PIKEVILLE HIGH SCHOOL



PROGRAM OF STUDIES

2024 - 2025

Pikeville High School I20 Championship Drive Pikeville, KY 4I50I (606) 432-0I85

Guidance Office (606) 437-5715

Pikeville High School Graduation Requirements

C T	Credits			
Course Type	Required	Courses		
English	4	English 9 English 10 or Honors English 10 English 11 or ENG111/ENG 112 English 12 or ENG200/ENG 251 English must be taken each year of high school		
		English must be taken each year of high school.		
Science	3	Intro Physics w/Earth/Space (or Honors) Intro Chemistry w/Earth/Space (or Honors) Intro Biology w/Earth/Space (or Honors)		
Math	4	Algebra I or Honors Algebra I Geometry or Honors Geometry Algebra II or Honors Algebra II Senior Math		
		Math must be taken each year of high school.		
Social Studies	3	US History World Civilization or AP World History: Modern Civics or AP American Government		
		Passing Score on the KY Civics Exam		
Fine Arts	1	Fine Arts, Art, Band, Drama or Chorus		
Health & P.E.	1	Health (½ Credit) & Physical Education I (½ Credit)		
Financial & Digital Literacy	1/2	Technology & Financial Concepts or equivalent course		
Electives	8 1/2			
TOTAL	25	Students must have 25 credits in order to graduate Sophomore-4 credits, Junior-11 credits, Senior-18 credits		

7th Grade Courses

English 7
PreAlgebra
Probability & Statistics-1/2 Year/Geometry 1/2 Year
History 7 (World History)
Science 7
Enrichment Rotation(9 weeks each):
 Leadership & Communication
 Earth Science
 Writing
 Lifeskills & Technology
1 Elective Class (Choir, Band, ACES I, Health & Physical Education, Art, Reading or Math Skills)

8th Grade Courses

Pikeville High School Levels of Distinction for Graduation Honors

GPA	LEVELS OF DISTINCTION	QUALIFYING REQUIREMENTS
3.9 - 4.0	Summa Cum Laude Gold Cord	Take seven (7) of the classes listed below with at least one from each content area
3.7 - 3.899	Magna Cum Laude Silver Cord	Take six (6) of the classes listed below with at least one from each content area
3.5 - 4.0	Cum Laude Maroon Cord	Higher GPAs that did not meet the requirements listed above.

- The required classes must be from the following lists.
- Minimum of 1 per content area.

English	Social Studies	Mathematics	Science
Honors English 10	AP US History	AP Pre-Calculus	Honors Physics I
ENG 111/ENG 112	AP US Government	Trig/Intro to Calculus	Honors Intro Chemistry
ENG 200/ENG 251	AP World History	AP Statistics	Honors Intro Physics
	AP Psychology	AP Statistics AP Calculus AB	Honors Intro Biology
	AP Human	2 3 2 3 3 3 3 3	Honors Chemistry II
	Geography	College Math	AP Biology
			AP Environmental Science

Pikeville High School 4 Year Plan

<u>9th Grade</u>

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PIKEVILLE HIGH SCHOOL

GPA & CLASS RANK

Unweighted GPA

- Based on a traditional 4-point system
- Used for graduation honors
- Colleges use this for automatic scholarships
- All courses are equal in weight

A = 4 points

B = 3 points

C = 2 points

D = 1 point

F = 0 points

Weighted Class Rank

- Based on your percentage scores for your credits earned (Final Grade each semester)
- Weighted classes have a 1.25 multiplier applied to the average when calculating Class Rank
- Class rank is used for selection of Valedictorian and Salutatorian
- Class rank is used for more selective admission colleges
- Competitive scholarships will ask for a student's class rank

Weighted Classes Offered

- Honors English 10
- AP English Literature
- Honors Physics I
- AP Biology
- AP Psychology
- Honors Intro Biology
- Honors Intro Physics
- Engineering I
- Engineering II
- Honors Geometry
- AP World History
- Trig/ Intro to Calculus
- AP Pre-Calculus
- AP Calculus

- AP Environmental Science
- AP US Government
- AP US History
- Honors Algebra I
- Honors Algebra II
- Honors Geometry
- AP Statistics
- Honors Intro Chemistry
- Honors Chemistry II
- English 111 Writing I
- English 112 Writing II
- ENG 200 Intro to Lit

- ENG 251 Survey of American Lit II
- BIO 137 & 139
 Anatomy &
 Physiology I & II
- AP Human Geography
- Biochemistry
- All Dual Credit Classes
- Engineering III
- Engineering IV Capstone
- Honors Band
- Honors Choir

VALEDICTORIAN & SALUTATORIAN HONORS

Students who have earned 50% of their high school credits at Pikeville High School and have been enrolled their entire senior year will be eligible for valedictorian and salutatorian. Based on scholastic achievement in the grades nine (9) through twelve (12), students in the senior class with the highest and second highest weighted numerical grade point average shall be designated respectively as valedictorian and salutatorian. Weighted numerical grade point average will be calculated and ranked as defined by SBDM council policy.

Earning College Credit in High School

There are two ways to earn college credit while in high school—passing scores on Advanced Placement exams or dual credit coursework. Here are the differences to consider when choosing your classes:

Dual Credit—Students enroll in a dual credit class in which they earn both high school and college credit based on their final grade in the class. Also,

- Credit comes from being enrolled in the class and doing the assigned work. You will have a grade on your PHS transcript as proof of your high school credit, but you will also have a college transcript with your college hours and grade that you will have to send separately to the college you eventually attend.
- Awarded by a specific college/university such as Upike, Big Sandy, or EKU.
- Guaranteed at the awarding college, but you must check to see how the credits will transfer to the college that you choose. The answer may be different for different colleges. The Office of the Registrar at the college/university is where you can ask specific questions.

Advanced Placement (AP) Credit—Students take exams and earn potential college credit based on their exam scores. Students must send their qualifying scores to the college they choose to attend.

- Credit is awarded by the college you decide to attend for scores on AP Exams, usually a 3, 4, or 5 out of a possible 1-5.
- More versatile, but harder to earn since you have to pass an exam.
- Nearly every college/university accepts AP credit, but they have different criteria for the scores needed. Check the colleges "AP Credit Guide" for more information. See some examples below:

Pikeville High School Career Pathways

Aerospace or Mechanical Engineering

E-Commerce

Engineering I (Intro To Engineering

Design)

Engineering II (Principles of

Engineering)

Aerospace or Mechanical Engineering

Engineering IV Capstone

Digital Literacy OR IT Computer

Literacy

Multimedia

Business & Marketing Essentials

Social Media Marketing

Advertising & Promotions

Advanced Multimedia

Computer Programming

Digital Literacy OR Computer Literacy

Intro to Programming

Computational Thinking

Project-Based Programming

AP Computer Science Principles

Network Administration

Digital Literacy OR IT Computer

Literacy

Computer Hardware/Software

Maintenance

Internet Technologies

Computational Thinking

Teaching & Learning

The Learning Community

The Learner-Centered Classroom

The Professional Educator

EDU 101 Education in America

EDU 203 Diversity in Education

Accounting

Accounting & Finance

IT Computer Literacy

Business & Marketing Essentials

Financial Analysis

Personal Finance

Digital Design & Gaming

Game Design Principles

IT Computer Literacy

Computational Thinking

Advanced Game Design Principles

Millard Vocational (Starting in Grade 11)

Building and Apartment Maintenance

Auto Technology

Electricity

Industrial Maintenance

Course Catalog

ARTS AND HUMANITIES COURSES

Course: Intro to Art (Elective)

Level: Regular Credit: 1 or ½ Prerequisite: N/A

Description: Students are introduced to the basic fundamentals of artistic expression. The course includes experiences in drawing, painting, two-and three-dimensional design, sculpture, and other art forms. The course emphasizes observations, interpretation of the visual environment, visual communication, imagination and symbolism, and an introduction to various visual arts techniques and media. The focus of the course is on application of the fundamental processes of artistic expression and application of the concepts and approaches in the symbolic aspects of art and design to two- and three-dimensional problems so that they demonstrate a range of abilities and versatility with technique, problem solving, and ideation. A study of historical and contemporary art and artists from a worldwide perspective, and instruction and practice in peer review through the critique process, presentation or their responding to art and connecting their art to the world around them are included.

Course: Painting & Drawing (Elective)

Level: Advanced Credit: 1 or ½ Prerequisite: Art 1

Description: Students focus on the blend and relationships that occur between drawing and painting. Attention is given to two-dimensional work and utilizes one or more mediums, such as pen-and-ink, pencil, chalk, watercolor, tempera, oils, and acrylics. Students extend and refine knowledge in the creative process to visually communicate personal intent. Advanced students extend and refine knowledge in the creative process. They are encouraged to develop their own artistic styles. Students focus on making meaning by investigating and reflecting their awareness of their perceptions, knowledge, and experiences of life. The course may emphasize either drawing or painting or combine both.

Course: Advanced Art (Elective)

Level: Advanced Credit: 1 or ½ Prerequisite: Intro and Painting & Drawing Description: This course is designed to address a variety of factors and methods including evolving technologies when preparing and refining artwork for portfolio presentation and or when deciding if and how to preserve and protect art. Students will create, select, respond to, and present work that clearly reflects newly obtained technical skills, increasing conceptual thinking and is a reflection of their personal interests and may serve as an opportunity for students to expand their expertise in a particular form or style, to explore a topic in greater detail, or to develop more advanced skills. Individual critique and planned peer review will help students prepare for future endeavors.

Course: Art Appreciation (Elective)

Level: Regular Credit: 1 or ½ Prerequisite: N/A

Students are introduced to historical study and basis for many forms of visual art. Students form an aesthetic framework to examine social, political and historical events in the world. Students address contemporary aesthetic issues and developments and how visual images and works express the needs and ideals of individuals and society. Students are involved in the creative process through lecture, discussion, observation, media and research.

Course: Fine Arts

Level: Regular Credit: 1 Prerequisite: N/A

Description: Students are introduced to a survey of significant works, artists, and movements that have shaped the arts world and have influenced or reflected various periods of history in the arts disciplines of dance, music, theatre and visual art. Course content emphasizes the sequential evolution of art forms, techniques, symbols, and themes within those disciplines. The course covers the connections of the arts to cultural, social, political, and historical events throughout the world. Critical analysis of works from the disciplines, as they communicate and express the history, needs, and ideals of society and individuals is included. The course provides for students to experience creating, performing/presenting/producing, responding and connecting their own works as well as the works of others.

Elective courses that can count for the Fine Arts credit for graduation: Band-Winds or Percussion, Theatre, Chorus, Art Appreciation, Music Theory, Music Appreciation, Art I

Course: Chorus (7-8)

Level: Regular Credit: N/A Prerequisite: N/A

Description: Students develop vocal skills in the context of a large choral ensemble as a means to study and perform a variety of styles. These courses are designed to develop students' vocal techniques and their ability to sing parts and include experiences in creating and responding to music. Courses are offered on multiple levels to accommodate proficiency.

Course: Chorus (9-12) (Elective)

Level: Regular Credit: 1 or ½ Prerequisite: N/A

Description: Students develop vocal skills in the context of a large choral ensemble as a means to study and perform a variety of styles. These courses are designed to develop students' vocal techniques and their ability to sing parts and include experiences in creating and responding to music. Courses are offered on multiple levels to accommodate proficiency.

Course: Wind & Percussion Studies I (Elective)

Level: Regular Credit: 1 Prerequisite: N/A

Description: Courses in General Band are designed to promote students' technique for playing brass, woodwind, and percussion instruments and cover a variety of band literature styles (e.g., Concert, Marching, Orchestral, and Modern) primarily for performances and also include experiences in creating and responding to music. These courses teach students the appropriate care, handling, and maintenance of musical instruments. Band courses may be offered on multiple skill levels to accommodate student proficiency. General Band courses may include marching activities for a portion of the year.

Course: Wind & Percussion Studies II (Elective)

Level: Regular or Honors Credit: 1 Prerequisite: Wind Studies I/Teacher Referral

Description: Courses in Symphonic Band are designed to promote students' playing technique for brass, woodwind, and percussion instruments, and cover a variety of music styles. Literature for Symphonic Band courses is usually more advanced and incorporates orchestral literature transcribed for band. These courses emphasize rehearsal and performance experiences and also include experiences in creating and responding to music. These courses teach students the appropriate care, handling, and maintenance of musical instruments. Symphonic band courses are offered on multiple skill levels to accommodate proficiency.

Course: Jazz Band (Elective)

Level: Regular Credit: 1 Prerequisite: Wind Studies I/Teacher Referral

Description: Courses in jazz ensemble are designed to promote students' playing technique for brass, woodwind, and rhythm section instruments, and cover a variety of jazz styles such as swing, Latin, funk, rock, and Bebop.

Literature for jazz ensemble courses is usually more advanced and incorporates the fundamentals of solo improvisation. These courses emphasize rehearsal and performance experiences and also include experiences in creating and responding to music. These courses teach students the appropriate care, handling, and maintenance of musical instruments. This course is offered on multiple skill levels to accommodate proficiency.

Course: Music Appreciation (Elective)

Level: Regular Credit: 1 or ½ Prerequisite: N/A

Description: Students develop an understanding of music and its importance in relation to the human experience. Learning experiences include guided listening, analysis, discussion and hands on experimentation including informal performance, improvisation, or composition focused on how various styles of music apply musical elements to create expressive or aesthetic impact.

Course: Spanish I

Level: Regular Credit: 1 Prerequisite: N/A

Description: High School course. Introductory course. It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate (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). Cultural aspects are typically included in order to understand the relationship among the products, practices and perspectives of the target language's culture. In addition, students develop insight into their own language and culture.

Course: Spanish II

Level: Regular Credit: 1 Prerequisite: Spanish 1

Description: It engages students in the target language with developmentally appropriate activities to acquire the language necessary to communicate and the skills necessary to 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.

Course: Yearbook (Elective)

Level: Regular Credit: 1 Prerequisite: English 10/Application Process This class is offered to juniors and seniors who have demonstrated strong English (speaking and writing) skills, initiative, responsibility, creativity, and willingness and ability to work well with their peers and teachers. The course will expose the students to a variety of experiences, including the following: organization, planning, brainstorming, interviewing, writing, photography, computer application-studio works, graphics and design, teamwork, etc.

Course: Drama (Elective)

Level: Regular Credit: 1 Prerequisite: None

Students develop experience and skill development in one or more aspects of theatrical production, concentrating on acting and performance skills as well as the planning, design, preparation, and production of plays and other theatrical performances. Introductory courses explore fundamental techniques. Advanced courses focus on extending and refining technique, expanding students' exposure to different types of theatrical craft and traditions from varied social/historical contexts, and increasing their participation in publicly staged productions. These courses may also provide a discussion of career and postsecondary placement opportunities.

ENGLISH COURSES

Course: English 7

Level: Regular Credit: N/A Prerequisite: N/A

Description: Middle level English/Language Arts is designed to present a wide range of reading experiences with print and non-print text for literary, informational, persuasive, and practical purposes. Students use writing-to-learn and writing-to-demonstrate-learning strategies, as well as the writing process and criteria for effective writing, to write in a variety of forms and for multiple audiences and purposes. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes, situations, and audiences. The integration of inquiry skills and technology with the other strands allows students to continue to discover and communicate ideas and information.

Course: English 8

Level: Regular Credit: N/A Prerequisite: English 7

<u>Description:</u> Middle level English/Language Arts is designed to present a wide range of reading experiences with print and non-print text for literary, informational, persuasive, and practical purposes. Students use writing-to-learn and writing-to-demonstrate-learning strategies, as well as the writing process and criteria for effective writing, to write in a variety of forms and for multiple audiences and purposes. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes, situations, and audiences. The integration of inquiry skills and technology with the other strands allows students to continue to discover and communicate ideas and information.

Course: English 9

Level: Regular Credit: 1 Prerequisite: English 8

<u>Description</u>: *Course Required for Graduation. The course is designed to present a wide range of reading experiences with print and non-print materials that have literary, informational, persuasive, and practical purposes. The course also requires students to use the writing process and criteria for effective writing to demonstrate their abilities to write in a variety of forms and for multiple audiences and purposes. Students use writing-to-learn and writing-to-demonstrate-learning strategies to make sense of their reading and thinking experiences. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes. In addition, students continue to integrate inquiry skills and technology to communicate ideas.

Course: English 10

Level: Regular Credit: 1 Prerequisite: English 9

<u>Description:</u> *Course Required for Graduation. The course is designed to present a wide range of reading experiences with print and non-print materials that have literary, informational, persuasive, and practical purposes. The course also requires students to use the writing process and criteria for effective writing to demonstrate their abilities to write in a variety of forms and for multiple audiences and purposes. Students use writing-to-learn and writing-to-demonstrate-learning strategies to make sense of their reading and thinking experiences. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes. In addition, students continue to integrate inquiry skills and technology to communicate ideas.

Course: Honors English 10

Level: Advanced Credit: 1 (weighted) Prerequisite: English 9

<u>Description</u>: *Course Required for Graduation. The course is designed to present a wide range of reading experiences with print and non-print materials that have literary, informational, persuasive, and practical purposes. The course also requires students to use the writing process and criteria for effective writing to demonstrate their abilities to write in a variety of forms and for multiple audiences and purposes. Students use writing-to-learn and writing-to-demonstrate-learning strategies to make sense of their reading and thinking experiences. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes. In addition, students continue to integrate inquiry skills and technology to communicate ideas.

This course presents more challenging material than English 10 and requires more independent study.

Course: English 11

Level: Regular Credit: 1 Prerequisite: English 10

<u>Description:</u> *Course Required for Graduation. The course is designed to present a wide range of reading experiences with print and non-print materials that have literary, informational, persuasive, and practical purposes. The course also requires students to use the writing process and criteria for effective writing to demonstrate their abilities to write in a variety of forms and for multiple audiences and purposes. Students use writing-to-learn and writing-to-demonstrate-learning strategies to make sense of their reading and thinking experiences. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes. In addition, students continue to integrate inquiry skills and technology to communicate ideas. Course adheres to Kentucky Academic Standards requirements. (AP Language or ENG 111/ENG112 may be substituted for English 11 for credit towards graduation.)

Course: AP Language and Composition

Level: Advanced Credit: 1 (weighted) Prerequisite: English 10

<u>Description</u>: The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods. College credit is earned with a qualifying score on an AP exam

Course: English 12

Level: Regular Credit: 1 Prerequisite: English 11

<u>Description:</u> *Course Required for Graduation. The course is designed to present a wide range of reading experiences with print and non-print materials that have literary, informational, persuasive, and practical purposes. The course also requires students to use the writing process and criteria for effective writing to demonstrate their abilities to write in a variety of forms and for multiple audiences and purposes. Students use writing-to-learn and writing-to-demonstrate-learning strategies to make sense of their reading and thinking experiences. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes. In addition, students continue to integrate inquiry skills and technology to communicate ideas. Course adheres to Kentucky Academic Standards. (AP Literature or ENG200/ENG251 may be substituted for English 12 for credit towards graduation.)

Course: AP Literature and Composition

Level: Advanced Credit: 1 (weighted) Prerequisite: English 11

<u>Description:</u> The AP English Literature and Composition course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works. College credit is earned with a qualifying score on an AP exam.

Course: Contemporary Fiction (Elective)

Level: Regular Credit: 1 Prerequisite: English 10

Special topics include: modern authors, thematic patterns, reading, evaluating, and critiquing works of the 20th and 21st century. Self-selected reading and independent work required as part of the course.

Course: Grammar & Composition (Elective)

Level: Regular Credit: ½ Prerequisite: English 10

Description: Content for this course may vary. Possible topics include basic composition structure and skill development and may focus on a combination of the modes of writing, e.g., narrative, expository and argumentative. Topics may vary depending on the mode of writing.

HEALTH AND PHYSICAL EDUCATION COURSES

Course Middle School Health & Physical Education

Level: Regular Credit: N/A Prerequisite: N/A

Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Health & Physical Education program. The emphasis of this course is to provide students with the skills, knowledge, attitude and confidence to be active for a lifetime. Students will have the opportunity to develop skills in fitness/conditioning activities, individual/team sports and recreational activities. Students will learn to explain and summarize how physical education contributes to optimal development of physical, mental, emotional and social health. This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Physical Education and Health Education program by combining the Kentucky Academic Standards for Middle School (7th Grade) Physical Education and Health Education (7th Grade) into one course.

Course: Physical Education I

Level: Regular Credit: ½ Prerequisite: N/A

Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Physical Education program in accordance with the Kentucky Academic Standards for High School (9th-12th Grade) Physical Education. The emphasis of this course is to provide students with the skills, knowledge, attitude and confidence to be active for a lifetime. Students will have the opportunity to develop skills in fitness/conditioning activities, individual/team sports and recreational activities. Students will learn how lifetime physical activity contributes to optimal physical, mental, emotional and social health.

Flex Route for Physical Education I

Level: Regular Credit: ½ Prerequisite: N/A

One semester of credit (1/2 credit) in PE will be issued for successful completion of a JV and/ or Varsity sport/activity and its full season in our athletic department or school. In order to earn the one semester of credit, a student-athlete would have to practice and/ or play in a minimum of 60 hours of a varsity sport. One semester of credit is the most one could earn for flex PE credit and the grade earned is not included in the cumulative GPA.

Course: Health

Level: Regular Credit: ½ Prerequisite: N/A

Description: This course is designed to give students the opportunity to learn through a comprehensive sequentially planned Health Education program in accordance with the Kentucky Academic Standards for High School Health Education. The emphasis of this course is to teach students the ability to access, understand, appraise, apply and advocate for health information and services in order to maintain or enhance one's own health and the health of others.

Course: Advanced Bodybuilding (Elective)

Level: Regular Credit: 1 or ½ Prerequisite: P.E. I

Description: This course is designed to be an extension of Physical Education I to provide students with the

advanced skills, knowledge, attitude and confidence to be active for a lifetime.

Course: Fitness Conditioning(Elective)

Level: Regular Credit: 1 or ½ Prerequisite: P.E. I

Description: This course is designed to offer the students a wide variety of cardiorespiratory fitness activities in

order to enhance cardiorespiratory endurance.

Course: Advanced Physical Education (Elective)

Level: Regular Credit: 1 or ½ Prerequisite: P.E. I

Description: This course is designed to be an extension of Physical Education I to provide students with the

advanced skills, knowledge, attitude and confidence to be active for a lifetime.

MATH COURSES

Course: Math 7

Level: Regular Credit: N/A Prerequisite: N/A

The 7th grade mathematics curriculum is based on the needs of 7th grade mathematics students as indicated by the Common Core State Standards for Mathematics. In Grade 7, instructional time should focus on four critical areas: (1) developing understanding of and applying proportional relationships; (2) developing understanding of operations with rational numbers and working with expressions and linear equations; (3) solving problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume; and (4) drawing inferences about populations based on samples. 7th Grade Math Content is divided among two classes: Pre-Algebra and Statistics, Probability, Measurement and Geometry.

Course: Math 8

Level: Regular Credit: N/A Prerequisite: Probability and Statistics/Geometry

& Prealgebra

The 8th grade mathematics curriculum is based on the needs of 8th grade mathematics students as indicated by the Common Core State Standards, the scope and sequence of the Mathematics Department of the Pikeville Independent School System, and the National Council of Teachers of Mathematics Standards for middle school students.

Course: Algebra I

Level: Regular Credit: 1 Prerequisite: Math 8

Description: Upon completion of the course, students should be able to represent relationships mathematically, develop fluency in writing, interpret expressions and equations, translate between various forms of linear equations and inequalities and use them to solve problems including those that require a system of equations, solve linear equations, apply related solution techniques and the laws of exponents to solve simple exponential equations, understand function definition and notation, contrast linear and exponential graphical representations, make judgments about the appropriateness of linear models, perform arithmetic operations on inequalities, interpret functions and fluently use function notation, construct and compare linear and exponential models and solve related problems, factor quadratic and cubic expressions solve quadratic equations to interpret related quadratic functions and explore non-linear relationships. This course should be designed to meet the high school graduation credit for Algebra 1 and to build a solid foundation necessary for future high school math courses.

Honors Algebra I

Level: Advanced Credit: 1 (weighted) Prerequisite: Math 8

Description: Upon completion of the course, students should be able to represent relationships mathematically, develop fluency in writing, interpret expressions and equations, translate between various forms of linear equations and inequalities and use them to solve problems including those that require a system of equations, solve linear equations, apply related solution techniques and the laws of exponents to solve simple exponential equations, understand function definition and notation, contrast linear and exponential graphical representations, make judgments about the appropriateness of linear models, perform arithmetic operations on inequalities, interpret functions and fluently use function notation, construct and compare linear and exponential models and solve related problems, factor quadratic and cubic expressions solve quadratic equations to interpret related quadratic functions and explore non-linear relationships. This course should be designed to meet the high school graduation credit for Algebra 1 and to build a solid foundation necessary for future high school math courses. The honors course is designed for students with a high mathematics aptitude and interest. The high level of effort and achievement expected demands that the student engage in extensive test preparation and homework.

Course: Geometry:

Level: Regular Credit: 1 Prerequisite: Algebra I

This course is designed so the students can develop skills and concepts from the relevant statements in the Kentucky Core Academic Standards for Mathematics in order to earn the high school graduation credit for Geometry. Content includes congruence, proof, constructions, similarity, trigonometry, extending to three-dimensions, connecting algebra and geometry through coordinates, circles, and applications of probability.

Course: Honors Geometry

Level: Advanced Credit: 1 (weighted) Prerequisite: Algebra I/Teacher Referral or Honors Algebra I

This course is designed so the students can develop skills and concepts from the relevant statements in the Kentucky Core Academic Standards for Mathematics in order to earn the high school graduation credit for Geometry. Content includes congruence, proof, constructions, similarity, trigonometry, extending to three-dimensions, connecting algebra and geometry through coordinates, circles, and applications of probability. This course is designed for students with a high mathematics aptitude and interest. The high level of effort and achievement expected demands that the student engage in extensive test preparation and homework.

Course: Algebra II

Level: Regular Credit: 1 Prerequisite: Algebra I and Geometry

Description: Upon completion of the course, students should be able to use properties of numerical operations to perform calculations involving polynomials,, identify zeros of polynomials and make connections between zeros of polynomials and solutions of geometry to extend trigonometry to model periodic phenomena, work with a variety of function families exploring the effects of transformations, analyze functions using different representations, build, interpret and compare functions including square root, cube root, piece-wise, trigonometric and logarithmic functions, identify appropriate functions to model situations, adjust parameters to improve the models, and compare models by analyzing appropriateness of fit.

Course: Honors Algebra II

Level: Advanced Credit: 1 (weighted) Prerequisite: Algebra I/Teacher Referral or Honors

Algebra Geometry/Teacher Referral. Honors

Geometry may be a Corequisite

Description: This course is designed so the students develop skills and concepts from the Kentucky Core Academic Standards beyond Algebra I and then builds on those skills and concepts in a **rigorous** manner. **This course is designed for students with a high mathematics aptitude and interest. The high level of effort and achievement expected demands that the student engage in extensive test preparation and homework.**

Course: Probability & Statistics (Elective)

Level: Regular Credit: 1 or 1/2 Prerequisite: Algebra II

Description: This course should focus primarily on the conceptual category of Statistics & Probability. If students have not completed courses containing all the required Kentucky Academic Standards for Mathematics, a Probability and Statistics course should attend to standards students still need. Upon completion of this course, students should be able to (1) summarize, represent and interpret data on a single count or measurement variable; (2) summarize, represent and interpret data on two categorical and quantitative variables; (3) interpret linear, quadratic and exponential models; (4) understand and evaluate random processes underlying statistical experiments; and (5) make inferences and justify conclusions from sample surveys, experiments and observational studies. (6) understand independence and conditional probability and use them to interpret data; (7) use the rules of probability to compute probabilities of compound events in a uniform probability model; (8) calculate expected values and use them to solve problems; and (9) use probability to evaluate outcomes of decisions. Technology should be an integral part of this course to generate plots, regressions functions and correlation coefficients and to simulate possible outcomes relatively quickly based on a given situation.

Course: Pre-Calculus

Level: Regular Credit: 1 (weighted) Prerequisite: Honors Algebra II

Description: This course is designed for students to attain the concepts necessary to be successful in a Calculus course, an AP Calculus course or a College Calculus course. Objectives for this course should include, but are not limited to: solve equations and inequalities involving polynomial, rational, exponential, logarithmic and trigonometric functions, understand and apply the behavior and properties of polynomial, rational, exponential, logarithmic, and trigonometric functions, graph polynomial, rational, exponential, logarithmic, and trigonometric functions, use technology to solve and graph various types of equations and inequalities and prove trigonometric identities. Standards for this course may also include the (+) standards denoted in the Kentucky academic standards document.

Course: Trigonometry (Elective)

Level: 1 Credit: ½ (weighted) Prerequisite: Pre-Calculus

Description: This course is designed for students who have completed Algebra 2 and want to proceed further into aspects of Trigonometry. This course should contain, but is not limited to: evaluating a trigonometric function for an angle expressed in radians and degrees, solving right and oblique triangles, including real-life applications, using and verifying (proving) trigonometric identities, solving trigonometric equations; and graphing and interpreting graphs of trigonometric functions in rectangular and polar form.

Course: Intro to Calculus (Elective)

Level: Regular Credit ½ (weighted) Prerequisite: Trigonometry

Description: This course is designed to address all the concepts normally covered in differential and integral calculus. Students who successfully complete this course should be able to demonstrate an understanding and use of the concept of a function, whether the function is represented by tabulated data, graphs, or formulas, use calculus to formulate and solve problems, understand the derivative as a rate of change, including its connections to tangent lines, linear approximations, extrema, and instantaneous velocity, understand the definite integral as a measurement of area, as a limit, and as an inverse of differentiation, use technology to solve problems, compute limits, derivatives, and antiderivatives and determine the continuity of a function and understand its significance and effectively communicate solutions to problems using correct and precise mathematical language.

Course: AP Statistics (Elective)

Level: Advanced Credit: 1 (weighted) Prerequisite: Pre-Calculus

Description: The AP Statistics course is equivalent to a one-semester, introductory, non-calculus based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and

experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding. College credit is earned with a qualifying score on an AP exam.

Course: Pre-College Algebra (Elective)

Level: Intervention Credit: 1 Prerequisite: Senior Only/Algebra II

Description: This course is for 12th grade students who have not yet met benchmark on college readiness mathematics standards and need additional time and support to be successful in post-secondary mathematics courses.

Course: Advance Topics in Mathematics (Elective)

Level: Regular Credit: 1 Prerequisite: Senior Only/Algebra II

This course is designed for students who have completed courses containing all the required high school Kentucky Academic Standards for Mathematics and should allow students to pursue topics in mathematics beyond content required for high school students. This course may cover topics from combined higher level courses or topics which are not found in other higher level courses but are of interest to students for success at the college and career level.

Course: AP Calculus AB (Elective)

Level: Advanced Credit: 1 Prerequisite: Trigonometry/Calculus I

Description: AP Calculus AB is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions. College credit is earned with a qualifying score on an AP exam.

SCIENCE COURSES

Course: Science 7th Grade

Level: Regular Credit: N/A Prerequisite: N/A

Description: In this course, students are engaged in experiences that demonstrate chemical reactions, energy transfer, forces, information processing, and genetics as described in the Kentucky Academic Standards for Science. 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.

Course: Science 8th Grade

Level: Regular Credit: N/A Prerequisite: Science 7

Description: In this course, students will be engaged in experiences which will connect their understandings about Life, Earth and Space, and Physical Science concepts experienced in grades 6 and 7. These connections should be related to human impact, as described in the Kentucky Academic Standards for Science. 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.

Intro Physics w/Earth & Space Science

Level: Regular Credit: 1 Prerequisite: Science 8

Description: The Introductory Physics course helps students recognize the nature and scope of physics and its relationship to the other sciences. Students will learn about basic topics such as motion, forces, energy, momentum, heat and heat transfer, waves, electricity, and magnetism. Students will be engaged in scientific inquiry, investigations, and labs so that they develop a conceptual understanding and basic scientific skills. The mathematics prerequisite skills are based on middle school mathematics topics such as data analysis, measurement, scientific notation, ratio and proportion, and algebraic expressions.

Honors Intro Physics w/Earth & Space Science

Level: Honors Credit: 1 Prerequisite: Science 8

Description: The Introductory Physics course helps students recognize the nature and scope of physics and its relationship to the other sciences. Students will learn about basic topics such as motion, forces, energy, momentum, heat and heat transfer, waves, electricity, and magnetism. Students will be engaged in scientific inquiry, investigations, and labs so that they develop a conceptual understanding and basic scientific skills. The mathematics prerequisite skills are based on middle school mathematics topics such as data analysis, measurement, scientific notation, ratio and proportion, and algebraic expressions. **This course is designed for students with a high scientific aptitude and interest. The high level of effort and achievement expected demands that the student engage in extensive test preparation and homework.**

Course: Intro Chemistry with Earth/Space Science

Level: Advanced Credit: 1 (weighted) Prerequisite: Intro Physics

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.

Course: Honors Intro Chemistry with Earth/Space Science

Level: Advanced Credit: 1 (weighted) Prerequisite: Intro Physics

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. **This course is designed for students with a high scientific aptitude and interest. The high level of effort and achievement expected demands that the student engage in extensive test preparation and homework.**

Course: Intro Biology with Earth/Space Science

Level: Regular Credit: 1 Prerequisite: Intro Chemistry

Description: This subject is designed to provide a general background for the understanding of the science of Biology. This course develops an appreciation of the beauty of life from its simplest composition at the molecular level to the global spectrum of complex ecological issues. It discusses Genetics, Cytology, Photosynthesis, Cellular Respiration, Populations, Ecology, and Evolution. Issues, concerns, and problems with life are also included. It also

deals with the basic principles and processes in the study of biology. It covers life processes and interactions at the cellular, organism, population, and ecosystem levels.

Course: Honors Intro Biology with Earth/Space Science

Level: Advanced Credit: 1 (weighted) Prerequisite: Intro Chemistry

Description: This subject is designed to provide a general background for the understanding of the science of Biology. This course develops an appreciation of the beauty of life from its simplest composition at the molecular level to the global spectrum of complex ecological issues. It discusses Genetics, Cytology, Photosynthesis, Cellular Respiration, Populations, Ecology, and Evolution. Issues, concerns, and problems with life are also included. It also deals with the basic principles and processes in the study of biology. It covers life processes and interactions at the cellular, organism, population, and ecosystem levels. **This course is designed for students with a high scientific aptitude and interest. The high level of effort and achievement expected demands that the student engage in extensive test preparation and homework.**

Course: AP Biology (Elective)

Level: Advanced Credit: 1 (weighted) Prerequisite: Biology and Chemistry AP Biology is a year-long course designed for high school students as an opportunity to earn AP credit on their high school transcript. Students who earn a qualifying score on the AP Biology Exam are typically eligible to receive college credit. This course is aligned to the College Board AP Biology Curriculum Framework and is based on four Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about living organisms and biological systems. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, energy and communication, genetics, information transfer, ecology, and interactions. Investigations require students to ask questions, make observations and predictions, design experiments, analyze data, and construct arguments in a collaborative setting, where they direct and monitor their progress. The framework encourages instruction that prepares students for advanced work in STEM and life science-related majors.

Course: AP Environmental Science (Elective)

Level: Advanced Credit: 1 (weighted) Co-rerequisite: Biology or Honors Biology
The course design gives the student an opportunity to earn college credit. APES is an interdisciplinary field applying scientific principles, concepts, and methods required to understand the natural world. This course provides a background in the fundamental principles of ecological science, including concepts of natural selection, population and community ecology, biodiversity, and sustainability. Examined through both human and natural causes, environmental issues will encompass a variety of topics. The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them.

Course: Honors Chemistry II (Elective)

Level: Advanced Credit: 1/2(weighted) Prerequisite: Honors Intro Chem

Description: This college level course focuses on the study of the structure of matter, chemical kinetics, solution chemistry, and laboratory techniques.

Course: Honors Physics I (Elective)

Level: Advanced Credit: 1 (weighted) Prerequisite: Pre-Calculus

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.

Course: Intro to Anatomy/Physiology (Elective)

Level: Regular Credit: 1 or 1/2

Description: Major concepts addressed in this course include all human body systems, including tissues, organs, and systems. The systems of study are integumentary, skeletal, muscular, nervous, cardiovascular, respiratory, excretory, digestive, immune/lymphatic and reproductive.

Course: Forensic Science (Elective)

Level: Regular Credit: 1 or 1/2 Co/Prerequisite: Intro Physics and/or Intro Chem **Description:** Forensic Science is the application of science (chemistry, physics, and biology) to the criminal and civil laws that are enforced by police agencies in a criminal justice system. This course teaches science related with crime, and applies many disciplines of science such as biology, mathematics, chemistry, physics, earth science... to solving crimes. It includes the investigation of fingerprinting, fiber analysis, ballistics, arson, trace evidence analysis, poisons, drugs, blood spatters, and blood samples. Students are taught the proper collection, preservation, and laboratory analysis of various samples.

Course: Biochemistry (Elective)

Level: Regular Credit: 1/2 Prerequisite: Intro Chem

Description: Major concepts addressed in this course include biochemical evolution, macromolecules, metabolism, glycolysis, photosynthesis, and respiration.

Course: Bio 137 – Anatomy and Physiology I (Elective)

Level: Dual Credit Credit: ½ (Weighted) Prerequisite: Intro Chem

Description: This course focuses on the study of human anatomy and physiology. Dual credit through Big Sandy Community & Technical College.

Course: Bio 139 – Anatomy and Physiology II (Elective)

Level: Dual Credit Credit: ½ (Weighted) Prerequisite: Intro Chem

Description: This course focuses on the study of human anatomy and physiology. Dual credit through Big Sandy

Community & Technical College.

Social Studies Courses

Course: History 7 (World Civilization)

Level: Regular Credit: N/A Prerequisite: N/A

Description: : Middle level social studies uses the five strands of social studies (historical perspective, geography, economics, government and civics, and culture and society) in an integrated program which focuses on a different grade-level context each year. Grade seven focuses on an integrated study of world history from the earliest civilizations to 1500. Regardless of the grade-level context, students use the five categories of social studies to explore the content.

Course: History 8 (United States History)

Level: Regular Credit: N/A Prerequisite: History 7

Description: Middle level social studies uses the five strands of social studies (historical perspective, geography, economics, government and civics, and culture and society) in an integrated program which focuses on a different grade-level context each year. Grade eight covers the history of the United States from the early inhabitants to Reconstruction. Regardless of the grade-level context, students use the five categories of social studies to explore the content.

Course: U.S. History

Level: Regular Credit: 1 Prerequisite: History 8

Description: Course required for graduation. U.S. History Survey is a basic overview of the history from

Reconstruction to present; government institutions; applications to daily living.

Course: AP U.S. History (Elective)

Level: Advanced Credit: 1 (weighted) Prerequisite: US History

Description: This course focuses on the development of historical thinking skills (chronological reasoning, comparing and contextualizing, crafting historical arguments using historical evidence, and interpreting and synthesizing historical narrative) and the development of students' abilities to think conceptually about U.S. history from approximately 1491 to the present. Seven themes of equal importance - American and National Identity; Migration and Settlement; Politics and Power; Work, Exchange, and Technology; America in the World; Geography and the Environment; and Culture and Society - provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and make comparisons among various historical developments in different times and places. The course also allows teachers flexibility across nine different periods of U.S. history to teach topics of their choice in depth. College credit is earned with a qualifying score on an AP exam.

Course: AP World History

Level: Advanced Credit: 1 (weighted) Prerequisite: N/A

Description: This course focuses on the development of historical thinking skills (chronological reasoning, comparing and contextualizing, crafting historical arguments using historical evidence, and interpreting and synthesizing historical narrative) and the development of students' abilities to think conceptually about U.S. history from approximately 1491 to the present. Seven themes of equal importance - American and National Identity; Migration and Settlement; Politics and Power; Work, Exchange, and Technology; America in the World; Geography and the Environment; and Culture and Society - provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and make comparisons among various historical developments in different times and places. The course also allows teachers flexibility across nine different periods of U.S. history to teach topics of their choice in depth. College credit is earned with a qualifying score on an AP exam.

Course: World Civilization

Level: Regular Credit: 1 Prerequisite: N/A

Description: World History is a survey of the history of the world focusing on cultural and political aspects; ancient

and modern history; the study of western and non-western civilizations; and current events.

Course: Honors World Civilization

Level: Advanced Credit: 1 (weighted) Prerequisite: N/A

Description: World History is a survey of the history of the world focusing on cultural and political aspects; ancient and modern history; the study of western and non-western civilizations; and current events. **This course presents more challenging material than World Civilization and requires more independent study.**

more changing material than world civilization and requires more independent st

Course: AP Human Geography (Elective)

Level: Advanced Placement Credit: 1 (weighted) Prerequisite: N/A

Description: AP Human Geography is an introductory college-level human geography course. Students cultivate their understanding of human geography through data and geographic analyses as they explore topics like patterns and spatial organization, human impacts and interactions with their environment, and spatial processes and societal changes.

Course: AP Government

Level: Advanced Credit: 1 (weighted) Prerequisite: N/A

Description: This course introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess causes and consequences of political events, and interpret data to develop evidence-based arguments. College credit is earned with a qualifying score on an AP exam.

Course: Contemporary U.S. History (Elective)

Level: Regular Credit: 1 or ½ Prerequisite: N/A

Description: Contemporary U. S. History is a study of local, state and national government operations; economic

issues; citizenship responsibilities; current events and historical origins; problem solving techniques.

Course: Civics(Required for Juniors)

Level: Regular Credit: 1 Prerequisite: N/A

Description: Civics is the study of citizenship responsibilities and government - introduction; federal, state and local government; organization and function. It also covers the study of United States voting procedures; court operations; local, state and national lawmaking.

Course: AP Psychology (Elective)

Level: Advanced Credit: 1 (weighted) Prerequisite: N/A

Description: This course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, development psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. College credit is earned with a qualifying score on an AP exam.

Course: Law and Justice (Elective)

Level: Regular Credit: 1 or ½ Prerequisite: N/A

Description: Law and Justice is a study of law-civil, criminal, constitutional, and international; the legal and justice systems. Students will examine the need for rules and regulations; interpretations of the constitution, both state and federal; Supreme Court decisions; the Bill of Rights, and individual rights law, criminal law, family law, and

consumer law. The study of the basic social contracts of society will enable students to understand the preferred democratic values: justice, equality, responsibility and freedom, rule of law, human rights, honesty, equity, rational process and human dignity.

Course: Global Issues (Elective)

Level: Regular Credit: 1 or ½ Prerequisite: N/A

Description: Global Issues is the study of persistent issues related to social, political, and economic facets of human behavior. This is an opportunity for the mature pupil to examine the concepts, skills, and tools of the social scientist and the humanist in some decision-making and problem-international concern. This should be more than a survey course in current events. Independently, pupils might pursue a new issue in considerable depth through comprehensive research and analysis. It would also be possible for the teacher to utilize this course to involve the students in some direct manner with community issues and problems. The student could identify with a practitioner who shares the concern or problem.

Course: Psychology (Elective)

Level: Regular Credit: 1 or ½ Prerequisite: N/A

Description: Psychology is an introduction to the basic scientific theoretical principles of individual human behavior. Students will be exposed to various topics in the field of psychology research.

Course: Sociology (Elective)

Level: Regular Credit: 1 or ½ Prerequisite: N/A

Description: Sociology is the scientific study of human society. It is concerned with the behavior of human beings in group situations. The study of sociology, therefore, consists of trying to understand: The basic units and institutions of social life, such as the family, schools, neighborhoods, rural and urban communities, and the many other kinds of groups with which humans identify. This group can include occupational, political, religious, ethnic, family, economic status, or ideology. The sociological perspectives focus on how those social relationships arise, why they persist, why antagonisms develop, and how they maintain social order to contribute to social change.

Course: History of Sports in America (Elective)

Level: Regular Credit: ½ Prerequisite: None

Description: This is a history survey course that will provide an overview of one of the major American pastimes: sports. The origin and evolution of sports and sporting events and how sports have been influential in American culture and history will be the focus.

Course: World History through Film (Elective)

Level: Regular Credit: ½ Prerequisite: None

Description: This course seeks to examine the portrayal of world history in films against both the historical reality of actual events and the intellectual and cultural forces that shaped the making of these movies. Through the reading of historical primary sources, scholarly articles from history, art, cinema, film, literature, English and interdisciplinary journals, students will learn how to critically interpret a variety of scholarly readings and understand scholarly arguments.

CAREER AND TECHNICAL EDUCATION

Course: Multimedia/Advanced Multimedia (Elective)

Level: Regular Credit: 1 or ½ Prerequisite: Teacher Approval

Description: Content for this course may vary but may include researching, reporting, writing, filming/recording

and editing in digital and/or online formats.

Course: Digital Literacy or IT Computer Literacy (Elective)

Level: Regular Credit: 1 or ½ Prerequisite: N/A

Description: Students will use a computer and application software including word processing, presentations, database, spreadsheets, internet, and email to prepare documents and reports. The impact of computers on society and ethical issues are presented.

Course: Social Media Marketing (Elective)

Level: Regular Credit: 1 or ½ Prerequisite: N/A

Description: This course cultivates a basic to intermediate understanding of social media history, terminology, and concepts as they apply to the marketing and business sectors. Integrates a working knowledge of platform management and simple social media marketing strategy. Students learn how to practice good marketing principles in an "electronic" marketing place. Decision-making and problem-solving skills are involved in such units as human relations, distribution, market information management, and product/service planning. The employment skills learned will improve and increase the change of successful transition into the world of work. Leadership development will be provided through FBLA and/or DECA.

Course: Advertising and Promotion (Elective)

Level: Regular Credit: 1 or ½ Prerequisite: N/A

Description: This course is designed to provide students with a realistic "hands-on" application of techniques used in the advertising and promotion of goods and services. Students use typical media software and media equipment while being exposed to all forms of media (including print, internet, radio, and television), methods, budgets, and evaluations used by industry. Leadership development will be provided through FBLA and/or DECA.

Course: The Learner-Centered Classroom (Elective)

Level: Regular Credit: 1 or ½ Prerequisite: N/A

Description: This course will develop rising educators' awareness of their funds of knowledge, as well as their personal biases that develop from their life experiences. Using research-based methods, rising educators will develop methods to impact student equity based on culturally competent models as well as growth mindset methods.

Course: The Professional Educator (Elective)

Level: Regular Credit: 1 or ½ Prerequisite: N/A

Description: In this course, The Professional Educator, students will develop an understanding of how educators advance their profession within the classroom. Specifically, students will gain both the knowledge and skills to plan, deliver, and reflect on the process of teaching and learning.

Course: The Learning Community (Elective)

Level: Regular Credit: 1 or ½ Prerequisite: N/A

Description: In this course, The Learning Community, students develop an understanding of the various responsibilities and systems involved in the K-12 educational system. Specifically, students will acquire the knowledge of education through the perspectives of classroom, school, district, state, and federal roles.

Course: Senior Seminar (Elective)

Level: Regular Credit: 1 or ½ Prerequisite: Seniors only

Description: Career Networking is a second level course in career and technical education and provides opportunities for exploration of career clusters with an in-depth focus on two or more clusters. The curriculum includes a continuum of employability and computer skills needed in the workplace. Opportunities are provided for students to participate in internships in cluster interest areas.

Course: Intro to Programming(Elective)

Level: Regular Credit: 1 or ½ Prerequisite: None

Description: Focuses on the general writing and implementation of generic and atomized programs to drive operating systems. Includes software design, languages, and program writing, trouble-shooting, etc.

Course: Project-Based Programming(Elective)

Level: Regular Credit: 1 or ½ Prerequisite: Intro to Prog **Description:** This project-based learning course engages those students with an entrepreneurial spirit that are interested in programming and in finding solutions to existing problems through the creation of applications. In this course, students will create projects that require computer science fundamentals and extensive research for successful completion. Students will work either solo or in a team to execute a project decided upon by the student(s). Students must learn and demonstrate proficiency in time management, scope, research, computer science, and teamwork to be successful in this course. Finally, students will engage in leadership skills by being held accountable for the completion of their tasks or project. The teacher will act more as a facilitator in this course and is highly encouraged to create his/her own project to demonstrate teacher "buy-in" to students. Students spend at least 20 hours of programming and applying learned concepts through programming. (Programming is defined, by the K-12 CS Framework, as the craft of analyzing problems and designing, writing, testing, and maintaining programs to solve them.) Participation in Kentucky Technology Student Association or SkillsUSA will greatly

Course: Internet Technologies(Elective)

enhance instruction.

Level: Regular Credit: 1 or ½ Prerequisite: None

Description: This course provides students with a study of traditional and emerging Internet technologies. Also covered are other topics including Internet fundamentals, Internet applications, Internet delivery systems, and Internet client/server computing. Internet Technologies provides a hands-on experience and some rudimentary programming in an Internet environment. Students spend at least 20 hours of programming and applying learned concepts through programming. (Programming is defined, by the K-12 CS Framework, as the craft of analyzing problems and designing, writing, testing, and maintaining programs to solve them.) Participation in Kentucky Technology Student Association or SkillsUSA will greatly enhance instruction

Course: AP Computer Science Principles(Elective)

Level: Advanced Credit: 1 (weighted) Prerequisite: Algebra I

Description: AP Computer Science Principles introduces students to the breadth of the field of computer science. In this course, students will learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They will incorporate abstraction into programs and use data to discover new knowledge. Students will also explain how computing innovations and computing systems,

including the Internet, work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. It is important to note that the AP Computer Science Principles course does not have a designated programming language. Teachers have the flexibility to choose a programming language(s) that is most appropriate for their students to use in the classroom. Students spend at least 20 hours of programming and applying learned concepts through programming. (Programming is defined, by the K-12 CS Framework, as the craft of analyzing problems and designing, writing, testing, and maintaining programs to solve them). College credit is earned with a qualifying score on an AP exam. Participation in Kentucky Technology Student Association or SkillsUSA will greatly enhance instruction.

Course: Hardware/Software Maintenance(Elective)

Level: Regular Credit: 1 or ½ Prerequisite: None

Description: This course presents a practical view of computer hardware and client operating systems. It also covers computer hardware components; troubleshooting, repair, and maintenance; operating system interfaces and management tools; networking components; computer security; and operating procedures. Students spend at least 20 hours of programming and applying learned concepts through programming. (Programming is defined, by the K-12 CS Framework, as the craft of analyzing problems and designing, writing, testing, and maintaining programs to solve them.) Participation in Kentucky Technology Student Association or SkillsUSA will greatly enhance instruction.

Course: Computational Thinking(Elective)

Level: Advanced Credit: 1 Prerequisite: None

Description: Students analyze the structure of the worldwide web, apply basic principles of web documents and HTML, and develop multi-media web pages. Course content will include the understanding of hypertext and web structures. Equipment such as scanners, digital and video cameras and sound recording devices will be utilized through hands-on instruction. Promotes understanding of computer programming and logic by teaching students to "think like a computer". Covers skills needed to develop and design language-independent solutions to solve computer related problems. Covers developmental and design basics including use of variables, control and data structures, and principles of command-line and object-oriented languages.

Course: Engineering I-Introduction to Engineering Design (Elective)

Level: Advanced Credit: 1 Prerequisite: Math Skills Assessment

Description: Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3-D modeling software, and use an engineering notebook to document their work.

Course: Engineering II Principles of Engineering (Elective)

Level: Advanced Credit: 1 Prerequisite: Engineering I

Description: Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation. Participation in Kentucky Technology Student Association will greatly enhance instruction.

Course: Aerospace Engineering (Elective)

Level: Advanced Credit: 1 Prerequisite: Engineering II

Description: This course propels students' learning in the fundamentals of atmospheric and space flight. As they explore the physics of flight, students bring the concepts to life by designing an airfoil, propulsion system, and rockets. They learn basic orbital mechanics using industry-standard software. They also explore robot systems through projects such as remotely operated vehicles. Participation in Kentucky Technology Student Association will greatly enhance instruction.

Course: Mechanical Engineering (Elective)

Level: Advanced Credit: 1 Prerequisite: Engineering II

Description:This course includes activities and real world projects with state-of-the-art equipment and trainers. Students explore and study an introduction to engineering, engineering design problem solving, and engineering graphics with a 3D parametric modeling software. Students prototype a part design and prepare the manufacturing process using a 3D printer, CNC Vertical Mill, CNC turning center, a material handling robot and/or plastic molding machine. Participation in the Kentucky Technology Student Association will greatly enhance instruction.

Course: Capstone Engineering IV(Elective)

Level: Advanced Credit: 1 Prerequisite: Engineering I and II (Seniors)

Description: The knowledge and skills students acquire throughout PLTW Engineering come together in Engineering Design and Development as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing Engineering Design and Development ready to take on any post-secondary program or career. Participation in Kentucky Technology Student Association will greatly enhance instruction. Articulated credit may be available from the University of Kentucky

Course: JAG(Elective)

Level: Regular Credit: 1 Prerequisite: None

Description: Jobs for Kentucky's Graduates Program. JAG's competency-based curriculum educates students in areas of career development, job attainment and retuention, leadership, financial literacy and numerous other life skills, all of which enhance a student's employability and likelihood of stucess upon graduation.

ENRICHMENT/INTERVENTION COURSES

Course: ACES

Level: Advanced Credit: N/A Prerequisite: Qualified for GT program

Description: Students in grades 7th and 8th who are identified in Gifted & Talented areas of Leadership, General Intellectual, Math, Language Arts, Science, Social Studies, and Creativity can take this course as an elective. If space allows students identified in GT Art, Music, Drama and Dance are allowed to take this elective. This course was designed to challenge GT students through authentic project based lessons. The first semester is centered on the Future City Competition. The second semester is dictated by student interest and choice. This course fosters the talents of the GT student.

Course: ACES 2

Level: Advanced Credit: 1 Prerequisite: Qualified for GT Program

Description: Students in grades 9th-12th who are identified in Gifted & Talented areas of Leadership, General Intellectual, Math, Language Arts, Science, Social Studies and Creativity can take this course as an elective. This course was designed to challenge GT students through authentic project based lessons. Student choice and interest drives curriculum. STEM projects are a main focus. This course fosters the talents of the GT student.

Course: Reading Skills 7th/8th Grade

Level: Intervention Credit: N/A Prerequisite: N/A

Description: This course is for students who need additional time and support or for students in reading at the middle school level who could benefit from enrichment. This course includes social sciences, natural sciences, humanities, and literary texts.

Course: Math Skills 7/8th Grade

Level: Intervention Credit: N/A Prerequisite: N/A

Description: This course is for students who need additional time and support or for students in mathematics at the middle school level that could benefit from enrichment. This course includes support for all middle school mathematics courses.

Course: ACT Reading/English Course

Level: Intervention Credit: 1 Prerequisite: N/A

Description: This course is for students who need additional time and support for students in reading at the high school level who could benefit from enrichment. This course includes social sciences, natural sciences, humanities, and literary texts. This course could serve as an English/Language Arts elective for high school graduation, but not as one of the four required English Language Arts courses.

Course: Foundations of Math

Level: Intervention Credit: 1 Prerequisite: N/A

Description: This course is for students who need additional time and support or for students in mathematics at the high school level who could benefit from enrichment. This course includes support for all high school mathematics courses.

Course: ACT Math

Level: Intervention Credit: 1 Prerequisite: N/A

Description: This course is for students who need additional time and support or for students in mathematics at the high school level who could benefit from enrichment. This course includes support for all high school mathematics courses.

Course: Pre-College Algebra

Level: Intervention Credit: 1 Prerequisite: Senior Only/Algebra II

Description: This course is for 12th grade students who have not yet met benchmark on college readiness mathematics standards and need additional time and support to be successful in post-secondary mathematics courses.

DUAL CREDIT COURSES

University of Pikeville

Tuition for dual credit courses at Pikeville High School is paid for by a combination of KHEAA dual credit scholarships and district funding. Students are never charged extra tuition for these classes. Students may be required to purchase textbooks if needed for off-campus or online courses only. There are online options available as well that vary by semester as well as classes taken on-campus at Upike. You may contact the guidance office for those extra opportunities.

Course: ENG 111 Writing I

Level: Dual Credit Credit: 1/2 Prerequisite: English 10, Met all ACT benchmarks **Description:** This course focuses on practical instruction in the process of reading, planning, and writing short essays, with emphasis on rhetorical strategies for structure and development, and on the basic rules of grammar and punctuation. Counts as 1st semester English 11 credit for graduation.

Course: ENG 112 Writing II

Level: Dual Credit Credit: 1/2 Prerequisite: ENG 111

Description: This course focuses on additional instruction and practice in writing, with emphasis on argumentation and research. This course is designed to strengthen and refine the skills acquired in ENG 111. Counts as 2nd semester English 11 credit for graduation.

Course: ENG 200 Introduction to Literature

Level: Dual Credit Credit: 1/2 Prerequisite: ENG 112

Description: A study of representative selections in the genres of fiction, drama, and poetry, with emphasis on interpretation and appreciation. Critical approaches and terminology appropriate to each genre will be considered. Counts as 1st semester of English 12 credit for graduation.

Course: ENG 251 Survey of American Literature II

Level: Dual Credit Credit: 1/2 Prerequisite: ENG 112

Description: Study of American writing from Twain to the present, with emphasis on poetry, short fiction, drama,

and the essay. Counts as 2nd semester of English 12 credit for graduation.

Course: MTH 113 Precalculus Algebra (College Algebra)

Level: Dual Credit Credit: 1/2 Prerequisite: Algebra II, ACT Math 19, 2.75 GPA, Senior **Description:** Further study of topics in algebra including: linear and quadratic equations; functions, relations and their graphs; polynomials and rational functions; exponentials and logarithmic functions; systems of linear equations; and applications. Prerequisite: MTH 105 or placement by examination. This course fulfills the

Mathematics requirement in the General Education Curriculum at Upike.

Course: EDU 101 Education in America

Level: Dual Credit Credit: 1/2 Prerequisite: Met ACT Benchmarks, 2.75 GPA, Junior

Description: Prospective teacher education candidates will explore teaching as a profession.

Course: EDU 203 Diversity in the Classroom

Level: Dual Credit Credit: 1/2 Prerequisite: Met ACT Benchmarks, 2.75 GPA, EDU 101, Junior

Description: In this course, preservice teachers will develop an understanding of how learning is influenced by individual experiences, talents, and prior learning as well as language, culture, family, and community values. They will research dimensions of diversity and explore strategies to differentiate instruction and classroom procedures to meet individual and group needs.

Big Sandy Community & Technical College

Big Sandy has dual credit offerings online each semester for high school students during their senior year. Seniors must meet all ACT benchmarks and have a 3.0 GPA. Course availability varies by semester. Students who take an online dual credit course should be independent learners with no problems with procrastination.

Morehead State University

We offer 2 semesters of dual credit Spanish through Morehead State University. Students must complete Spanish 1 and 2 to enroll and meet college readiness benchmarks.

SPA 101 Spanish Language & Culture I SPA 102 Spanish Language & Culture II