

LAWRENCE COUNTY HIGH SCHOOL

100 Bulldog Lane
Louisa, KY 41230



Christy Moore, Principal
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Dear Students, Parents, And Guardians,

Welcome to Lawrence County High School! If you are a student at LCHS, you are privileged to be a part of our school at a time when there are more and better opportunities than ever before. If you are a parent or guardian, you will be excited for your child and all the opportunities they will be given at LCHS.

This *College and Career Catalog* will outline course descriptions, graduation requirements, college pathways and career pathways. Courses that are listed in this catalog can help each of you select courses that best fit your future goals.

“We will create a positive learning community where all individuals are prepared for a successful life.”

Our vision for LCHS students is to not only graduate, but graduate with the skills and abilities to be successful in college, career, and community. This vision comes to life in our students. Our hope is that through coursework included in this catalog, every student will have the opportunities and experiences necessary to meet their goals and aspirations for the future.

Most of all, we want every student to be a success, realizing success means different things to different people. Within this document, you will find the information needed to make good choices, and at LCHS you'll find staff wanting to help guide you down your path. GO BULLDOGS!!

Christy Moore, principal

TABLE OF CONTENTS

Guidance and Counseling Services	4
Advanced Placement	4
Dual Credit.....	4
Ways to Earn College Credit.....	4
Individual Learning Plans	4
LCHS Graduation Requirements	5
Graduation Honors	5
KEES Scholarship Program.....	5
Proposed Graduation Requirements	6
Transition Readiness.....	7
LCHS Reading Intervention Protocol	8
LCHS Math Intervention Protocol.....	9
Work Based Learning	10
English Language Arts Courses.....	11
Mathematics Courses	14
Social Studies Courses.....	17
Science Courses	19
Wellness Courses.....	21
World Language Courses	22
Fine Arts Courses	23
Agriculture Courses.....	25
Biomedical Science Courses	28
Business Courses	30
Carpentry Courses.....	31
Family Consumer Science Courses	32
Engineering Courses.....	33
Flight and Aeronautics	34
Health Science Courses	35
Heavy Equipment Courses	37
JROTC Courses.....	38
University of Kentucky Next Gen Scholars Program.....	39
Apex Virtual Courses.....	40
Accounting Pathway	41
Agricultural Power Pathway.....	42
Animal Science Systems Pathway	43
Army JROTC Pathway.....	44
Civil Engineering	45
College Prep- English	46
College Prep – Mathematics	47
College Prep – Science	48
College Prep – Social Studies.....	49
Culinary and Food Services.....	50
Family and Consumer Science	51
Flight and Aeronautics	52
Environmental Science/Natural Resources Systems	53
Horticulture and Plant Science	54
Heavy Equipment Science.....	55
Phlebotomy.....	56
Pre-Nursing	57
PLTW Biomedical Science.....	58
Residential Carpenter Assistant.....	59
High School Ready	61
Middle School Ready.....	64



We will create a positive learning community where all individuals are prepared for a successful life.

GUIDANCE AND COUNSELING SERVICES

The counseling program at Lawrence County High School is designed to ensure that all students have access to the assistance they need to be successful students with the necessary social and emotional competencies. The counselors at LCHS make sure that all students satisfy all graduation requirements, assist in the completion of Free Application for Student Aid (FAFSA) and KEES money through Kentucky Higher Education Assistance Authority (KHEEA), provide students with scholarship opportunities, and transition services for after high school.

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 the 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. There is a fee set by the College Board per exam. *AP Score Qualification: 5-Extremely well qualified, 4- Well qualified, 3-Qualified, 2-Possibly qualified, 1-No Recommendation*

DUAL CREDIT

Dual Credit courses may be offered to LCHS students through participating colleges and universities. 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 the semester.

WAYS TO EARN COLLEGE CREDIT

Option 1: Dual Credit

Eligible high school students take a pre-determined college classes on the high school campus taught by college-level instructors. These courses may be in collaboration with any regional post-secondary institution and an application process required.

Option 2: Advanced Placement

Students can enroll in AP courses, designed and approved by the College Board. Post-secondary institutions MAY award college credit if the students receive a 3 or higher (out of a possible 5) on AP exams. Courses currently offered include: AP Government, AP Language, AP US History, and AP World History.

Option 3: Articulated Credit

Articulated credit is by definition a pre-determined agreement between a high school and post-secondary institution. College credit is generally **awarded** after high school graduation when the student meets admission criteria and/or other standards outlined within the specific agreement. Articulation ensures that secondary and post-secondary schools work together to assist students in progressing to post-secondary programs. Students can receive early admission to college and **college credit** through these agreements.

INDIVIDUAL LEARNING PLANS

Our district utilizes the concept of an "Individual Learning Plan" or ILP 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 sixth grade. From there, the ILP will be a crucial component of planning and scheduling



LCHS Graduation Requirements

- 4 English credits (English I, II, III, IV)
- 4 Math Credits (to include Algebra I, Algebra II and Geometry)
- 3 Social Studies credits (Integrated Social Studies, World Civilization, and US History)
- 3 Science credits (Integrated Science, Biology, Introduction to chemistry and Physics or Chemistry or Physics)
- 1 Visual and Performing Arts credit
- 1 Fitness and Wellness Credit
- Minimum of Nine elective credits

*Transfer students may require different credits for graduation

GRADUATION HONORS:

Summa Cum Laude: GPA of 4.0 - 3.8

Magna Cum Laude: GPA of 3.79 - 3.5

Cum Laude: GPA of 3.49 - 3.0

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 www.kheaa.com

The following chart indicates how the money is awarded:

GPA	Amount	ACT Score	Bonus
2.50	\$125	15	\$36
2.60	150	16	71
2.70	175	17	107
2.75	187	18	143
2.80	200	19	179
2.90	225	20	214
3.00	250	21	250
3.10	275	22	286
3.20	300	23	321
3.25	312	24	357
3.30	325	25	393
3.40	350	26	428
3.50	375	27	464
3.60	400	28+	500
3.70	425		
3.75	437		
3.80	450		
3.90	475		
4.00	500		

KENTUCKY DEPARTMENT OF EDUCATION: NEW MINIMUM GRADUATION REQUIREMENTS

Other Credits
1/2 Health; 1/2 PE (one of which shall provide CPR training), and Visual/Performing Arts

3 Science Credits
Lab-based Science
Lab-based Science

3 Social Studies Credits
Social Studies
Social Studies

4 Math Credits
Algebra I
Geometry

4 English Credits
English I
English II

FOUNDATIONAL

PERSONALIZED

2 Additional English credits aligned with the ILP and covering the remaining KAS for Reading and Writing

Social Studies aligned with ILP

Science aligned with ILP

6 credits aligned with ILP

Additional course options could include, but are not limited to: English III, English IV, AP Language, AP Literature, dual credit English, etc.

Additional course options could include, but are not limited to: Government (or AP), U.S. History (or AP), World Civilizations/History (or AP), dual credit social studies, etc.

Additional course options could include, but are not limited to: Chemistry (or AP), Physics (or AP), Biology (or AP), CSI Forensics, dual credit science, etc.

Additional course options could include, but are not limited to: Chorus 1, Orchestra 1, Visual Arts 1, Theatre 1, Band 1, etc.

GRADUATION QUALIFIERS FOR STUDENTS ENTERING HIGH SCHOOL IN 2019-2020 (COMPLETE ONE):

Precollege curriculum Benchmark score as established by the Council on Postsecondary Education in 13 KAR 2:020

Three postsecondary credit hours or more of a Kentucky Department of Education-approved dual credit course with a grade of C or higher

One course and corresponding assessment meeting the following criteria:
Advanced placement (AP) with a score of three or higher; **or**
Cambridge Advanced International (CAI) with a score at or above benchmark; **or**
International Baccalaureate (IB) with a score of five or higher

Industry certification as approved by the Kentucky Workforce Innovation Board

Two years of a KDE-approved or Kentucky Labor Cabinet-approved **pre-apprenticeship or apprenticeship**

A KDE-approved process to verify **500 hours of exceptional work experience** **or** **requirements** as prescribed in a student's IEP

GRADUATION PREREQUISITES FOR STUDENTS ENTERING HIGH SCHOOL IN 2020-2021 (MEET ONE OR A COMBINATION OF THE FOLLOWING TO DEMONSTRATE BASIC COMPETENCE IN READING AND MATH):

The student's **10th-grade** state-required assessments in reading and mathematics meet the minimum criteria. The minimum criteria shall include **scoring, at least, as an Apprentice in reading and mathematics** in the state-required assessments approved by the Kentucky Board of Education. Students who do not meet the minimum criteria on one or both assessments may retake the reading and/or mathematics assessments twice annually in the 11th and 12th grades of high school enrollment.

Score Proficient or higher for reading or mathematics or both reading and mathematics, if applicable, on the student's **8th-grade** state-required assessment.

The principal may **submit a collection of the following student evidence** to the superintendent or designee for review and approval: the student's ILP that includes student transcript; if applicable, for students with IEPs, evidence that the student has achieved progress on measurable annual IEP goals as determined by the Admissions and Release Committee; performance on the 10th-grade state-required assessments in reading or mathematics; and appropriate interventions, targeted to the student's needs, provided to the student to ensure support was offered and accessible in order for the student to meet the requirements outlined in this administrative regulation.



OTHER GRADUATION REQUIREMENTS:

- Pass state-mandated civics test
- Successfully complete a course or program in financial literacy
- Receive instruction in essential workplace skills
- Demonstrate competency in technology
- Completion of annual ILP (6th to 12th grade)

All required courses must be aligned to the Kentucky Academic Standards. These are state minimum standards and additional requirements may vary by district.



Transition Readiness



Student Expectations for Transition Readiness

High School Diploma

Earn a high school diploma by meeting/exceeding the Kentucky Minimum High School Graduation Requirements

AND

Meet Requirements of Academic or Career Readiness

 Academic Readiness	 Career Readiness	English Language Readiness (only required for English Learners)
<ul style="list-style-type: none"> ✓ Benchmarks, determined by Council on Postsecondary Education (CPE) on a college admissions exam or college placement examination; OR ✓ A grade of C or higher in each course on 6 hours of KDE-approved dual credit; OR ✓ A score of 3+ on exams in 2 Advanced Placement courses; OR ✓ A score of 5+ on 2 exams for International Baccalaureate courses; OR ✓ Benchmarks on 2 Cambridge Advanced International examinations; OR ✓ Completing a combination of academic readiness indicators listed above. <ul style="list-style-type: none"> • Demonstration of academic readiness shall include one quantitative reasoning or natural sciences and one written or oral communication, or visual and performing arts; or humanities; or social and behavioral sciences learning outcomes. 	<ul style="list-style-type: none"> ✓ Receiving an Industry Certification <i>(Approved by the Kentucky Workforce Innovation Board on an annual basis)</i>; OR ✓ Scoring at or above the benchmark on the Career and Technical Education End-of-Program Assessment for articulated credit; OR ✓ A grade of C or higher in each course on 6 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. 	<ul style="list-style-type: none"> ✓ Meeting exit criteria for English language proficiency assessment (Overall composite of a 4.5 on a Tier B/C) for any student who received English Language services during high school. <ul style="list-style-type: none"> • English Language Learners are included in academic and career readiness in addition to English Language Readiness.

Note: Students participating in the alternate assessment program and earning an alternate diploma will have criteria for Transition Readiness based on alternate assessment requirements and employability skills attainment.

Please contact the Office of Standards, Assessment and Accountability (OSAA) if there are any questions:

(502) 564-4394

dacinfo@education.ky.gov

Lawrence County High School
Reading Intervention Protocol



LCHS Purpose: LCHS is committed to providing a creative and rigorous 21st century education that ensures all students are transition ready. To ensure all students meet our goal of graduating 100% of our students transition ready, LCHS has developed a highly structured RTI process to identify at risk or gap students and provide immediate and intentional support.

Reading Identification Process: Students will be identified based on ACT score and/or MAP-ACT aligned cut score.

College Course or Course Area	Test	ACT Score /CEP Score	MAP cut score for college readiness
Social Sciences	Reading	22/20	238

Response to Intervention Placement: Students not meeting the Reading college readiness benchmark can be assigned an additional reading class to address gaps in knowledge and skills. However, intervention will vary based on grade level. Intervention guidelines will be followed in accordance with school capacity to serve.

Response to Intervention Process:

For grades 9 and 12: Once students have been identified as not meeting the reading college readiness benchmark, 9th grade 220 MAP and 12th grade 20 reading ACT, they will be scheduled into a reading college readiness transition course in addition to their regular reading class. Even though the intervention class is based on the student’s instructional level, and will focus upon areas of skill deficit according to college readiness benchmark data.

For grades 10 and 11: Once students have been identified as not meeting the reading college readiness benchmark, they will be scheduled into a reading intervention lab in addition to their English class. The students will work in a blended classroom with the majority of instruction coming from a computer based program.

Tiers of Intervention					
	Entrance Criteria		Exit Criteria		Frequency per week
	MAP Score Range	MAP %tile	MAP Score	MAP %tile	
Tier II*	222-230	50th - 66th	230	66th	2-3
Tier III	<222	below 49th	223	50th	5

**Eligible Tier II students may enter into individual contracts with instructors to complete intervention outside of school day but will complete progress monitoring and conferencing as needed with instructor.*

***Students who qualify for Tier II services in both Math and Reading may be served in Tier III setting.*

Transitioning out of Intervention: Students may transition out of intervention one of two ways.

1. Meet the reading college readiness ACT benchmark
2. Meet a MAP benchmark on one of the MAP assessments given during the spring, winter, and fall.

READING		
Grade	ACT Score/CPE ACT Score	*Applicable college readiness levels, i.e. KYOTE
12 th	22/20	

Lawrence County High School
Mathematics Intervention Protocol



LCHS Purpose: LCHS is committed to providing a creative and rigorous 21st century education that ensures all students are transition ready. To ensure all students meet our goal of graduating 100% of our students transition ready, LCHS has developed a highly structured RTI process to identify at risk or gap students and provide immediate and intentional support.

Math Identification Process: Students will be identified based on ACT score and/or MAP-ACT aligned cut score.

College Course or Course Area	Test	ACT Score /CPE ACT Score	MAP cut score for college readiness
College Algebra	Mathematics	22/19	258/249

Response to Intervention Placement: Students not meeting the math college readiness benchmark can be assigned an additional math class to address gaps in knowledge and skills. However, intervention will vary based on grade level. Intervention guidelines will be followed in accordance with school capacity to serve.

Response to Intervention Process:

For grade 9 and 12: Once students have been identified as not meeting the math college readiness benchmark, 9th grade 230 MAP and 12th grade 19 Math ACT, they will be scheduled into a math college readiness transition course in addition to their regular math class. Even though the intervention class is based on the student’s instructional level, and will focus upon areas of skill deficit according to college readiness benchmark data.

For grades 10-11: Students who have been identified as not meeting the math college readiness benchmark may be provided intervention according to the following guidelines.

Tiers of Intervention					
	Entrance Criteria		Exit Criteria		Frequency per week
	MAP Score Range	MAP %tile	MAP Score	MAP %tile	
Tier II*	235-253	50th - 79th	250	80th	2-3
Tier III	<234	below 49th	235	50th	5

**Eligible Tier II students may enter into individual contracts with instructors to complete intervention outside of school day but will complete progress monitoring and conferencing as needed with instructor.
 **Students who qualify for Tier II services in both Reading and Math may be served in Tier III setting.*

Transitioning out of Intervention: Students may transition out of intervention one of two ways.

1. Meet the math college readiness ACT benchmark
2. Meet a MAP benchmark on one of the MAP assessments given during the spring, winter, and fall.

MATH		
Grade	ACT Score/CPE ACT Score	*Applicable college readiness levels, i.e. KYOTE
12 th	22/19	

WORK-BASED LEARNING

School Based Enterprise 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 observations 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 a 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 internships 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.

Apprentice/TRACK program is a partnership between The 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. Apprenticeships work under the supervision of the 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 LCHS 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.

Work Release 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 requirements or enrolled in appropriate intervention classes.

ENGLISH LANGUAGE ARTS

English I

Grade: 9; Credit: 1

Course Description: English I is a course which develops a pupil's competencies in language arts, most notably reading. The course will address spoken and written composition, grammar, vocabulary, reading strategies, and basic research techniques. The course focuses study on the reading and understanding of literary, nonfiction, and practical workplace texts. Students will leave this course with a writing folder containing at least two high school writing pieces.

Reading Lab

Grade: 9; Credit: 1

Prerequisite: Spring MAP Testing 5th grade level or below

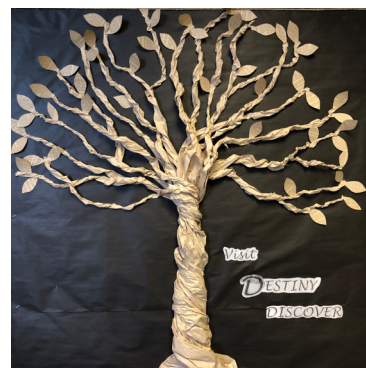
Course Description: Designed to help identify students who need additional support in basic reading skills, reading comprehension and fluency. Students will receive extra time and help in order to boost reading achievement. This course will be scheduled in addition to the required English course. A variety of research-based strategies will be used to address the needs of identified students.

Honors English I

Grade: 9; Credit: 1

Prerequisite: The criteria for enrolling in Honors English I is based on MAP and CTBS test scores from the 8th grade. *Up to the top 20% of the class can be taken with class size not exceeding 25 students.* Students must meet or exceed a minimum of 80th percentile on the MAP or CTBS; in the event a student who does not meet these requirements desires to take this honors course, and class size allows, the parent and student must sign a contract stating that the student will remain in the course the entire year. To maintain equity between the freshmen teams, two honors classes will be offered.

Course Description: This is an accelerated version of the English I curriculum, designed for students who show exceptional aptitude and/or interest in English; this course is also the first-phase of a program for those students who plan to take Advanced Placement English courses.



English II

Grade: 10; Credit: 1

Prerequisite: Successful completion of English I

Course Description: Content includes instruction in oral and written grammar, vocabulary, reading strategies, and basic research techniques. Literary and nonfiction genres, plus applied and technical skills will also be addressed. The course goal is to build communication skills and achieve proficiency in reading and an appreciation for literature. A writing folder with at least three required writings will be completed by course end.

Honors English II

Grade: 10; Credit: 1

Prerequisite: Successful completion of Honors English I, recommendation letter from freshman English teacher.

Course Description: This is an accelerated version of the English II curriculum. This class is designed for students who show exceptional aptitude and/or interest in the English language/literature and is a program for those students planning to take AP English courses. In the event a student does not meet the prerequisite for the course, and class size permits, the student and parent must sign a contract stating that the student will remain in the course for the entire school year.

English III

Grade: 11; Credit: 1

Prerequisite: Successful completion of English I and II

Course Description: This course continues to develop students' competencies in reading, writing, and speaking; the primary focus will be composition. Content includes instruction in process writing (with particular emphasis on revision and editing), public speaking, grammar, vocabulary, advanced reading comprehension, and research techniques.

ENGLISH LANGUAGE ARTS

English III (CTE Track)

Grade: 11; Credit: 1

Prerequisite: Successful completion of English I and II

Course Description: This course continues to develop students' competencies in reading, writing, and speaking; the primary focus will be composition, especially real-world writing: business, civic, and technical. Content includes instruction in process writing (with particular emphasis on revision and editing), grammar, vocabulary, and professional inquiry and composing.

AP English III

Grade: 11; Credit: 1

Prerequisite: Successful completion of Honors English II, recommendation letter from sophomore English teacher, and instructor approval

Course Description: Advanced Placement English Language is an expanded and accelerated version of English III and serves as the first part of the AP English course strand. Content includes intensive study of rhetoric and composition, critical reading and thinking, grammar and vocabulary, and research techniques. The literature component includes an accelerated survey of American literature as well as study of the essay, journalism, and other nonfiction writing. **Students who pass the AP English language exam with a 3 or above can receive 3 college credit hours and/or advanced college standing.**



English IV

Grade: 12; Credit: 1

Prerequisite: Successful completion of English I, II, and III

Course Description: English IV is the final English requirement for Kentucky public school students. The course is designed to teach those students to read, write, think, speak, and listen better, with the goal of better preparing them for college, work, and citizenship. Students in this class study grammar, reading, writing, literature, and research methods; the content includes English language history and development, basic linguistics, creative writing, and real world writing.

Applied English III

Grade: 12; Credit: 1

Prerequisite: Successful completion of English I, II, and III

Course Description: English IV is the final English requirement for Kentucky public school students. The course is designed to teach those students to read, write, think, speak, and listen better, with the goal of better preparing them for post-secondary education/training, the world of work, and citizenship. This course is essentially a more advanced version of English III.

College English (ENG 100-200)

Grade: 12; Credit - 1 credit + 6 hours College Credit

Prerequisite: ACT English score of 18 AND ACT Reading score of 19,

Admission to MSU Dual Credit Program, and successful completion of English I, II, and III

Course Description: Intensive reading, writing, speaking, and listening experiences are planned with the advanced college-bound student in mind. Through a demanding reading schedule, a variety of writing activities (learning log, open response, essay, research paper), multiple discussion assessments, and numerous interdisciplinary projects, students will acquire the habits of mind necessary to excel in the college setting.

ENGLISH LANGUAGE ARTS

Bible as Literature

Grade Level: 9 - 12 **Credits:** 1 English elective

Description: Special Topics: study of the Old Testament; New Testament; Heroes; prophecies; poetry. The course will consist of reading, discussion, and written analysis of major literary selections from the Old and New Testaments. The Bible will be studied not as a religious document but as a source of ideas and style reflected in various works of world literature, politics and culture.

Transition English

Grade: 12; Credit:1

Prerequisite:

Course Description: As per the Kentucky Department of Education, the purpose of this course is to enable students to transition into credit-bearing college classes, which require a minimum benchmark English score of 18 on the ACT. This course is a direct result of implementing Senate Bill 1 legislation which requires the development of a "unified strategy to reduce college remediation rates by at least fifty percent (50%) by 2014 from what they are in 2010" ("Unified strategy for college and career readiness,"2010).

Film Studies

Grade: 11-12; Credit: 1

Course Description: Film Studies is an advanced elective course based on the award-winning program offered by the Kentucky Governors Scholars Program. Film knowledge and appreciation is the goal: through a wide variety of engaging activities, students learn to analyze and understand the most popular art form of the modern era. The class involves taking notes, performing research, viewing

COMS 108 - Fundamentals of Speech

Communication - MSU

Grade:12; HS Credit 1; 3 hours of College credit

Practice and study of speech communication fundamentals, including: interpersonal skills; critical listening; small group problem solving; informal presentations. This course satisfies the required core-oral communications for general education.

films, writing film reviews, and producing student films (documentary, experimental, fiction, etc.), in the process learning a great deal about both the artistic and commercial sides of the movie industry. ***Offered on a rotating basis with Drama; only if staffing permits.***

Yearbook

Grade: 12; Credit: 1

Course Description: "Yearbook" is an elective course that gives students marketable experience in print media publishing. This course solely works toward the completion and selling of a large finished product, Lawrence County High School's yearbook. In class, students compose, construct, and edit all elements of computerized text layout, graphic art, and digital photography. Students work on many clerical operations, make announcements, maintain signs, conduct student polls, and will assist in yearbook photos taken at Lawrence County High School. "Yearbook" in turn covers many of the Content Standards and Objectives encountered in English courses, as does it also for Objectives of art, business, and computer technology courses. Because

Mass Media

Grade 11-12; Credit :1

Course Description: Mass Media is a class designed to provide students with a groundwork in various forms of media, including writing, videography, broadcasting, podcasting and editing. Students will develop the skills necessary to produce a news broadcast as well as a documentary piece. Emphasis will be placed on writing and interviewing skills. Students will also become proficient in the use of technology used in modern media production



MATHEMATICS

Algebra I

Grades 9; Credit 1

Course Description: The fundamental purpose of this course is to recognize and extend the mathematics that students have learned in the middle grades. Students should be proficient in basic mathematics and have mastered pre-algebra skills. Due to the fact that it is built on middle grades standards, this is a more ambitious version of Algebra I than has been generally offered. Students successfully completing this course will receive one full credit towards their high school diploma.

Geometry

Grade 9/10; Credit 1

Grade 10; Successful Completion of Algebra I

Course Description: The fundamental purpose of this course is to formalize and extend students' geometric experiences from the middle grades. Students will be exploring more complex geometric situations and deepen their explanations of geometric relationships, moving toward formal math arguments. Students completing this course will receive one full credit towards their high school diploma.

Algebra II

Grades 9/10/11; Credit 1

Grades 10/11; Successful Completion of Geometry

Course Description: The fundamental purpose of this course is to have students build on their work from Algebra I and Geometry. Emphasis will be placed on the study of higher and more about abstract algebraic thinking skills. Students completing this course will receive one full credit towards their high school diploma.

PRE-CALCULUS

Grades 9-12; Credit 1

Prerequisite: Successful Completion of Geometry and Algebra II (with a grade of B or higher)

Course Description: This course is designed for the advanced study of algebraic and trigonometric exploration and enrichment as well as previously acquired mathematical skills. Topics taught will review and go in depth into complex concepts of Algebra II as well as expounding on trigonometric concepts. Students completing this course will receive one full credit towards their high school diploma.

AP Calculus

Grades 11/12; Credit 1

Prerequisite: Pre-Calculus (with a grade of B or higher)

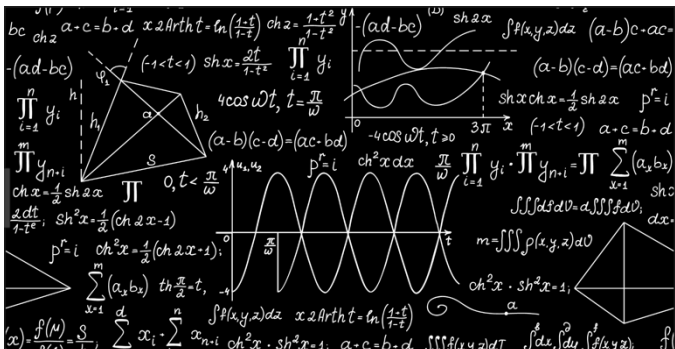
Course Description: This course is designed for students who have completed Pre-Calculus. The course follows the curriculum established by the College Board. Students successfully completing this course are prepared to take the AP exam in Calculus AB or Calculus BC. The discrete mathematics portion of the course offers students an opportunity to study topics outside the normal high school curriculum and with rich applications. Students completing this course will receive one full credit towards their high school diploma.

AP Statistics

Grade 10/11/12; Credit 1

Prerequisites: Successful completion of Algebra II (grade B or higher)

This course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The class follows the AP curriculum set forth by the College Board. Students will receive one full credit towards their high school diploma.



MATHEMATICS

Financial Literacy

Grade 11 and 12; Credit 1

Prerequisites: None

Course Description: This course is designed to give students the opportunity to apply financial management practices, including budgeting, banking, savings and investments, stocks, bonds, mutual funds, certificates of deposit and credit cards, establishing good credit, and explain their importance in achieving short and long-term goals. Students completing this course will receive one full credit towards their high school diploma.

Transition Math

Grade 12; Credit 1

Prerequisites: ACT < 19

Course Description: This transitional math class targets seniors who have successfully completed Algebra I, Geometry, and Algebra II but do not have the ACT math score of a 19, which would allow them to enroll in a college math course. Students will be placed in the transitional course based upon their ACT score, with the opportunity to become transition ready by using the test-taking strategies, skills and concepts that will be taught in this course. Students will be urged to retake the ACT to become transition ready in math (ACT of 19). Students will receive one full credit towards their high school diploma.



MATH DUAL CREDIT

MAT 126 Contemporary College Math - ACTC
Grades 10-12; Credit 1 (high school), 3 Hours
College Credit

Prerequisites: Successful Completion of Algebra II, ACT Math Score >16

Technical Algebra and Trigonometry Examines mathematical concepts from algebra and trigonometry. Includes vectors, phasor algebra, variation, trigonometric functions, coordinate systems, system of linear equations, quadratic, rational, exponential and logarithmic equations.

MAT 155 Trigonometry - ACTC
Grades 10-12; Credit 1 (high school), 3 Hours
College Credit

Prerequisites: Successful Completion of Algebra II, ACT Math Score >22

Includes the trigonometric functions, identities, multiple analytic formulas, laws of sines and cosines, graphs of trigonometric functions in rectangular and polar coordinates, and solving trigonometric equations. Emphasizes applications in each topic. (Students may not receive credit for both MAT155 and any other trigonometry or pre-calculus course.)

MATH 123 Introduction to Statistics - MSU
Grades 10-12; Credit 1 (high school), 3 Hours
College Credit

Prerequisites: Successful Completion of Algebra II, ACT Math Score >19

Course Description: Basic concepts of probability, sampling, and the algebra of events. Properties of selected discrete and continuous distributions. Successful completion of this course will allow students to earn one credit towards their high school diploma as well as three college credit hours.

MATH 131 Problem Solving - MSU
Grades 10-12; Credit 1 (high school), 3 Hours of
College Credit

Prerequisites: Successful Completion of Algebra II, ACT Math Score >19

Course Description: A course providing the student with experiences designed to improve the ability to make decisions and solve a variety of problems. Emphasis is on learning to investigate, organize, observe, question, discuss, reason, generalize and validate. Mathematical content includes topics which are related to consumer mathematics, geometry, graphs, probability and statistics. Successful completion of this course will allow students to earn one credit towards their high school diploma as well as three college credit hours.

Math 152 College Algebra-MSU
Grades 9-12; Credit 1 (high school), 3 Hours of
College Credit

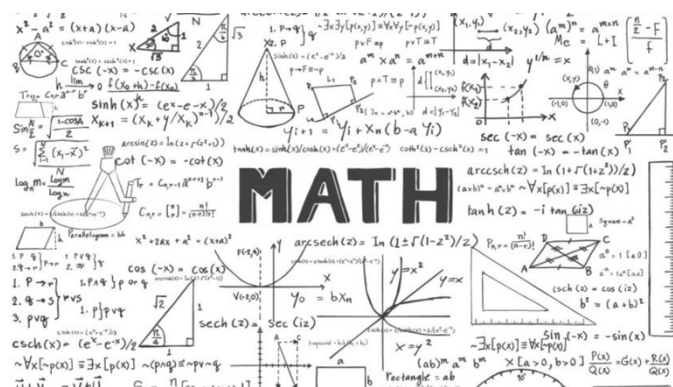
Prerequisites: Successful Completion of Algebra II, ACT Math Score > 22

Course Description: A course providing the student with concepts concerning field and order axioms; equations, inequalities; relations and functions; exponentials; roots; logarithms; sequences. Successful completion of this course will allow students to earn one credit towards their high school diploma as well as three college credit hours.

MATH 174 Pre-Calculus - MSU
Grades 10-12; Credit 1 (high school), 3 Hours of
College Credit

Prerequisites: Successful completion of Math 152 (grade C or higher), ACT math score > 24

Course Description: A college-level review of basic and advanced calculus. This course is offered the second semester to students who have completed College Algebra. Exponential, logarithmic and trigonometric functions; complex numbers, theory of equations. Successful completion of this course will allow students to earn one credit towards their high school diploma as well as three college credit hours.



SOCIAL STUDIES

Integrated Social Studies

Grade: 9; Credit: 1

Course Description: Civic education is essential for active participation by informed citizens. This course will: emphasize a study of government and individual rights and responsibilities. Examination of rules and laws and the need for authority is crucial to maintaining a safe society of for diverse individuals and groups. Civic understanding increases as students develop the knowledge and skills needed to make informed decisions in the public sphere; understanding economics is essential so students will know that most decisions have financial consequences. This course will emphasize the need to make sense of an array of facts, events, observations, and issues in everyday life at the local, regional, state, national, and world level.



World Civilization

Grade: 10; Credit: 1

Course Description: This course takes place an emphasis on modern history from 1500 to present. World Civilization reaches into the depths of world history to include themes as revolution, exploration, cultural and social change, the growth of science and technology, and emergence of the global community. Students will gain an understanding of our rapidly changing world and realize their place in it.

AP World History

Grade: 10; Credit: 1

Course Description: The purpose of this course is to develop greater understanding of the world today

through the lens of history. Students will study the history, culture, and geography of the world's major locales and civilizations, beginning in 3000 BC and continuing to the present day. The course builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage. Specific historical periods organize the course, as well as themes linked to contemporary issues. Students will engage in intensive discussion, note-taking, reading, and factual learning. This course serves as the *introduction* to college-level, Advanced Placement coursework.

U.S. History

Grade: 11; Credit: 1

Course Description: The course focuses on the eras and themes in American History during the nineteenth and twentieth centuries. Through reading, writing and research, students will examine the interweaving of social, political, and economic issues in the U.S. History and will discover how the past affected the future. Additional use of maps and map studies will be incorporated into the course.

AP US History

Grade: 11; Credit: 1

Course Description: This course covers U.S. History from exploration to present time. This course includes a great deal of lecture, reading, writing and analysis of various works. The course relies on academic maturity and self-motivation of the student to meet class assignments. The course is designed to prepare students to think critically and communicate effectively both orally and in writing.

Psychology/Sociology

Grade: 11-12; Credit: 1

Course Description: This course is the study of human behavior. The primary emphasis is placed on the theories and applications of basic psychology. The knowledge we can gather of ourselves enhances our ability to modify and organize our behavior to better sort our situation. Individual and group behavior will be covered. Emphasis will be placed on theory, data gathering, and analysis. Exploration of social problems in today and the future are major concerns of the course. This is an elective class in social studies.

SOCIAL STUDIES

AP US Government & Politics

Grade: 12; Credit: 1

Course Description: This course provides an analytical perspective on government and politics. The course involves both the study of general concepts used to interpret US politics and the analysis of specific case studies. It also includes familiarity with various political institutions (parties, special interests, etc.), beliefs, groups, and ideas that constitute American political reality; these topics will be studied in the contexts of both historical and current events. The coursework shall consist of rigorous classroom discussion, debate, text-based study, writing, and project-based assignments.

PSY 110 General Psychology - ACTC

Grade: 12; HS Credit 1; 3 hours of College credit

Introduces the history, methods and content of modern psychology. Covers the history and systems

of psychology, psychological research, physiological psychology, psychological processes, developmental psychology, personality, abnormal behavior and social psychology. Pre-requisite or Co-requisite: Current placement scores for college level reading established by KCTCS or completion of, or concurrent enrollment in, transitional reading course(s).

SOC 101 – Introduction to Sociology - MSU

Grade 11 and 12; HS Credit 1; 3 hours of College credit

This course offers a general overview of basic perspectives and methods in the discipline examining groups, formal organizations and institutions, while focusing on inequalities of class, gender and race, crime, deviance and social change.



SCIENCE

Integrated Science I

Grade: 9; Credit: 1

Course Description: This course helps students to develop a conceptual understanding of Earth/Space Science and Biology through the use of scientific inquiry. They experience Earth/Space concepts such as energy in the Earth system, geochemical cycles, formation and ongoing changes of the Earth system, and formation and ongoing changes of the universe during semester one. Following semester one, students are exposed to multiple biological concepts, such as ecology, biochemistry, and plant anatomy. A scientific inquiry approach uses concrete, hands-on experiences that require students to apply critical thinking skills. For each guiding question, students apply and connect scientific concepts to real life, applying skills taught to real-world scenarios.

Introduction to Chemistry and Physics

Grade: 10-11; Credit: 1

Course Description: This course serves as an introduction which integrates the basic concepts of chemistry and physics as outlined in the Kentucky Academic Standards for Science. Students learn how the physical and chemical properties of matter can be explained and predicted in terms of atomic and molecular structures and forces. They also learn how balanced and unbalanced forces influence the behavior of objects. Students will learn these core ideas within these topics through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.

Biology

Grade: 10; Credit: 1

Course Description: Students develop a conceptual understanding of biological sciences, as outlined in the Kentucky Academic Standards for Science. They experience 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. Students will learn these core ideas through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are the tools students will use, and skills they develop, as they investigate the natural world, and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.

Anatomy and Physiology

Grade: 11-12; Credit: 1

Prerequisite: Biology—B or above or teacher recommendation.

Course Description: Major concepts addressed in this course include plant structure, animal structure, tissues, organs, and systems.

Chemistry

Grade: 10-12; Credit: 1

Course Description: This course focuses on problem solving techniques; bonding; equilibrium; equations. Students develop a conceptual understanding of chemistry content, outlined in the Kentucky Academic Standards. Students will learn these core ideas within these topics through the use of the science and 211 engineering practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.



SCIENCE



Physics

Grade: 10-12; Credit: 1

Course Description: Students develop a conceptual understanding of physics as outlined in the Kentucky Academic Standards for Science. They experience concepts such as motions and forces, conservation of energy and the increase in disorder, interactions of energy and matter. Students will learn these core ideas through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.

BIO 112 – ACTC General Biology

Grade: 11 and 12; HS Credit: 1; College Hours 3

Basic study of structure, function and interactions of living organisms including cell theory, genetics, energetics, evolution and ecology.

BIO 113 – ACTC General Biology Lab

Grade: 11 and 12; College Hours 1

Co-requisite: BIO 112

Emphasizes basic laboratory studies of structure, function and interactions of living organisms including cell theory, genetics, energetics, evolution, and ecology.

BIO 137 ACTC Human Anatomy and Physiology

Grade: 11 and 12; HS Credit: 1; College Hours 3

The interrelationship of structure and function of each body system will be presented in two semesters. The first semester will include basic chemistry, cell structure, cell physiology, metabolism, tissues, and integumentary, skeletal, muscular, and nervous systems.

CHEM 140 ACTC Chemistry

Grade: 11 and 12; HS Credit: 1; College Hours 3

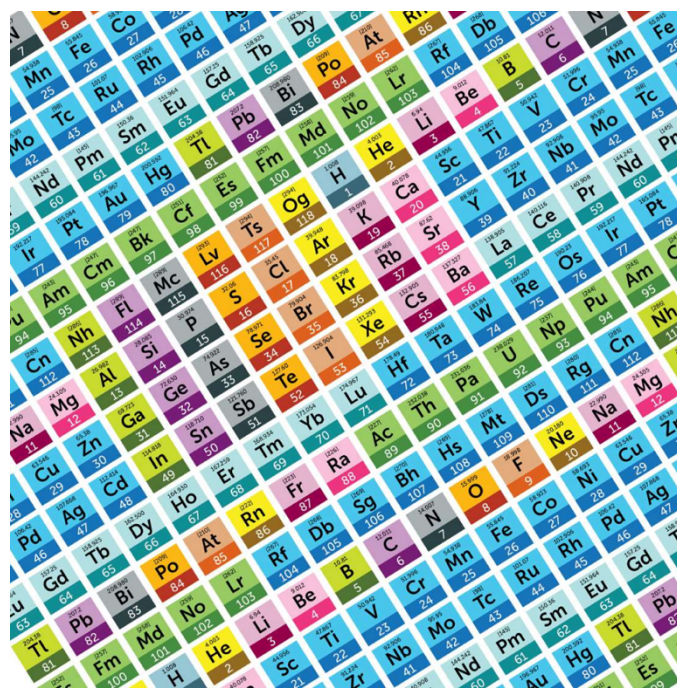
Introduces topics in general chemistry, including properties of matter, stoichiometry, gases, atomic structure, bonding, acids and bases, oxidation and reduction, and nuclear chemistry. Intended for students interested in a one semester course in general chemistry and recommended for students seeking careers in allied health fields.

CHEM 145 ACTC Chemistry Lab

Grade: 11 and 12; College Hours 1

Co-requisite: CHE 140

Reinforces concepts covered in CHE 140 and introduces basic laboratory techniques, methods, and instrumentation through selected experiments dealing with chemical and physical properties, qualitative analysis, and quantitative analysis.



WELLNESS

Fitness/Wellness Required

Grade: 9; Credit: 1

Course Description: The Health and Wellness curriculum is an organized curriculum teaching students the information and skills they need to become health literate, maintain and improve health, prevent disease, and reduce health-related behaviors. This curriculum helps students develop skills in: **a.** behaviors that result in intentional and unintentional injuries; **b.** tobacco use; **c.** alcohol and drug use; **d.** sexual behaviors that result in HIV infections, STD's and unintentional pregnancies; **e.** dietary patterns that contribute to disease, and finally; **f.** insufficient physical activity. The fitness curriculum is geared to teach students skills and proper techniques in acquiring and maintaining physical wellness. The curriculum helps students to develop flexibility, agility, and aides in improving cardiovascular endurance. (Rules of the games as well as proper etiquette will be emphasized during this course.)

Advanced Physical Education

Grade: 10-12; Credit: 1

Course Description: This course includes the following objectives: (1) To make students aware of lifetime commitments to good personal health; (2) Establish a consistent weekly workout program consisting of cardiovascular work and weight training regimen; (3) Make all students aware of scholastic sports rules and objectives, and to understand lifetime sports rules and objectives.

Weight Lifting

Grade: 9-12; Credit 1

Course Description: This course is designed to give students the opportunity to learn weight training concepts and techniques used for obtaining optimal physical fitness. Students will benefit from comprehensive weight training and cardiorespiratory endurance activities. Students will learn the basic fundamentals of weight training, strength training, aerobic training, and overall fitness training and conditioning. Course includes both lecture and activity sessions. Students will be empowered to make wise choices, meet challenges, and develop positive behaviors in fitness, wellness, and movement activity for a lifetime.



WORLD LANGUAGES

Spanish I

Grade Level: 10– 11 **Credits:** 1

Course Description: Prepares students to: perform interpersonal, interpretive and presentational communicative tasks within the novice 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. In addition, students develop insight into their own language and culture.

Note: Consistent active participation (in preparation for class, in the classroom, and in organized class events) and online homework are required.

Spanish II

Grade Level: 11 – 12 **Credits:** 1

Prerequisites: Grade of 80 or above in Spanish I.

Content: Spanish

Course Description: Prepares students to: perform interpersonal, interpretive and presentational communicative tasks within the novice high to intermediate low 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. In addition, students develop insight into their own language and culture.

Note: Consistent active participation (in preparation for class, in the classroom, and in organized class events) and online homework are required.

Spanish III

Grade Level: 11 – 12 **Credits:** 1

Prerequisites: Grade of 80 or above in Spanish II.

Course Description: Prepares students to communicate in the target language and perform interpersonal, interpretive and presentational communicative tasks; 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. In addition, students develop insight into their own language and culture.



FINE ARTS

Visual Art I

Grade: 9-12; Credit: 1

Course Description: This course provides students with basic understanding of the elements of art and the principles of design, using a variety of two and three-dimensional art projects. This course also introduces art history from Prehistoric to Contemporary.

Visual Art II

Grade: 10-12; Credit: 1

Prerequisite: Successful completion of VISUAL ART I with at least a C

Course Description: A variety of two and three-dimensional art projects will be introduced in various media. Emphasis will be on acquiring new skills and improving skills previously acquired.

Specialized Art I

Grade: 11 & 12; Credit: 2 (in conjunction with Specialized Art II)

Prerequisite: Visual Art 1 & II maintains a minimum of a C average in each course.

Course Description: This course is a continuation of Visual Art II. Due to the amount of time needed and the complexity of some projects, it will take many students two school years to become competent in different media of their interest and sharpen the various skills and techniques. Specialized Art I and II meet the same class period for the entire year.

Specialized Art II

Grade: 11 & 12; Credit: 2 (in conjunction with Specialized Art I)

Prerequisite: Visual Art I and II maintain a minimum average in each course.

Course Description: This course is designed for the opportunity of in-depth study of various media and the development of various artistic skills in different areas of art. The student makes individual decisions and sets goals as to which media will be used and which skills will be improved or acquired. Ample time will be provided to master different media and techniques. The class meets all year and is held in conjunction with Specialized Art I.

Humanities

Grade: 10-11; Credit: 1

Course Description: Humanities is a required class. Students study the disciplines of visual art, music, dance, drama, and literature. A wide range of learning activities and assessments are employed.

History and Appreciation of Vis/ Perf Arts

Grade: 10-12; Credit: 1

Course Description: This elective course involves the rigorous study of theatre and acting. Students will learn about dramatic history, styles of performance, and the professional skills necessary for today's actor. Students will be required to apply techniques needed for performance as well as to analyze performances in class. Major projects will include public presentations, film production, and independent classroom performances. *Offered only if staffing permits.*



FINE ARTS

Concert Choir

Grade: 10-12; Credit: 1

Course Description: The aim of this course is to provide a non-competitive outlet for musical creativity, to reinforce music core content, and to demonstrate the benefits of cooperative working and learning. Students will sing music literature from several eras, interpret music notation and symbols, and perform after school at least four times per year. Students are expected to attend school and all concerts, use proper vocal techniques, and sing every day.

Honors Choir

Grade: 10-12; Credit: 1

Prerequisite: Audition and Instructor Approval

Course Description: Honors Choir is a select group of 24 to 36 singers who represent Lawrence County High School in many musical events throughout the school year. It requires an extensive time commitment, some after school and evening events, 4 concerts, Follies and a Musical (if time permits). Students in Honors Choir are required to sing, dance, and perform at very high levels. Students in this choir will sing choral literature of an advanced level. Selection to Honors Choir is by audition only, and previous choral experience is helpful.

AP Music Theory

Grade: 10-12; Credit: 1

Music theory is designed for students who are interested in further exploration of music elements and principles. The purpose of the course is to acquaint students with the basic design of music; how to build chords, music composition, etc., all within a historical context. Students will also review intervals, key signatures, chords, and cadences. They will further their knowledge of musical organization, texture, voice leading in two and four parts, harmonic progressions, and the use of dominant and leading tone seventh chords. Additionally, students will sharpen their ear-training, sight-singing, and musical dictation skills. Students who have had experience performing or reading music prior to the class will find the most success. **Students who pass the AP Music Theory exam with a 3 or above can receive 3 college credit hours and/or advanced college standing.**

Band

Credit: 1; Grades: 9-12

Prerequisite: Student must have completed at least two consecutive years of intermediate level band at the middle school level. Admittance to the band without this prerequisite will be subject to audition and the professional discretion of the band director.

Course Description: Band is a performance-based course. Students will participate in daily rehearsals as well as occasional after-school rehearsals when deemed necessary. The course requires students to participate in Marching Band and Concert Band with specified graded performances and concert band assessment. Many band students also participate in District Band, Clinic Band, and/or All-State Band through audition processes. Students strengthen fundamentals in music-reading and playing techniques in continuation from intermediate levels. Students learn self-discipline and build appropriate skills in a cooperative learning environment.



AGRICULTURE

Principles of Agricultural Science and Technology

Grade: 9; Credit: 1

Course Description: This course provides instruction in the foundations of the various segments of the agricultural industry. Agricultural career opportunities will be emphasized. Animal science, plant and land science, and agricultural mechanics skills will be the focus of the curriculum. The selection and planning of a supervised agricultural experience program and related record keeping will be presented. Leadership development will be provided through FFA. Students will receive personal guidance and counseling with preparatory instructional program selection.

Agriscience

Grade: 9-10; Credit: 1

Course Description: Agriscience introduces the scientific agricultural approach to animal science and selection, and plant and land science. Agricultural career opportunities will be emphasized in each class. Laboratory experiences relating to basic and current technology will be part of the program. Content may be enhanced by utilizing appropriate computer applications. Leadership development will be provided through FFA. Each student will be expected to have a supervised agricultural experience program and keep appropriate records.

Agricultural Construction Skills

Grade: 10-12; Credit: 1

Course Description: Prepares students to construct and maintain agricultural structures and equipment. Develops basic skills such as: tool identification, interpreting plans, calculating a bill of materials, electrification, carpentry, welding, metal fabrication, plumbing, and masonry. Content may be enhanced with appropriate computer applications. Leadership

development will be provided through FFA. Each student will be expected to have a supervised agricultural experience program. This course may be extended to two credits offered on a two-hour basis provided that instruction is enhanced with laboratory experience, project construction, and in-depth skill development.

Advanced Plant Science (Murray State University)

Grade: 10-12; Credit: 1

Course Description: A freshman college-level course which introduces students to the world of plants. The course is a survey of botany, agronomy, horticulture, soils, forestry, and other areas of plant science. Opportunity is provided for students to earn three (3) hours of introductory college credit. Content may be enhanced by utilizing appropriate computer applications. Leadership development will be provided through FFA. Each student will be expected to have a supervised agricultural experience program.

Greenhouse Technology

Grade: 10-12; Credit: 1

Course Description: Greenhouse Technology provides instruction in greenhouse structures and greenhouse environment regulations. Plant growth and development and propagation are included as well as production and maintenance of bedding and container produced plants. Fundamental principles of vegetable production and commercial production of vegetable crops may be included. Content may be enhanced with appropriate technology. Leadership development will be provided through FFA. Each student will be expected to have a supervised agricultural experience program.

AGRICULTURE

Forestry

Grade: 10-12; Credit: 1

Course Description: This course introduces the science of silviculture. The course includes career opportunities, tree identification, tree production, forestry management, timber harvesting, wood utilization and the environmental and ecological aspects of forestry. Content may be enhanced with appropriate computer applications. Leadership development will be provided through FFA. Each student will be expected to have a supervised agricultural experience program.

Introduction to Greenhouse and Plant Production

Grade: 10-12; Credit: 1

Course Description: Plant and Land Science develops basic scientific knowledge and skills pertaining to management of the land and its effects on food and fiber production, the environment, and the quality of life. The relationship of land to plant growth will be emphasized. Plant composition, reproduction, growth, and current biotechnological advances will be included. Content may be enhanced with appropriate computer applications. Leadership development will be provided through FFA. Each student will be expected to have a supervised agricultural experience program.

Veterinary Science

Grade: 10-12; Credit: 1

Course Description: This course introduces students to the field of veterinary science. Major topics include veterinary terminology, safety, sanitation, anatomy/physiology, clinical exams, hospital procedures, parasitology, posology, laboratory techniques, nutrition, disease, office management, and animal management. Careers are also explored. Leadership development will be provided through FFA. Each student will be expected to have an agricultural experience program.

Wildlife Resources

Grade: 10-12; Credit: 1

Course Description: Develops an awareness of wildlife industry resources. The course includes: a study of ecology and ecosystems, wildlife habitat, population dynamics, management techniques that deal with wildlife in all areas and the regulations that affect the wildlife industry. Content may be enhanced with appropriate applied scientific laboratory activities and computer applications. Leadership development will be provided through FFA. Each student will be expected to have a supervised agricultural experience program.

AGR 100 Animal Science – Murray State

Grade: 12; HS Credit 1; 3 hours of college credit

General overview of meat animal production in the United States, including its evolution from Colonial times. The major emphasis is focused on the red meat animal species with only limited comments on dairy and poultry species. The principles of nutrition, breeding programs, disease prevention, marketing, and processing are taught.

AGR 182 Veterinary Science

Grade: 12; HS Credit 1; 3 hours of college credit

Course examines basic principles of veterinary science, including breeds, biology, veterinary tools parasitology, office management, animal control, and basic clinical exam techniques for large and small animals. The purpose of this course is to provide upper classmen agricultural education students, at the high school level, with an introduction to the basic principles of veterinary science. This requires students to understand the biology of both large and small breeds of animals, as well as specifics related to the area of veterinary medicine. This class will build a foundation for those high school students interested in the area of veterinary science while serving as a dual credit course to gain elective credit through Murray State University.



AGRICULTURE

Small Power and Equipment

Grade: 10-12; Credit:1

This course is designed to develop skills in maintenance, repair, and operation of equipment, small combustion-type engine and electric motors. Leadership development will be provided through FFA (Future Farmers of America). Each student will be expected to have a supervised agricultural experience program.

Agriculture Employability Skills

Grade:10-12; Credit: 1

Agriculture Employability Skills provides opportunities to develop skills in: job searching, preparing resumes, writing letters of application, job interview, attitude, communicating effectively, human relations and accepting responsibilities. Content may be enhanced with appropriate computer applications. Leadership Development will be provided through FFA (Future Farmers of America). Each student will be expected to have a supervised agricultural experience program.



Biomedical Science

Principles of Biomedical Science (Elective)

Grade: 9-10; Credit: 1

Course Description: “In the introductory course of the PLTW Biomedical Science program, students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person’s life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems.” The course is designed to provide an overview of all the courses in the Biomedical Science program and to lay the scientific foundation necessary for student success in the subsequent courses. - PLTW Biomedical Science



Human Body Systems (Elective)

Grade: 10-11; Credit: 1

Course Description: “Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Exploring science in action, students build organs and tissues on MAKIKEN® skeletal models; use data acquisition software to monitor body functions, such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases.” - PLTW



Medical Interventions (Elective)

Grade: 11-12; Credit: 1

Course Description: In the Medical Interventions course, students will investigate the variety of interventions involved in the prevention, diagnosis, and treatment of disease as they follow the lives of a fictitious family. A “How-To” manual for maintaining overall health and homeostasis in the body, the course will explore how to prevent and fight infection, how to screen and evaluate the code in our DNA, how to prevent, diagnose, and treat cancer, and how to prevail when the organs of the body begin to fail. Through these scenarios, students will be exposed to the wide range of interventions related to Immunology, Surgery, Genetics, Pharmacology, Medical Devices, and Diagnostics. Each family case scenario will introduce multiple types of interventions and will reinforce concepts learned in the previous two courses, as well as present new content. Interventions may range from simple diagnostic tests to treatment of complex diseases and disorders. These interventions will be showcased across the generations of the family and will provide a look at the past, present and future of biomedical science. Lifestyle choices and preventive measures are emphasized throughout the course as well as the important role scientific thinking and engineering design play in the development of interventions of the future. Additionally, students will begin job shadowing healthcare professionals during this course.

Biomedical Innovations (Elective)

Grade: 12; Credit: 1

Course Description: In this fourth course, students will be asked to apply what they have learned in the previous three courses to solve unique problems in science, medicine, and healthcare. Students design innovative solutions for the health challenges of the 21st century as they work through progressively challenging, open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. They will have the opportunity to work on an independent project or shadow a mentor in a hospital, physician's office, or industry. Throughout the course, students are expected to present their work to an adult audience that may include representatives from the local business and healthcare community.



BUSINESS

Accounting & Finance Foundations

Grade: 9-11; Credit: 1

Course Description: The accounting principles taught in this course are based on a double-entry system and include preparing worksheets, journals, ledgers, payroll taxes, and financial statements for a sole proprietorship, partnership, and corporation. Opportunities for exposure to automated accounting are provided. Leadership development will be provided through INTERACT (Junior Rotary).

Financial Accounting

Grade; 10-12; Credit: 1

Prerequisite: Accounting and Finance Foundations

Course Description: The accounting principles taught in this course include an in-depth study of accounting principles, procedures, and techniques used in keeping financial records for sole proprietorships, partnerships, and corporations. There is an emphasis on automated accounting. Leadership development will be provided through INTERACT (Junior Rotary).

Business Management

Grade 10-12; Credit: 1

Course Description: This course emphasizes the skills needed for managing a business that involves the selection and supervision of employees including efficient use of time, personnel, facilities, and financial resources. Students will explore forms of business ownership; typical business organizational structure; product or service promotion in business; effective communications; human relations skills required in dealing with employees; and effective management strategies used in personnel, finance, production, marketing, and information processing.

Financial Literacy

Grade 12; Credit: 1

Course description: Financial literacy course is designed to alert, inform, and educate students in concepts of personal finance and money management. Students will begin to develop the skills and strategies that promote personal and financial responsibility related to financial planning, savings, investment, and charitable giving in the global economy. Effective money management is a disciplined behavior. It is difficult to master, and much easier when learned earlier in life.



CARPENTRY

Introduction to Construction Technology

Grade: 10; Credit: 1

Course Description: These courses emphasize the types, grades, sizes, and standards of building materials including the types of fasteners and their correct uses. Students will also learn to correctly utilize and maintain commonly used hand and power tools. Safety in the lab and on the job site is stressed.

Floor and Wall Framing

Grade: 11; Credit: 1

Course Description: The student will practice floor framing, layout, and construction of floor frames. Cutting and installing floor and wall framing members according to plans and specifications will also be practiced.

Site Layout & Foundations

Grade: 11; Credit: 1

Course Description: These courses will introduce the student to heavy commercial construction. The student will receive information about rigging wall forms, vertical piers and columns, grade curb forms, horizontal beam forms, above-grade slab systems, fireproof encasement forms, stair forms, bridge and bridge deck forms.

Ceiling and Roof Framing

Grade: 12; Credit: 1

Course Description: This course covers roof types and combinations of roof types used in the construction industry. The emphasis is on layout, cutting and installing ceiling joists, rafters, roof decking, and roof coverings.



Exterior and Interior Finish

Grade Level: 10 - 12 Credits: 1

Description: This course presents basic concepts of building trim, gypsum wallboard, paneling, base, ceiling and wall molding with instruction on acoustical ceilings and insulation, wood floors, tile, inlaid adhesive and tools of the flooring trade. This course will continue to refine the techniques and skills taught in the previous carpentry courses. In this course, cost control, speed, and precision are emphasized. In addition, students will perfect the skills associated with the exterior finishing of a house.

FAMILY CONSUMER SCIENCE

FACS Essentials

Grade: 9-12; Credit 1

Course Description: This comprehensive course provides an opportunity for acquiring basic life skills and guides students to explore and select specific areas for concentrated study. Emphasis is on family, employability skills, adolescent development, introduction of textiles, interiors and design, financial management, parenting, establishing healthy relationships, creating a foundation for healthy lifestyles, and nutrition.

Relationships

Grade: 9-12; Credit 1

Course Description: This course assists students to develop self-understanding, understanding of others, interpersonal skills, awareness of other's needs, and physical, mental, and emotional wellness. Family life education comprises a portion of this course including dating and married relationships. Preparations for and the achievement of a successful marriage are emphasized.

Foods and Nutrition

Grade: 10-11; Credit: 1

Course Description: This course is designed to assist students in making critical decisions about food, which contributes to health and well-being.

Laboratory instruction is included as an application process. Practical problems addressed relate to attitudes toward food, nutrition facts, special health concerns and diets, management of food resources, preparation skills, food safety, sanitation, and careers in nutrition and food service.

Culinary Skills I

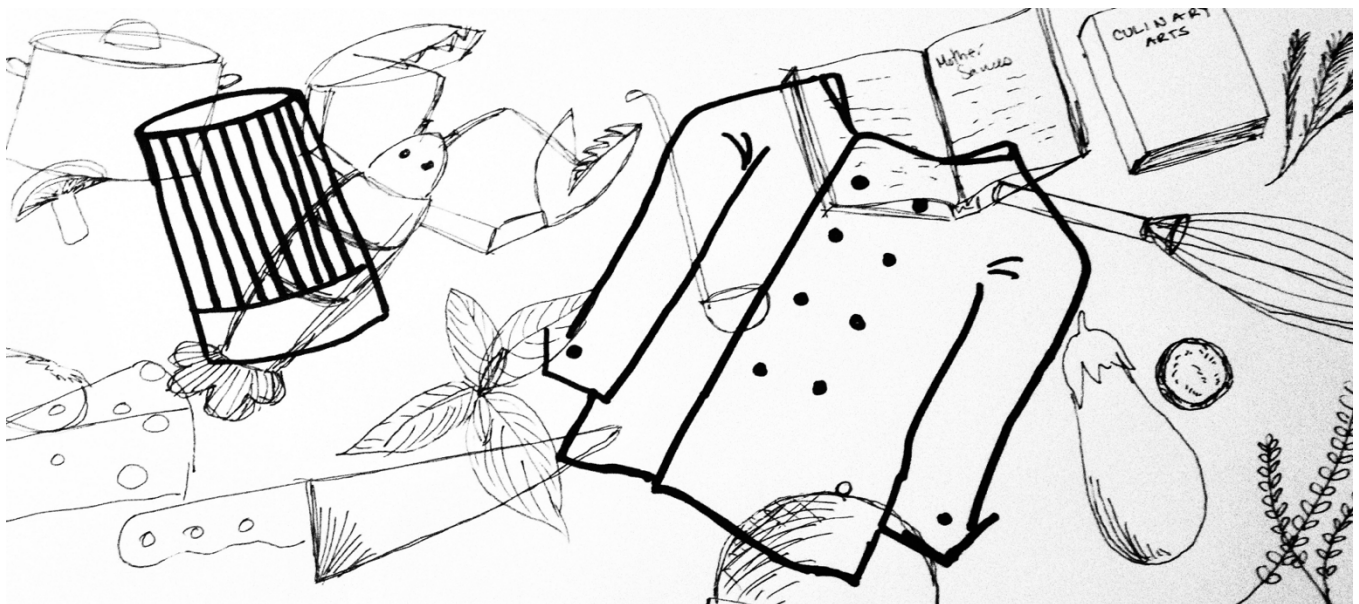
Grade: 11-12; Credit: 1

Course Description: This advanced course allows students to increase competencies in a variety of food preparation techniques. Emphasis will be placed on food presentation, garnishing, menu planning, and the skills necessary to prepare for a career in the culinary arts profession.

Culinary Skills II

Grade: 11-12; Credit: 1

Course Description: In this course, students resume progress in pursuing competencies in food production and services. Orientation to the food service industry and development of food preparation skills are reinforced. Food service management functions are introduced. More in-depth information is provided and higher levels of skills are taught. Time is provided for work-based learning opportunities.



ENGINEERING

Engineering I

Grade Level: 9 – 12; Credit: 1

Course Description: This course applies the skills, concepts, and principles of engineering. Students explore various technological systems and engineering processes in related career fields. Topics include investigating technological system, design optimization, and problem solving. Students utilize CAD (computer-aided design) and physical and virtual modeling concepts to construct, test, collect, and report data. Participation in Kentucky Technology Student Association will greatly enhance instruction.

Engineering II

Grade Level: 10 – 12; Credit: 1

Course Description: A project and research based course that extends the learning experiences where students focus on mechanical, electrical, fluid and thermal systems allowing in depth exploration in selected disciplines of engineering areas such as manufacturing, power/energy/transportation, robotics, hydraulics, electricity/electronics, communications, construction systems, alternative energy, computer-aided design, and problem solving. Participation in Kentucky Technology Student Association will greatly enhance instruction.

Civil Engineering

Grade Level: 10 – 12; Credit: 1; Prerequisites:

Engineering I and/or Engineering II

Course Description: This is an introduction to residential and light commercial building construction and design. Students will learn basic sketching, architectural drafting skills with an emphasis on computer-aided drafting. In this class, students will design a structure relevant to today's modern architecture and create models of their designs with various materials and tools. Students will experience and solve many problems in designing or building structures with regard to environment and community impact and limitations from town planning, urban design and landscape architecture to furniture and objects. Participation in Kentucky Technology Student Association will greatly enhance instruction.

Environmental Engineering

Grade Level: 11 – 12; Credit: 1

Course Description: This course will use the principles of engineering, soil science, biology, and chemistry to develop solutions to environmental problems. Students will work to improve recycling, waste disposal, public health, and water and air pollution control. They also address global issues, such as unsafe drinking water, climate change, and environmental sustainability. Participation in Kentucky Technology Student Association will greatly enhance instruction.

Engineering Co-op

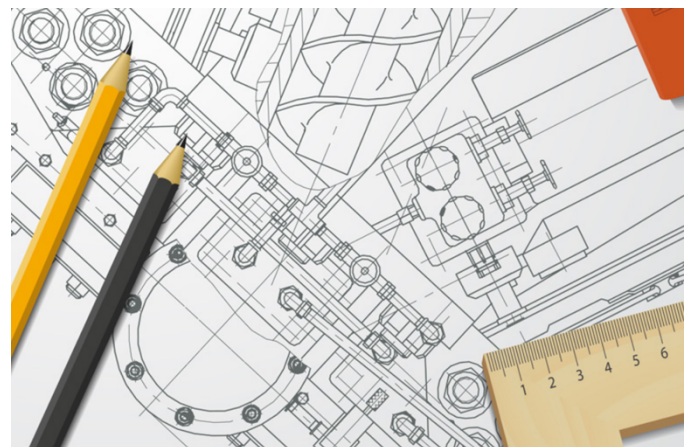
Grade Level: 11 – 12; Credit: 1

Course Description: Cooperative education is a paid educational program consisting of in-school instruction combined with the program related on-the-job work experience in a business or industrial establishment. These are planned experiences supervised by the school and the employer to ensure that each phased contributes to the student's Individual Learning Plan (ILP). Refer to the KDE Work-Based Learning Manual for further specifications. Participation in Kentucky Technology Student Association will greatly enhance instruction.

Engineering Internship

Grade Level: 11 – 12; Credit: 1

Course Description: Internship provides supervised work-site experience for high school students associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. Participation in Kentucky Technology Student Association will greatly enhance instruction.



Flight and Aeronautics

Introduction to Aerospace

Grade Level: 10 – 12; Credit: 1

Course Description: This core aerospace and aviation course provides the foundation for all flight and aviation pathways. Students will gain an appreciation for the similarities and differences between aviation and aerospace. Students will also gain a historical perspective starting from the earliest flying machines to the wide variety of modern aircraft and the integral role they play in making today's world work. Students will learn about the history and impact of space exploration and have opportunities to build and fly historical and contemporary aircraft and spacecraft designs. Students will also begin to drill down into the various sectors of aviation and the parts that make up the aviation and aerospace ecosystem. They will discover how advances in aviation created a need for regulation and will learn about the promulgation of civil aviation oversight.

Fundamentals of Aviation Science

Grade Level: 10-12; Credit: 1

Course Description: This course will introduce students to basic aircraft structures and their major components, principles of flight, and the fundamental physical laws affecting flight. Students will learn about basic aerodynamics and forces that act on aircraft in flight. This course will provide students with a foundational understanding of basic physics concepts related to flight. Design characteristics will be covered, including concepts surrounding aircraft stability, controllability, and the effect of weight and balance on flight performance. The course will cover primary and secondary flight control systems. It also covers the different types of power plants and how they support the operation of the aircraft. Students will learn about several different types of fuel systems and gain an understanding of the critical components of aircraft electrical systems. Finally, students will learn about various systems that drive flight instruments and how those flight instruments operate.



Aviation Science

Grade Level: 10-12; Credit: 1

Course Description: This course prepares students for flight training and aircraft operations. Students will gain knowledge and skills in airport systems, air traffic control procedures, aviation weather, air navigation, radio communication procedures, and Federal Aviation Regulations (FAR's). This course covers the history of aviation law, federal regulation of air transportation and the role of state and federal government in aviation law including functions of the Federal Aviation Administration. Students will become familiar with aircraft power plants, principles of flight, aircraft systems/instruments, and science of weather.



Unmanned Aircraft Systems

Grade Level: 11-12; Credit: 1

Course Description: This course is an introduction to unmanned aircraft systems (UAS). A history of UAS, typical applications and an overview of regulations, airframe and powerplant systems, sensors, ground control stations, airspace, weather, and other foundational skills needed to safely operate UAS in the U.S. airspace systems will be covered. This course will incorporate hands-on practical applications and will give students the opportunity to design, build, and pilot UAS, both remotely and autonomously. Students will be prepared to complete the Federal Aviation Administration's Part 107 Remote Pilot written exam upon completion of this course

HEALTH SCIENCES

Principles of Health Science

Grade: 10; Credit: 1

Course Description: Principles of Health Science is an orientation and foundation for occupations and function in any healthcare profession. This course includes broad healthcare core standards that specify the knowledge and skills needed by the vast majority of healthcare workers. The course focuses on exploring health career options, history of healthcare systems and processes, and basic healthcare industry skills. This introductory course may be a prerequisite for additional courses in the Health Science program.

Medical Terminology

Grade: 11; Credit: 0.5

Course Description: Medical Terminology is designed to develop a working knowledge of language in all health science major areas. Students acquire word-building skills by learning prefixes, suffixes, roots, and abbreviations. Students will learn correct pronunciation, spelling and application rules. By relating terms to body system, students identify proper use of words in a medical environment. Knowledge of medical terminology enhances the students' ability to successfully secure employment or pursue advanced education in health care.

Medicaid Nurse Aide

Grade: 12; Credits: 1

Course Description: This course is an instructional program that prepares individuals to perform routine nursing-related services to patients in long-term care facilities under the training and supervision of an approved Registered Nurse. State Registry is available upon successful completion of State written and performance examinations. Prior to offering the course the instructor and the Health Science Program must be approved for meeting State requirements set by the Cabinet for Health and Family Services.

Emergency Procedures

Grade: 11; Credits: 0.5

Course Description: This course will focus on potential emergency situations. It is designed to promote and understanding of standard precautions necessary for personal and professional health maintenance and infection control. Upon successful completion of the course the student will demonstrate the necessary skills in First Aid and Cardiopulmonary Resuscitation (CPR) and will be given the opportunity to take the completion examination as outlined by the sponsoring agency.

Body Structures and Function

Grade: 12; Credits: 1

Co-Requisite: Medicaid Nurse Aide

Course Description: Body Structures and functions is designed to provide knowledge of the structure and function of the human body with an emphasis on normalcy. The interactions of all body systems in maintaining homeostasis will promote and understanding of the basic human needs necessary for health maintenance. Academic knowledge from life science core content as it related to the human body will be included. Laboratory activities should be a part of the course when appropriate.



Medical Laboratory Aide (Phlebotomist)

Grade:11-12; Credits: 1

Course Description: This course consists of a combination of classroom and hands-on experiences related to the student's education objectives in the area of Medical Laboratory Aide/Phlebotomist. Students may be eligible to take the National Health Careers Association Phlebotomy Tech certification exam upon successfully completing the course. It is best practice for students to participate in a work-based learning experience during this course. Students will be required to follow program and agency requirements for attendance and health screening. These may include but are not limited to: drug screens, TB (tuberculin) skin test, and immunization certificates. Students must complete a minimum of 30 successful unaided venipuncture collections and 10 successful unaided capillary collections in order to take the National Health Careers Association certification exam. This is an independent study course.



HEAVY EQUIPMENT

Introduction to Construction Technology

Grade Level: 9 – 12; Credit: 1

Course Description: This course is the introduction to the construction carpentry industry. The class will emphasize safe and proper methods of operating hand tools, portable power tools, and stationary power tools in the construction industry. Students will **identify** the proper use of personal protection equipment and general job safety, perform mathematics functions as related to tasks being performed, demonstrate the safe and proper use of the following types of hand tools: fastening devices, layout and measuring devices, leveling devices, demonstrate the safe and proper use of the following types of portable power tools: various saws, surfacing and shaping tools, drills, and pneumatic tools.



Heavy Equipment Operation

Grade Level: 9 – 12; Credit: 1

Course Description: This course introduces students to the basic terminology and equipment used in the heavy equipment trade; working around heavy equipment in a safe and responsible manner; commonly used heavy equipment machines, including dump trucks, trenchers, backhoes, excavators, skid steer, and dozers; drive systems and hydraulic systems; pre-operational checks and operator maintenance tasks for heavy equipment; basic tractor operation, controls, attachments, maintenance, and safety guidelines; basic concepts and procedures related to the use of heavy equipment to perform earthmoving work; preparing graded surfaces using heavy equipment; identification and interpretation of construction stakes; and describes the methods for grading slopes. Students will learn what tasks are expected from an apprenticeship program in heavy equipment.

Special Topics

Grade Level: 9 – 12; Credit: 1

Course Description: Instruction related to Industrial Education – Heavy Equipment but not described in

the other courses. Students will complete selected tasks and problems as determined by the instructor.

Heavy Highway Construction Equipment Repair

Grade Level: 9 – 12; Credit: 1

Course Description: This course introduces students to keep preventive maintenance, diagnose malfunction, prescribe corrective actions, and repair heavy highway equipment. Students will identify the basic parts of each type of equipment and explain the differences in models of type of equipment, identify and explain the systems that make up the drive system used on heavy equipment, explain the basics of a hydraulic system and identify hydraulic components, describe the different types of transmissions used on utility tractors, perform pre-start inspection and maintenance procedures. Inspect different types of heavy equipment, perform preventive maintenance., diagnose malfunction and prescribe corrective actions.

Environmental Resources

Grades 9-12; Credit: 1

Course Description: This course is an intermediate scientific study of environmental technology. It is designed to develop an awareness of environmental concerns related to air, water, soil, land use management, waste management, and their interrelationship with the biological ecosystem. Soil formation, conservation and evaluation material will also be included. Content will be enhanced with appropriate computer applications, scientific laboratory activities, field experimentation, community development projects, and occupational development.



JROTC

LET I

Grade: 9-12; Credit: 1

Course Description: LET I (Leadership, Education & Training) – This laboratory course is designed to introduce students to the history, customs, traditions and purpose of the Army JROTC program. It teaches students strategies to maximize their potential for success through learning and self-management. Basic leadership skills include leadership principles, values and attributes and communications skills are integrated throughout the course. The JROTC curriculum is enhanced through physical fitness activities, extracurricular and co-curricular activities that support the core employability skills standards and McRel academic standards.

LET II, III, & IV

Grade: 10-12; Credit: 1 each

Prerequisite: Successful completion of LET I

Students receive instruction in the following areas: conflict resolution, physical fitness, techniques of communication, leadership, first aid, map reading, American history, current events, citizenship, leadership lab, technology awareness, drug/alcohol/tobacco abuse dangers, sexual harassment, proper relationships, career opportunities, and techniques of how to argue.

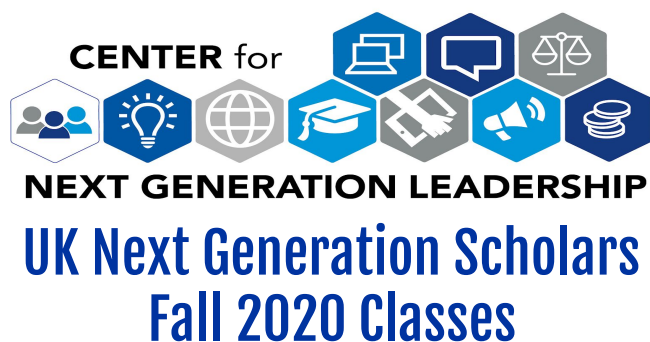
Staff Organization and Problem Solving

Grade: 11 - 1; Credit: 1

Prerequisite: Successful completion of 3 years of JROTC. Must be a LET IV and approved by Cadre

This course provides lessons on staff work, relations, and basic office skills of organization and cooperation. Problem solving instruction builds teamwork, self-esteem, spirit, and class participation. These are related to life skills, community involvement, and community skills.





CIS 110 Composition and Communication I **(MWF 9:00–9:50 EST)**

Composition and Communication I is the introductory course in a two-course sequence designed to engage students in composing and communicating ideas using speech, writing, and visuals. Students will develop interpersonal communication, critical thinking, and information literacy skills by exploring what it means to be engaged, twenty-first century citizens. Students will practice composing, critiquing, and revising ideas based on personal experience, observation, and fieldwork in the community, culminating in several discrete projects using oral, written, and visual modalities.

EES 110 Endangered Planet: An Introduction to Environmental Geology **(TR 10:30–11:45)**

An introductory course that applies basic geological concepts to current environmental issues including the availability and use of water and soil resources, pollution causes, effects and solutions, and causes and prediction of environmental hazards including floods, landslides, subsidence, earthquakes and volcanoes.

DES 100 Design in Your World **(TR 9:00–10:15)**

Understanding how design unfolds from and informs culture, students garner appreciation for and creatively experiment with the embedded practice of design as a basic human response for inhabitation, work, play, and worship.

MA 109 College Algebra **(MWF 10:00–10:50 EST)**

Selected topics in algebra. Develops manipulative algebraic skills and mathematical reasoning required for further study in mathematics and use in mathematical modeling. Includes brief review of basic algebra, quadratic formula, systems of linear equations, introduction to functions and graphing. This course is not available for credit to persons who have received credit in any mathematics course of a higher number with the exceptions of MA 111, 112, 123, 162, 201 and 202. Credit not available on the basis of special examination. Prereq: Two years of high school algebra and a Math ACT score of 21 or above or a Math SAT score of 510 or above or a Math SAT2016 score of 540 or above; or UK 096; or appropriate MathIndex; or grade of B or better in MA 111. Math placement test recommended.



English

- English Foundations I P F
- English Foundations II P F
- English 6 **NEW** C
- English 7 **NEW** C
- English 8 **NEW** C
- English 9 P C H
- English 10 P C H
- English 11 P C H
- English 12 P C H
- AP® English Language and Composition A
- AP® English Literature and Composition A
- Creative Writing* C
- Media Literacy* C
- Reading Skills and Strategies* C
- Writing Skills and Strategies* C



Science

- Science Foundations P F
- Science 6 C
- Science 7 C
- Science 8 C
- MS Physical Science **NEW** C
- MS Life Science **NEW** C
- MS Earth and Space Science **NEW** C
- Earth Science C H
- Physical Science P C H
- Environmental Science P C
- Biology P C H
- Chemistry P C H
- Physics P C H
- Psychology* C
- AP® Environmental Science A
- AP® Biology A
- AP® Chemistry A
- AP® Psychology* A



Math

- Math Foundations I P F
- Math Foundations II P F
- Math 6 **NEW** C
- Math 7 **NEW** C
- Math 8 **NEW** C
- Introductory Algebra C
- Algebra I P C H
- Geometry P C H
- Algebra II P C H
- Mathematics I P C
- Mathematics II P C
- Mathematics III P C
- Precalculus C H
- AP® Calculus AB A
- AP® Statistics A
- Financial Literacy* C
- Mathematics of Personal Finance C
- Probability and Statistics* C
- Fundamental Math C
- Algebra I-A C
- Algebra I-B C
- Bridge Math **NEW** C
- Liberal Arts Mathematics 1 C
- Liberal Arts Mathematics 2 C



Electives

- College and Career Preparation I* C
- College and Career Preparation II* C
- Art Appreciation* C
- Music Appreciation C
- Physical Education* C
- Health* P C
- Health Opportunities through Physical Education (HOPE) C
- Psychology* C
- Multicultural Studies* C
- Sociology* C
- Creative Writing* C
- Media Literacy* C
- Reading Skills and Strategies* C
- Writing Skills and Strategies* C
- Financial Literacy* C
- Mathematics of Personal Finance C
- Probability and Statistics* C
- Bridge Math **NEW** C
- Liberal Arts Mathematics 1 C
- Liberal Arts Mathematics 2 C

World Languages

- Spanish I P C H
- Spanish II P C H
- Spanish III C
- AP® Spanish Language A
- French I C H
- French II C H
- Mandarin Chinese I** C
- Mandarin Chinese II** C
- German I** C
- German II** C
- Latin I** C
- Latin II** C
- MS Spanish 1** **NEW** C
- MS Spanish 2** **NEW** C
- MS French 1** **NEW** C
- MS French 2** **NEW** C
- MS Mandarin Chinese 1** **NEW** C
- MS Mandarin Chinese 2** **NEW** C
- MS German 1** **NEW** C
- MS German 2** **NEW** C
- MS Latin 1** **NEW** C
- MS Latin 2** **NEW** C



CTE

- Principles of Health Science C
- Accounting I **NEW** C
- Principles of Business, Marketing, and Finance C
- Legal Environment of Business C
- Human Resources Principles C
- Introduction to Business and Technology C
- Principles of Information Technology C
- Information Technology Applications* C
- Computer Applications* C
- Business Applications* C

- P Prescriptive
- C Core
- H Honors
- A Advanced Placement
- ➔ Coming Soon
- * One Semester
- ** Available only through Apex Learning Virtual School (ALVS)

Lawrence County High School



Accounting
CIP 52.0301.00

Courses

Accounting Foundations

Financial Accounting

Financial Literacy

Business Management

Career Ready

ASK- Concepts of Finance
QuickBooks Certified User

Post-Secondary Education



Bachelor of Science
Accounting



Accounting

What Accountants and auditors do: Accountants and auditors prepare and examine financial records. They ensure that financial records are accurate and that taxes are paid properly and on time. Accountants and auditors assess financial operations and work to help ensure that organizations run efficiently.

Work Environment: Most accountants and auditors work full time. In 2016, about 1 in 5 worked more than 40 hours per week. Overtime hours are typical at certain times of the year, such as at the end of the budget year or during tax season.

How to Become an Accountant or Auditor: Most employers require a candidate to have a bachelor's degree in accounting or a related field. Certification within a specific field of accounting improves job prospects. For example, many accountants become Certified Public Accountants (CPAs).

Pay: The median annual wage for accountants and auditors was \$69,350 in May 2017.

Job Outlook

Employment of accountants and auditors is projected to grow 10 percent from 2016 to 2026, faster than the average for all occupations. In general, employment growth of accountants and auditors is expected to be closely tied to the health of the overall economy. As the economy grows, more workers should be needed to prepare and examine financial records.

Lawrence County High School Preliminary Career Pathway Accounting

Freshman	Sophomore	Junior	Senior
English	English	English	English
Math	Math	Math	Math
Science	Science	Science	Science
Social Studies	Social Studies	Social Studies	Social Studies
Health/PE	Financial Accounting	Business Management	Financial Literacy
Accounting Foundations	Elective	Elective	Elective
Elective	Elective	Elective	Elective

Lawrence County High School



Agricultural Power
01.0201.00

Courses

Principles of Ag Science and
Tech

Agriscience

Ag Construction Skills

Small Engine Power and
Equipment
or
Ag Employability Skills

Career Ready

EETC Principles of Small
Engine Technology

Welding 1

Post Secondary Education



Bachelor of Science in
Agriculture



Agricultural Power

What metal fabricators do: Metal fabricators, whether it be a welder, pipefitter, fabricator. They turn raw metal into premade shapes for assembly to use or its final product.

Work Environment: Metal fabricators typically they work for construction and manufacturing companies.

How to Become an Agricultural or Food Scientist: Metal fabricators, while they can be on the job trained, they need at least trade school, college, or a welding school.

Pay: The median annual wage for a metal fabricator is around \$56,000 or \$18- \$25/hour plus a bonus.

Job Outlook: The demand for metal fabricators is expected to grow at a faster than average rate of 13% through 2026.

Lawrence County High School Preliminary Career Pathway Horticulture & Plant Science

Freshman	Sophomore	Junior	Senior
English	English	English	English
Math	Math	Math	Math
Science	Science	Science	Science
Social Studies	Social Studies	Social Studies	Greenhouse Tech
Prin of Ag Sc	Agri Science	Humanities	Ag Employ Skills
Health PE	Elective	Ag Construction Skills	Elective
Elective	Elective	Elective	Elective

Possible Advanced Placement/Dual Credit Courses:

Lawrence County High School



Animal Science Systems
01.0901.00

Courses
*Dual Credit Option

Principles of Ag Science and
Tech

Agriscience

Animal Science

Veterinary Science
or
Ag Employability Skills

Career Ready

Ebsco Animal Science
EOP Animal Science

**Post Secondary
Education**



Bachelor of Science in
Agriculture

Veterinary Technology

Advanced Degrees:
Veterinary School-
Auburn University
Ohio State



Animal Science Systems

What Veterinarian Technologists and Technicians Do: Veterinary technologists and technicians perform medical tests under the supervision of a licensed veterinarian to assist in diagnosing the injuries and illnesses of animals.

Work Environment: Veterinary technologists and technicians work in private clinics, laboratories, and small animal hospitals. Their jobs may be physically or emotionally demanding. Many work evenings, weekends, or holidays.

How to Become a Veterinarian Technologists and Technicians: Veterinary technologists and technicians must complete a postsecondary program in veterinary technology. Technologists need a 4-year bachelor's degree, and technicians need a 2-year associate's degree. Typically, both technologists and technicians must take a credentialing exam and must become registered, licensed, or certified, depending on the requirements of the state in which they work.

Pay: The median annual wage for veterinary technologists and technicians was \$31,070 in May 2014.

Job Outlook: Employment of veterinary technologists and technicians is projected to grow 19 percent from 2014 to 2024, much faster than the average for all occupations. Employment will grow as more veterinarians utilize technicians and technologists to do general care and lab work, and as they continue to replace lower skilled veterinary assistants.

Lawrence County High School Preliminary Career Pathway Animal Science Systems

Freshman	Sophomore	Junior	Senior
English	English	English	English
Math	Math	Math	Math
Science	Science	Science	Science
Social Studies	Social Studies	Social Studies	Veterinary Science
Prin of Ag Sc	Agri Science	Humanities	Ag Employ Skills
Health PE	Elective	Animal Science	Elective
Elective	Elective	Elective	Elective

Possible Advanced Placement/Dual Credit Courses:
AGR 100 MSU Animal Science, AGR 182 MSU Veterinary Science

Lawrence County High School



Courses

ROTC LET I

ROTC LET II

ROTC LET III

ROTC LET IV

Army ROTC Leadership

College Ready

ACT – CPE
 English – 18
 Math – 22
 Reading – 22
 Science – 23

Post Secondary Education



Army JROTC

The Junior Reserve Officer Training Corps is a leadership education program. This program will help students build a strong knowledge base of self-discovery and leadership skills applicable to many leadership and managerial situations. Mastery of the Army Junior ROTC standards through project-based learning, service learning and leadership development activities will prepare students for the 21st Century leadership responsibilities. The curriculum focus is reflected in its mission statement, *“To motivate young people to be better citizens.”*

Desired Learning Outcomes:

This program intends to teach students to:

- Maximize potential for success through learning, self-management and development of employability “soft skills”
- Develop leadership skills
- Incorporate principles of mental and physical wellness into behaviors and decisions with health and wellness awareness
- Build effective relationships with peers, co-workers, and the community with information and communications skill development
- Apply physical and political geography to building global awareness
- Understand the importance that financial, economic, business, and entrepreneurial literacy have in the work force
- Correlate the rights and responsibilities of citizenship to the purposes of the U.S. government through civic literacy
- Relate events in U.S. history to choices and responsibilities Americans have today
- Characterize the role of the military and other national service organizations in building a democracy and maintaining peace in a democratic society.

Lawrence County High School Preliminary Career Pathway Army JROTC

Freshman	Sophomore	Junior	Senior
English I	English II	English III	English IV
Algebra I	Geometry	Algebra II	Pre-Cal
Int Science	Biology	Chemistry	Physics
Int SS	World Civ	US History	ROTC LET IV
Health PE	Humanities	ROTC Let III	Army ROTC Leadership
ROTC LET I	ROTC LET II	Elective	Elective
Elective	Elective	Elective	Elective

Possible Advanced Placement/Dual Credit Courses:

Lawrence County High School



Civil Engineering
14.0801.00

Courses

Engineering I

Engineering II

Civil Engineering

Environmental
Engineering/Engineering
Internship/Co-Op

Career Ready

End of Program
Industry Certificate

REC - Foundation Pre-
Engineering Certification

**Post-Secondary
Education**



Kentucky Community &
Technical College System
Engineering Technology

University of Kentucky
Engineering



Civil Engineering

What Civil Engineers Do

Civil engineers conceive, design, build, supervise, operate, construct, and maintain infrastructure projects and systems in the public and private sector, including roads, buildings, airports, tunnels, dams, bridges, and systems for water supply and sewage treatment.

Work Environment

Civil engineers generally work in a variety of locations and conditions. It is common for them to split their time between working in an office and working outdoors at construction sites so that they can monitor operations or solve problems onsite.

How to Become a Civil Engineer

Civil engineers need a bachelor's degree in civil engineering, in one of its specialties, or in civil engineering technology.

Pay

The median annual wage for civil engineers was \$84,770 in May 2017.

Job Outlook

Employment of civil engineers is projected to grow 11 percent from 2016 to 2026, faster than the average for all occupations.

**Lawrence County High School Preliminary Career Pathway
Engineering Technology Education**

Freshman	Sophomore	Junior	Senior
English	English	English	English
Math	Math	Math	Math
Science	Science	Science	Science
Social Studies	Social Studies	Social Studies	Social Studies
Health/PE	Engineering II	Civil Engineering	Environmental Engineering
Engineering I	Elective	Environmental Engineering	Engineering Co- op
Elective	Elective	Elective	Engineering Internship



Courses

Honors English I

Honors English II

AP English III

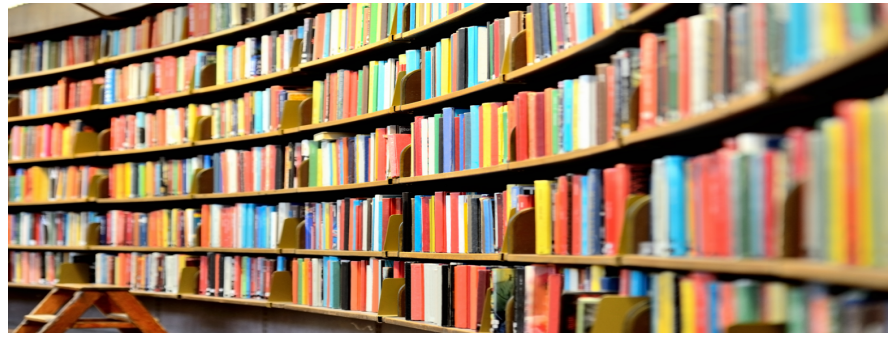
ENG 100*/ENG 200*

COMS 108*

College Ready

ACT – CPE
 English – 18
 Math – 22
 Reading – 22
 Science - 23

Post Secondary Education



College Prep – English

There are 2,400+ four-year colleges and universities in the United States and they have varying levels of selectivity. Approximately 100 of them are considered “highly” selective. Another tier of colleges are considered “very” selective, then a huge number are ranked as simply “selective” and a final group is considered “non-selective.” The elements in a student’s profile that a college will evaluate in the selection procedure boil down to these things listed in the order of their importance:

- The strength of the academic curriculum (how rigorous or hard is the curriculum a student is taking)?
- How well did the student do in those courses (i.e. grades/GPA)?
- What are the results on national tests (i.e. the SAT test or the ACT, the SAT, and the APs)?
- Is the student involved in any kind of extracurricular activities (sports, school government, clubs, church groups, community groups, work)?
- Letters of recommendation from a counselor and teachers.
- Well-managed application (strong essay, where required, demonstrated interest in college, where applicable).

Lawrence County High School Preliminary Career Pathway College Prep English

Freshman	Sophomore	Junior	Senior
Honors English I	Honors English II	AP English III	Eng 100*/Eng 200*
Algebra I	Geometry	Algebra II	Pre-Cal or College Algebra*
Int Science	Biology	Chemistry	Physics
Int SS	World Civ	US History	PSY 110*
Health PE	Humanities	Elective	COM 181*
Elective	Elective	Elective	Elective
Elective	Elective	Elective	Elective



Courses

Pre - Calculus

College Algebra

Trigonometry

Calculus I

Probability and
Statistics

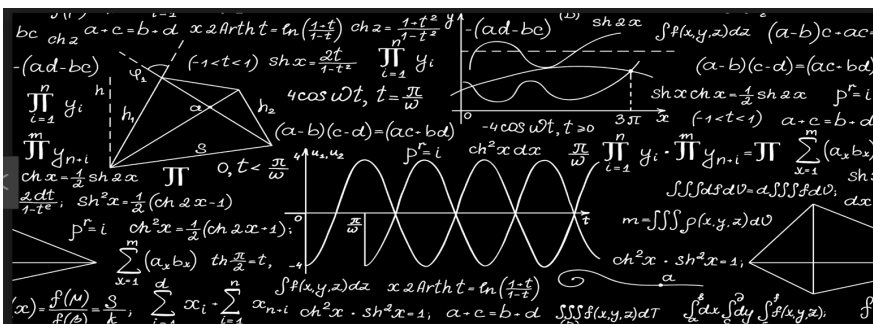
College Ready

ACT – CPE
English – 18
Math – 22
Reading – 22
Science - 23

**Post Secondary
Education**



Bachelor of Science



College Prep - Mathematics

There are 2,400+ four-year colleges and universities in the United States and they have varying levels of selectivity. Approximately 100 of them are considered “highly” selective. Another tier of colleges are considered “very” selective, then a huge number are ranked as simply “selective” and a final group is considered “non-selective.” The elements in a student’s profile that a college will evaluate in the selection procedure boil down to these things listed in the order of their importance:

- The strength of the academic curriculum (how rigorous or hard is the curriculum a student is taking)?
- How well did the student do in those courses (i.e. grades/GPA)?
- What are the results on national tests (i.e. the SAT test or the ACT, the SAT, and the APs)?
- Is the student involved in any kind of extracurricular activities (sports, school government, clubs, church groups, community groups, work)?
- Letters of recommendation from a counselor and teachers.
- Well-managed application (strong essay, where required, demonstrated interest in college, where applicable).

**Lawrence County High School Preliminary Career Pathway
College Prep Mathematics**

Freshman	Sophomore	Junior	Senior
Honors English I	Honors English II	AP English III	Eng 100*/Eng 200*
Geometry	Pre-Cal	College Algebra* / Trigonometry*	Calculus I*
Int Science	Biology	Chemistry	Physics
Int SS	World Civ	US History	Probability and Statistics*
Algebra II	Humanities	Elective	Elective
Health PE	Elective	Elective	Elective
Elective	Elective	Elective	Elective

Possible Advanced Placement/Dual Credit Courses:



Courses

Chemistry

Physics

BIO 112*/BIO 113*
General Biology w/Lab

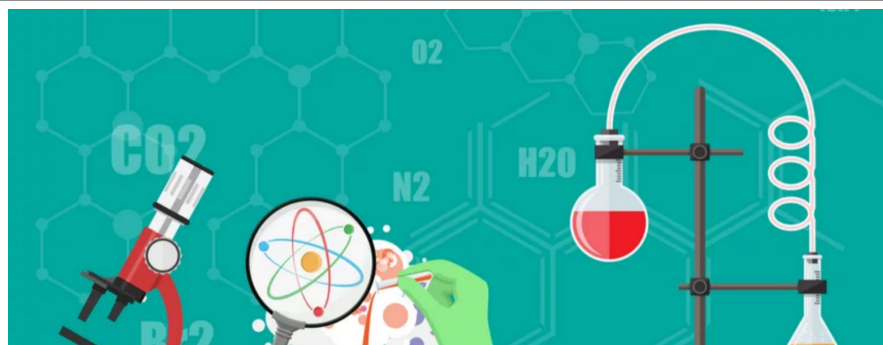
CHEM 140*/CHEM145*
Intro to Chem w/Lab

BIO 137*
Human
Anatomy/Physiology

College Ready

ACT – CPE
English – 18
Math – 22
Reading – 22
Science - 23

**Post Secondary
Education**



College Prep - Science

There are 2,400+ four-year colleges and universities in the United States and they have varying levels of selectivity. Approximately 100 of them are considered “highly” selective. Another tier of colleges are considered “very” selective, then a huge number are ranked as simply “selective” and a final group is considered “non-selective.” The elements in a student’s profile that a college will evaluate in the selection procedure boil down to these things listed in the order of their importance:

- The strength of the academic curriculum (how rigorous or hard is the curriculum a student is taking)?
- How well did the student do in those courses (i.e. grades/GPA)?
- What are the results on national tests (i.e. the SAT test or the ACT, the SAT, and the APs)?
- Is the student involved in any kind of extracurricular activities (sports, school government, clubs, church groups, community groups, work)?
- Letters of recommendation from a counselor and teachers.
- Well-managed application (strong essay, where required, demonstrated interest in college, where applicable).

**Lawrence County High School Preliminary Career Pathway
College Prep Science**

Freshman	Sophomore	Junior	Senior
Honors English I	Honors English II	AP English III	Eng 100*/Eng 200*
Algebra I	Geometry	Algebra II	Pre-Cal or College Algebra*
Int Science	Biology	Chemistry	Physics
Int SS	World Civ	US History	BIO 137*
Intro to Chem and Physics	Humanities	BIO 112*/ BIO 113*	CHEM 140*/ CHEM 145*
Health PE	Elective	Anatomy & Physiology	Elective
Elective	Elective	Elective	Elective

*Dual Credit



Courses

AP World History

AP US History

AP Government

College Ready

ACT – CPE
 English – 18
 Math – 22
 Reading – 22
 Science - 23

Post Secondary Education



College Prep – Social Studies

There are 2,400+ four-year colleges and universities in the United States and they have varying levels of selectivity. Approximately 100 of them are considered “highly” selective. Another tier of colleges are considered “very” selective, then a huge number are ranked as simply “selective” and a final group is considered “non-selective.” The elements in a student’s profile that a college will evaluate in the selection procedure boil down to these things listed in the order of their importance:

- The strength of the academic curriculum (how rigorous or hard is the curriculum a student is taking)?
- How well did the student do in those courses (i.e. grades/GPA)?
- What are the results on national tests (i.e. the SAT test or the ACT, the SAT, and the APs)?
- Is the student involved in any kind of extracurricular activities (sports, school government, clubs, church groups, community groups, work)?
- Letters of recommendation from a counselor and teachers.
- Well-managed application (strong essay, where required, demonstrated interest in college, where applicable).

Lawrence County High School Preliminary Career Pathway College Prep Social Studies

Freshman	Sophomore	Junior	Senior
Honors English I	Honors English II	AP English III	Eng 100*/Eng 200*
Algebra I	Geometry	Algebra II	Pre-Cal or College Algebra*
Int Science	Biology	Chemistry	Physics
Int SS	AP World History	AP US History	AP Gov
Health PE	Humanities	Elective	COM 181*
Elective	Elective	Elective	Elective
Elective	Elective	Elective	Elective

Possible Advanced Placement/Dual Credit Courses:



Culinary and Food Services
12.0500.00

Courses

FACS

Food & Nutrition

Cullinary Arts I

CulinaryArts II

Career Ready

ServSafe Industry Certification
EOP Certification

Post Secondary Education



Associate of Science
Culinary Arts

Associate of Science
Baking and Pastry

Bachelor of Science
Hospitality Science

Lawrence County High School



Culinary and Food Services

What Chefs and Head Cooks Do Chefs and head cooks oversee the daily food preparation at restaurants and other places where food is served. They direct kitchen staff and handle any food-related concerns.

Work Environment Chefs and head cooks work in restaurants, private households, and other establishments where food is served. The work can be hectic and fast-paced.

How to Become a Chef or Head Cook Most chefs and head cooks learn their skills through work experience. Others receive training at a community college, technical school, culinary arts school, or 4-year college. Some learn through apprenticeship programs.

Pay The median annual wage for chefs and head cooks was \$47,000 in May 2019.

Job Outlook Employment of chefs and head cooks is projected to grow 10 percent from 2016 to 2026, faster than the average for all occupations.

Lawrence County High School Preliminary Career Pathway Culinary & Food Services			
Freshman	Sophomore	Junior	Senior
English	English	English	English
Math	Math	Math	Math
Science	Science	Science	Science
Social Studies	Social Studies	Social Studies	Social Studies
Health/PE	Food & Nutrition	Humanities	Culinary I & II
Elective	Elective	Elective	Elective
FACS	Elective	Elective	Elective



Family and Consumer Management
19.0403.00

Courses

FACS

Relationships

Food and Nutrition

Money Skills

Career Ready

AAFCS
Pre-Pac

Post Secondary Education



Bachelor of Science
Family and Consumer Science

Lawrence County High School



Family & Consumer Management

What Administrative service managers do: Administrative services managers plan, direct, and coordinate supportive services of an organization. Their specific responsibilities vary by specific field.

Employment opportunities:

- School Systems/Teacher
- Human or Social Service Organizations.
- Church or Religious Organizations.
- Private Homes or Family Day Care Centers.
- Nursery School or Child Programs
- Restaurants or Speciality Food Shops
- Textile & Apparel Manufacturers
- Fashion Consulting Firms
- Government Agencies
- Community Centers
- Child Care Providers/Managers
- Hospitality Industry
- Retail Stores
- Fashion Consulting Firms/Boutiques
- Dietetics/Nutritional Services
- Social Work

How to become an Administrative Services Manager: Although educational requirements for administrative services managers vary by the type of organization and the work they do, they usually have a bachelor's degree and must have related work experience.

Pay: The median annual wage for administrative services managers was \$89,708 in May 2019.

Job Outlook: Projected to grow 10% from 2016 to 2026.

**Lawrence County High School Preliminary Career Pathway
Family and Consumer Science**

Freshman	Sophomore	Junior	Senior
English	English	English	English
Math	Math	Math	Math
Science	Science	Science	Science
Social Studies	Social Studies	Social Studies	Social Studies
Health/PE	Relationships	Humanities	Money Skills
FACS	Elective	Food & Nutrition	Elective
Elective	Elective	Elective	Elective

Lawrence County High School



Flight and Aeronautics
CIP 49.0102.00

Courses

Introduction to Aerospace

Fundamentals of Aviation
Science

Aviation Science

Unmanned Aircraft Systems

Career Ready

Private Pilot Written Exam

Post-Secondary Education



Aerospace Management
Professional Flight
Aerospace Technology



Flight and Aeronautics

What Pilots Do: Pilots plan their flights by checking that the aircraft is operable and safe, that the cargo has been loaded correctly, and that weather conditions are acceptable. They file flight plans with air traffic control and may modify the plans in flight because of changing weather conditions or other factors

Work Environment: Federal regulations set the maximum work hours and minimum requirements for rest between flights for most pilots. Airline pilots fly an average of 75 hours per month and work an additional 150 hours per month performing other duties, such as checking weather conditions and preparing flight plans.

How to Become a Pilot: Those who are seeking a career as a professional pilot typically get their licenses and ratings in the following order: Student pilot certificate, Private pilot license, Instrument rating, Commercial pilot license, Multi-engine rating, Airline transport pilot certificate

Pay: The median annual wage for airline pilots, copilots, and flight engineers was \$140,340 in May 2018

Job Outlook: Overall employment of airline and commercial pilots is projected to grow 6 percent from 2018 to 2028, about as fast as the average for all occupations.

Lawrence County High School Preliminary Career Pathway Engineering Technology Education

Freshman	Sophomore	Junior	Senior
English	English	English	English
Math	Math	Math	Math
Science	Science	Science	Science
Social Studies	Social Studies	Social Studies	Social Studies
Health/PE	Elective	Introduction to Aerospace	Fundamentals of Aviation Science
Elective	Elective	Elective	Elective
Elective	Elective	Elective	Elective

Lawrence County High School



Environmental
Science/Natural Resources
Systems
01.1101.00

Courses

Principles of Ag Science and
Tech

Agriscience

Environmental Science

Forestry
or
Employability Skills
or
Greenhouse Tech
or
Wildlife Tech

Career Ready

EOP
Environmental Science

Post Secondary Education



Bachelor of Science in
Wildlife and Conservation
Biology



Environmental Science/ Natural Resources Systems

What Conservation Scientists and Foresters Do: Agricultural and food scientists, research conservation scientists, and foresters manage the overall quality of forests, parks, rangelands, and other natural resources.

Work Environment: Conservation scientists and foresters work for governments (federal, state, or local), on privately owned lands, or in social advocacy groups.

How to Become a Conservation Scientist and Forester: Conservation scientists and foresters typically need a bachelor's degree in forestry or a related field.

Pay: The median annual wage for conservation scientists and foresters was \$60,360 in May 2014.

Job Outlook: Employment of conservation scientists and foresters is projected to grow 7 percent from 2014 to 2024, about as fast as the average for all occupations. Heightened demand for American timber and wood pellets help increase the overall job prospects for conservation scientists

Lawrence County High School Preliminary Career Pathway Environmental Science/Natural Resources Systems

Freshman	Sophomore	Junior	Senior
English	English	English	English
Math	Math	Math	Math
Science	Science	Science	Science
Social Studies	Social Studies	Social Studies	Greenhouse
Prin of Ag Sc	Agri Science	Humanities	Ag Employ
Health PE	Wildlife Resource	Environmental Science	Elective
Elective	Elective	Elective	Elective

Possible Advanced Placement/Dual Credit Courses:

Lawrence County High School



Horticulture & Plant Science
01.1101.00

Courses

Principles of Ag Science and
Tech

Agriscience

Intro to Greenhouse

Ag Employability Skills
or
Greenhouse Tech

Career Ready

Bayer Plant Certificate
EOP Plant Science

Post Secondary Education



Bachelor of Science in
Agriculture

Horticulture



Horticulture & Plant Science

What Agricultural and Food Scientists Do: Agricultural and food scientists research ways to improve the efficiency and safety of agricultural establishments and products.

Work Environment: Most agricultural and food scientists work in research universities, private industry, or the federal government. They work in offices, laboratories, and may sometimes work in food production facilities. Most agricultural and food scientists work full time.

How to Become an Agricultural or Food Scientist: Agricultural and food scientists need at least a bachelor's degree from an accredited postsecondary institution, although many get advanced degrees.

Pay: The median annual wage for agricultural and food scientists was \$60,690 in May 2014.

Job Outlook: Employment of agricultural and food scientists is projected to grow 5 percent from 2014 to 2024, about as fast as the average for all occupations. Employment is projected to grow as research into agricultural production methods and techniques continue.

Lawrence County High School Preliminary Career Pathway Horticulture & Plant Science

Freshman	Sophomore	Junior	Senior
English	English	English	English
Math	Math	Math	Math
Science	Science	Science	Science
Social Studies	Social Studies	Social Studies	Greenhouse Tech
Prin of Ag Sc	Agri Science	Humanities	Ag Employ Skills
Health PE	Elective	Intro to Greenhouse	Elective
Elective	Elective	Elective	Elective

Possible Advanced Placement/Dual Credit Courses:



HEAVY EQUIPMENT SCIENCES
49.0202.01

Courses

Introduction to Construction
Technology

Heavy Highway Construction
Equipment Repair

Heavy Equipment
Operations

Special Topics–Heavy
Equipment

Career Ready

1. National Center for Construction Education Research (NCCER) Core Curriculum
2. NCCER - Heavy Equipment Operations Level 1
3. CDL Permit

**Post-Secondary
Education**



Associate in Applied Science
Construction Technology

Lawrence County High School



HEAVY EQUIPMENT SCIENCES

How to Become a Heavy Equipment Operator:

- Step 1: Earn a High School Diploma.
- Step 2: Complete Heavy Equipment Training.
- Step 3: Earn License and/or Certification.

What Heavy Equipment Operators do:

A heavy equipment operator drives or controls construction equipment including bulldozers, forklifts, back hoes, dump trucks, cargo trucks, and hydraulic truck cranes. They operate this equipment to assist in the construction of structures including bridges, roads, and buildings.

Work Environment:

As a Heavy Equipment Operator, you will work outdoors on construction sites in nearly all weather conditions. You will work closely with other equipment operators and with ground crew.

Pay:

Bureau of Labor Statistics data shows that operating engineers and other equipment operators earned \$45,720 a year. The top tenth of workers in the occupation made more than \$72,350.

Job Outlook:

Overall employment of construction equipment operators is projected to grow 12 percent from 2016 to 2026, faster than the average for all occupations. Spending on infrastructure is expected to increase, resulting in new positions over the next 10 years. Workers who can operate multiple types of equipment should have the best job opportunities.

Lawrence County High School Preliminary Career Pathway
Heavy Equipment Sciences

Freshman	Sophomore	Junior	Senior
English	English	English	English
Math	Math	Math	Math
Science	Science	Science	Social Studies
Social Studies	Social Studies	Social Studies	Humanities
Digital Lit	Digital Lit	Equip. Repair	Heavy Equip. Operations
Health/ PE	Intro to Const. Technology	Heavy Equip. Operations	Special Topics– Heavy Equip.

Possible Advanced Placement/Dual Credit Courses:

Hazard Community & Technical College – Heavy Equipment Operations Employability

Lawrence County High School



Phlebotomy Technician
51.1009.01

Courses

Principles of Health Science

Medical Terminology I

Emergency Procedures

Body Structures and
Functions

Medical Laboratory Aide
(Phlebotomist)

Career Ready

National Health Careers
Association Certification Exam:
Phlebotomist

Post- Secondary Education



Associate in Applied Science



Phlebotomy Technician

What Phlebotomists Do:

Phlebotomists draw blood for tests, transfusions, research, or blood donations. They confirm a patient or donor's identity, label drawn blood for testing or processing, and enter patient information into a database. They assemble and maintain medical instruments such as needles, test tubes, and blood vials

Work Environment:

Phlebotomists work in healthcare facilities, medical offices, and in hospitals. They are frequently active and often help lift and move patients, to perform their duties.

How to become a Phlebotomist:

Phlebotomy training itself: 1-2 semesters, or 4 to 8 months, depending on institution.

Pay:

The average annual phlebotomist salary is approximately \$33,000.00

Job Outlook:

You can start a fast-paced, detail-oriented career in phlebotomy where you spend time caring for patients, helping them receive the right care for their needs. These jobs, like other healthcare positions, offer strong job security, good benefits and good pay.

Lawrence County High School Preliminary Career Pathway Phlebotomy Technician

Freshman	Sophomore	Junior	Senior
English	English	English	English
Math	Math	Math	Math
Science	Science	Science	Social Studies
Social Studies	Social Studies	Social Studies	Humanity
Digital Literacy	Principles of Health Science	Medical Terminology I /Emergency Procedures	Medical Laboratory Assistance (Phlebotomist)
Health/PE	Elective	Elective	Body Structure and Function
Elective	Elective	Elective	Elective

Possible Advanced Placement/Dual Credit Courses:
AHS 115 – Medical Terminology

Lawrence County High School



Pre-Nursing
51.2699.01

Courses

Principles of Health Science

Medical Terminology I

Emergency Procedures

Body Structures and
Functions

Medicaid Nurse Aide

Career Ready

Kentucky State Nurse Aide
Registry Exam
(SRNA)

Post- Secondary Education



Associate in Applied Science;
Nursing

Diploma: Licensed Practical
Nurse



Pre-Nursing

What Nursing Assistants and Orderlies Do:

Nursing assistants and orderlies, sometimes called “nurse aides,” help provide basic care for patients in healthcare facilities, such as hospitals and nursing homes.

Work Environment:

Nursing assistants and orderlies work in nursing and residential care facilities and in hospitals. They are frequently active and often help lift and move patients.

How to Become a Nursing Assistant or Orderly:

Nursing assistants and orderlies must complete a state-approved education program and must pass a State competency examination to become registered. Most employers require Nursing Assistants to also hold a High School Diploma or G.E.D.

Pay:

The national average salary for Nursing Assistants is \$26,590.00 per year.

Job Outlook:

Employment opportunities for Nursing Assistants is projected to grow 17% from 2014-2024; much faster than the average for all occupations. Because of the growing elderly population, many nursing assistants will be needed to assist and care for these patients.

Lawrence County High School Preliminary Career Pathway Pre-Nursing

Freshman	Sophomore	Junior	Senior
English	English	English	English
Math	Math	Math	Math
Science	Science	Science	Social Studies
Social Studies	Social Studies	Social Studies	Humanity
Digital Literacy	Principles of Health Science	Medical Terminology I /Emergency Procedures	MNA
Health/PE	Elective	Elective	Body Structure and Function
Elective	Elective	Elective	Elective

Possible Advanced Placement/Dual Credit Courses:

AHS 115 – Medical Terminology NAA 100 – Medicaid Nurse Aide



Lawrence County High School



PLTW BIOMEDICAL SCIENCES
26.0102.00

Courses

Principles of Biomedical Science

Human Body Systems

Medical Interventions

Biomedical Innovations

Career Ready

NOCTI Biotechnology Exam

Post Secondary Education



- Pre-Medicine
- Pre-Pharmacy
- Pre-Dentistry
- Pre-Physical Therapy
- Biology
- Biomedical Science
- Veterinary Science
- Nursing

PLTW Biomedical Science

What Physicians and Surgeons Do: Physicians and surgeons diagnose and treat injuries or illnesses. Physicians examine patients, take medical histories, prescribe medications, order, perform, and interpret diagnostic tests. They counsel patients on diet, hygiene, and preventive healthcare. Surgeons operate on patients to treat injuries, such as broken bones, diseases, such as cancerous tumors, and deformities.

Work Environment: Many physicians and surgeons worked in physicians' offices. Others worked in hospitals, in academia, or for the government.

How to Become a Physician or Surgeon: Physicians and surgeons have demanding education and training requirements. Physicians typically need a bachelor's degree, a degree from a medical school, which takes 4 years to complete, and, depending on their specialty, 3 to 7 years in internship and residency programs.

Pay: Wages for physicians and surgeons are among the highest of all occupations, with a median wage equal to or greater than \$208,000.

Job Outlook: Overall employment of physicians and surgeons is projected to grow 7 percent from 2018 to 2028, faster than the average for all occupations. Job growth is projected due to increased demand for healthcare services by the growing and aging population. www.bls.gov

Lawrence County High School Preliminary Career Pathway Biomedical Science Pathway			
Freshman	Sophomore	Junior	Senior
English	English	English*	English*
Math	Math	Math*	Math*
Science	Science	Science*	Science*
Social Studies	Social Studies*	Social Studies*	Elective
Principles of Biomedical Science	Human Bodies Systems	Medical Interventions	Biomedical Innovations
Health/PE	Humanities	Elective*	Elective*
Elective	Elective	Dual Credit Elective*	Dual Credit Elective*

Possible Advanced Placement/Dual Credit Courses: BIO 112, BIO 113, BIO 137, BIO 139, PSY 110, SOC 101, COMS 108



Residential Carpenter
Assistant
46.0201.02

Courses

Introduction to
Construction Technology

Floor and Wall Framing

Ceiling and Roof Framing

Site Layout and Foundation

Exterior and Interior Finish

Career Ready

EOP-
Construction

NCCER - Carpentry

**Post-Secondary
Education**



Big Sandy Community &
Technical College

Construction Technology



Residential Carpenter Assistant

What Carpenter Assistants 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. They work in sometimes strenuous conditions.

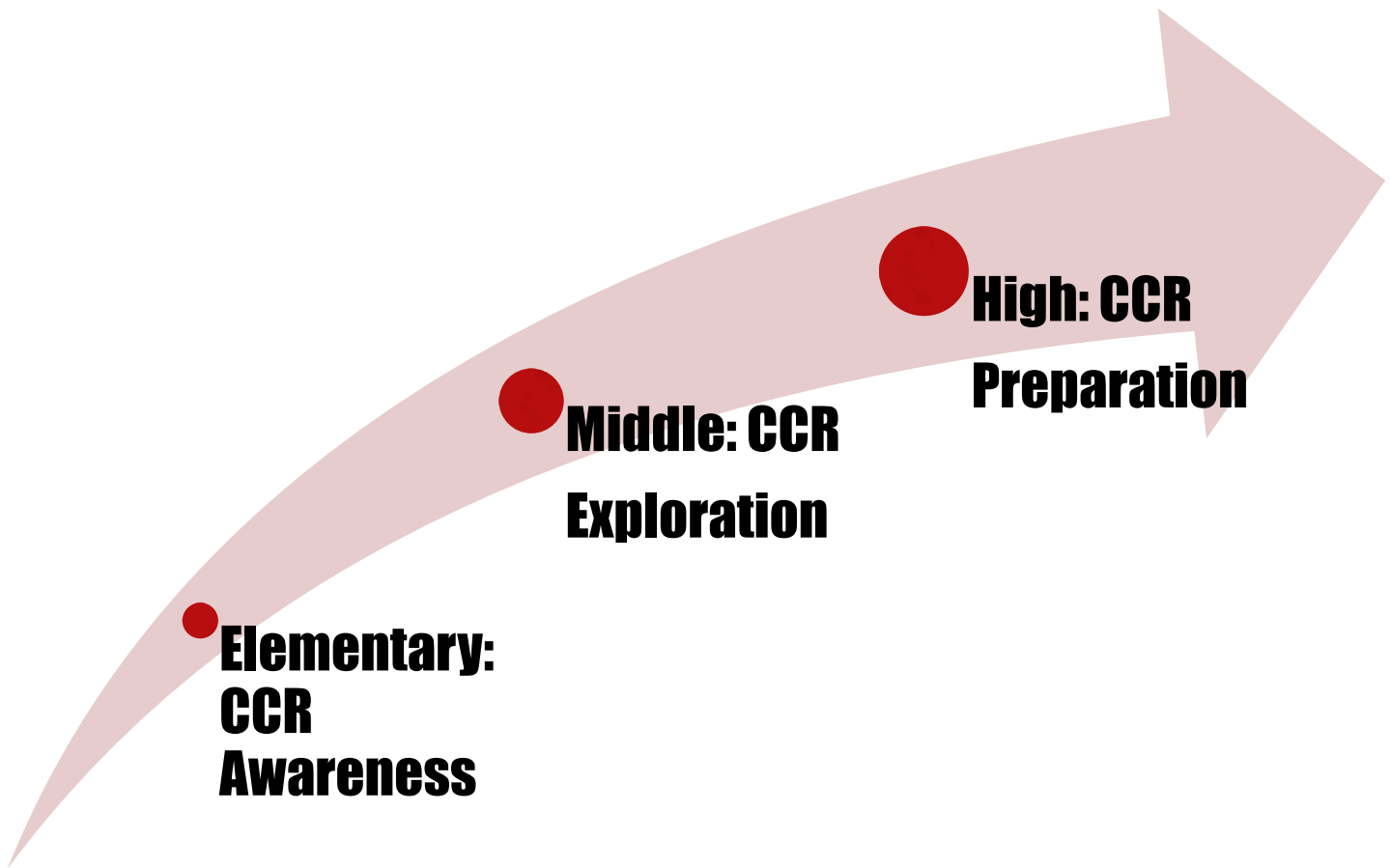
How to Become a Carpenter Assistant: Although most carpenters learn through an apprenticeship program, some learn on the job and start out as a helper.

Pay: As of January 2020, the average carpenter salary in the United States falls between \$48,179 and \$64,291

Job Outlook: Employment of carpenters is projected to grow 15% from 2018 to 2028. Increased levels of new home, highway and bridge construction will require more carpenters.

Lawrence County High School Preliminary Career Pathway Carpenter Assistant

Freshman	Sophomore	Junior	Senior
English	English	English	English
Math	Math	Math	Math
Science	Science	Science	Science
Social Studies	Social Studies	Social Studies	Site Layout & Foundations
Health/PE	Intro to Const Technology	Floor & Wall Framing	Ceiling & Roof Framing
Elective	Elective	Humanities	Elective
Elective	Elective	Industrial Safety	Elective



Schools utilize a **structured and 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 in K-12 and into college. Individual learning plans set academic goals, provide course selection, assist in educational planning, and personal growth. CCR expectations are embedded at all levels and integrated into classroom instruction, hallways, and celebrations.

HIGH SCHOOL READY



Commit to Graduate!
college . career . life.

READY 

Lawrence County Schools utilize a system to track and monitor all students to be “High School Ready” as indicated by Measures of Academic Progress (MAP) assessments in English, Reading and Math. Each Middle School will track 6-8 grade students progress based on the following benchmarks.

Reading MAP Benchmarks:

6th grade - Beginning of Year 220/ End of Year 224

7th grade - Beginning of Year 223/ End of Year 230

8th grade - Beginning of Year 227/ End of Year 231

Math MAP Benchmarks:

6th grade - Beginning of Year 228/ End of Year 235

7th grade - Beginning of Year 235/End of Year 240

8th grade - Beginning of Year 241/End of Year 248



HIGH SCHOOL READY

Statistics show that more students fail ninth grade than any other year in school. The reasons for this dip in students' achievement are varied and complex. Eighth grader contemplating the move to ninth grade worry about a variety of issues: getting picked on by older students, harder work, earning lower grades, getting "lost" in the crowd, etc. Research has shown that at the ninth-grade level students may show a decline in grades and attendance and have a more negative view of themselves. They will also demonstrate an increased need for friendships and social interaction. The transition from middle school to high school is a big step in a young person's life. The Freshman Academy is here to help students discover and take the fundamental steps required for a successful transition into high school.

Lawrence County Schools Transition Program is here help provide a smooth transition.

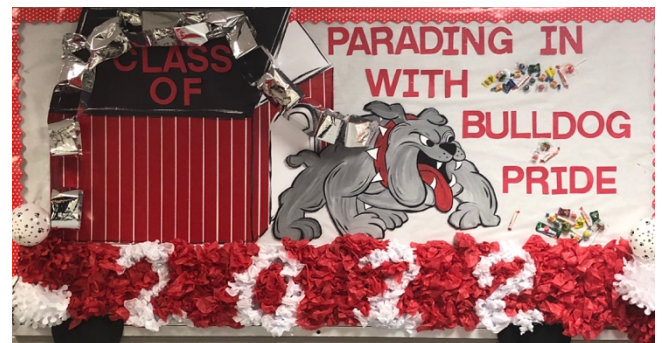
Components of Lawrence County Schools Transition Program:

1. Provide parent and students with essential information about LCHS.

This includes orienting parents and students to a new building, new expectations, routines, etc. in order alleviate some of the initial fears they might be feeling.

Possible activities may include:

- Tours
- High School Counselor visits
- High School "Move Up" Days
- 8th Grade Involvement in social or athletic events
- Websites, social media



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

This allows students to begin building relationships and feel welcomed to the high school community.

Possible activities may include:

- Orientation – Bridge Days
- Open house
- Supervised attendance at 8th grade/9th grade social functions (Bridge Days)
- Separate lunches by grade level
- Freshmen Academy





HIGH SCHOOL READINESS

Lawrence County Middle Schools utilize a system to track and monitor every student to be “High School Ready” as indicated by the Measures of Academic Progress (MAP) assessment in Reading and Math.

MATHEMATICS							
		6	7	8	9	10	2015 Norms Percentile
ACT ≥ 24	Spring	237	243	248	252	255	70-86
ACT ≥ 22	Spring	232	238	243	246	249	61-78
NWEA	Fall	243	250	256	260	262	95
NWEA	Fall	233	239	244	248	250	84
NWEA	Fall	225	231	235	239	240	69
NWEA Median	Fall	218	223	226	230	230	50
LCHS Intervention	Fall				<230	<235	
NWEA	Fall	210	214	217	221	220	31
NWEA	Fall	202	206	209	212	211	16
NWEA	Fall	195	198	200	204	201	7

higher
achievement
◆
lower
achievement

A student score at or above the following scores on a 6+ MAP math suggests student readiness for 230 Introduction to Algebra; 235 Algebra; 245 Geometry. College readiness benchmarks on ACT are projections in growth from grade 9. *NWEA is parent company for Measures of Academic Progress (MAP)*

READING							
		6	7	8	9	10	2015 Norms Percentile
ACT ≥ 24	Spring	223	227	230	233	236	66-80
ACT ≥ 22	Spring	220	224	227	230	232	59-73
NWEA	Fall	236	240	243	246	248	95
NWEA	Fall	226	230	233	236	237	84
NWEA	Fall	218	222	225	228	229	69
NWEA Median	Fall	211	214	217	220	223	50
LCHS Intervention	Fall				<220	<223	
NWEA	Fall	204	207	209	212	212	31
NWEA	Fall	196	199	202	205	204	16
NWEA	Fall	189	192	194	197	196	7

higher
achievement
◆
lower
achievement

College readiness benchmarks on ACT are projections in growth from grade 9. *NWEA is parent company for Measures of Academic Progress (MAP)*



MIDDLE SCHOOL READINESS

Lawrence County Elementary Schools utilize a data-focused system to track and to monitor every student to be “Middle School Ready” by the STAR Reading and STAR Math assessments.

STAR Linked Earlier Grade Score Ranges to 7th Grade College Readiness

Subject	Linked 5 th Grade STAR Scaled Score Range		
	Probability of 25%	Probability of 50%	Probability of 75%
Math	722	789	857
Reading	560	662	765

MATH (Scaled Score to Percentile Rank)			
	4 th	5 th	Percentile
STAR	802	863	95
STAR	745	802	84
STAR	705	757	69
STAR Median	663	717	50
STAR	618	672	31
STAR	571	623	16
STAR	514	561	7



READING (Scaled Score to Percentile Rank)			
	4 th	5 th	Percentile
STAR	837	1022	95
STAR	635	832	84
STAR	542	668	69
STAR Median	460	564	50
STAR	377	473	31
STAR	307	390	16
STAR	246	314	7

