to earn work ethic certificates during each year of middle school.

Qualifications Include:

- **A student must obtain no more than 2 unexcused absences**
- **No discipline behavior incidents**
- **A student must have no grades lower than a C on quarter or final grades posted on report card**
- **Participate in 2 of the following: School/ Community Team Sport, School/ Community extra-curricular activity, or 10 community service hours**
- **Score in-progress or met progress on essential skills each nine weeks**

Essential Skills:

Adaptability, Diligence, Initiative, Knowledge, Reliability, Remaining Drug Free, Working Well With Others

BULLITT COUNTY Chamber of Commerce

Bullitt Moving Forward

MIDDLE SCHOOL READY

BCPS Elementary Schools utilize a data-focused system to track and to monitor every student to be "Middle School Ready" by the Measure of Academic Progress (MAP) assessments in Reading, and Math. Elementary School Leaders will track student progress in the 5th grade to meet the following benchmarks:

READING BENCHMARKS:
5TH GRADE - By the end of the Year = 215

MATH BENCHMARKS:
5TH GRADE - By the end of the Year = 226

MIDDLE SCHOOL READY

Below are possible transition type information and activities that elementary and middle schools may use in transition planning for students. The below information is not all-inclusive of the information or activities that may occur:

Preparation During the Last Year of Elementary

Principal / Designee/ in collaboration with grade 5 teachers:

- Schedule meeting with teachers and administrators at feeder middle level school.
- 5th grade students will visit Middle Schools.
- Seminar in the spring related to the important differences between elementary and middle school including new expectations.
- Obtain and allow students to view middle level course outlines and materials. Review information about school policy, traditions, etc.

The elementary school teachers, in collaboration with middle school teachers, may:

- Gather important information on specific students that will assist in their success in middle school and provide to feeder middle.
- Submit to feeder middle school the student's working writing folder and other work artifacts that may assist in appropriate placement(s).
- Review with transitioning students' curriculum standards / expectations.
- Send information to feeder middle on tier level interventions that have occurred including the student proficiency plans and other relevant data.
- Allow students to construct middle level goals for success as an activity during the tour or summer program visit [if applicable].

MIDDLE SCHOOL READY

Parent Preparation

The elementary school teachers / team may:

- Discuss with parents, via a parent meeting, how they may assist their child over the summer to become ready for the transition. This could be information contained in the middle level feeder school packet.
- Share materials with parents that might assist the student in becoming familiar with the new school [e.g. school map, student handbook, yearbook, etc.]. This could be information contained in the middle level feeder packet.
- Discuss with parents how to communicate effectively with their child's middle school teacher(s). How parents will be informed about activities? How parents will be informed of faculty and school expectations?
- Identify and provide information on parent support groups, booster groups, etc. This could be information contained in the middle level feeder packet.
- Remind, or provide a name list, of school personnel who will function as primary office contacts to address questions etc. This could be information contained in the middle level feeder packet.

Student Preparation

- Write social stories as individuals or class groups to help the student prepare for the change. Elementary level activity possibly carried out as a guidance activity.
- Allow the transitioning student to review a sample schedule. This could be information contained in the middle level feeder packet.
- Provide opportunities for students to practice opening locks and lockers [could be a part of a summer orientation program].
- Review school rules with student.
- Provide a summer orientation [if applicable and planned by the middle level school].
- Prepare the student for having more than one teacher and that all teachers may have different rules and expectations.
- School materials should include items to assist with organization.

ES WORK ETHIC CERTIFICATION

Coming Together For Learning & Earning

Elementary School Work Ethic Certification

Part of the mission of education is to prepare students for the transition from school to work and life beyond the classroom. It is essential that students be taught essential skills necessary to be successful in the world of work. The Work Ethic Certification will demonstrate to employers that a student recognizes the importance of work ethic and has been trained to succeed in the workplace.

Bullitt County Chamber of Commerce, Spencer County Chamber of Commerce, Bullitt County Public Schools and Spencer County Public Schools have partnered to develop work Ready communities. Students will have the opportunity to earn Work Ethic Certificates during the 4th and 5th grade year.

Qualifications Include:

- **A student must obtain no more than 2 unexcused absences**
- **No discipline behavior incidents**
- **A student must have all passing grades with a grade of C or above on each nine weeks report card. A student must have a score of Basic or above when using standards based report cards**
- **Participate in 2 of the following: School/ Community Team Sport, School/ COmmunity extra-curricular activity, or 10 community service hours**
- **Score in-progress or met progress on essential skills each nine weeks**

Essential Skills

Adaptability, Diligence, Initiative, Knowledge, Reliability, Remaining Drug Free, Working Well With Others

DISCOVER What we are all about by watching Our video linked HERE.

Bullitt County Public Schools
Moving Forward

The DISCOVERY SCHOOL

A Project-Based Learning STEM School
for Gifted & Talented Students
at Hebron Middle School
in Shepherdsville, KY