2020 – 2021 Virtual Arkansas Course Catalog

Unless noted next to the course, ALL CORE, CTE, and CONCURRENT CREDIT COURSES are Act 1280 approved

Contents

ALL CORE COURSES ARE AVAILABLE AS CONTENT ONLY OPTIONS FOR SCHOOLS 2
K – 8 CONTENT ONLY COURSE OFFERINGS 2
SPECIALTY CONTENT ONLY 2
TEACHER-FACILITATED ADVANCED PLACEMENT 3
TEACHER-LED ADVANCED PLACEMENT CORE 5
COMPUTER SCIENCE 7
ENGLISH LANGUAGE ARTS 8
FINE ARTS 9
MATHEMATICS 10
TEACHER-FACILITATED MATH 11
PHYSICAL EDUCATION AND HEALTH 11
SCIENCE 12
SOCIAL STUDIES 12
WORLD LANGUAGES 14
AGRICULTURE, FOOD and NATURAL RESOURCES 17
ARTS, A/V, COMMUNICATION AND TECHNOLOGY 17
CAREER EXPLORATION AND PREPARATION 17
EDUCATION AND TRAINING 18
FINANCE 18
HEALTH SCIENCE 19
HOSPITALITY and TOURISM 20
HUMAN SERVICES 21
INFORMATION TECHNOLOGY 21
LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY 22
STEM 22
TRANSPORTATION, DISTRIBUTION, AND LOGISTICS 23
ARKANSAS TECH UNIVERSITY FALL 2020 24
ARKANSAS TECH UNIVERSITY SPRING 2021 25

Symbol Key: NCAA Approved course | NOT NCAA Approved | Act 1280 approved | NOT Act 1280 Approved

Virtual Arkansas Certified | Quality Matters Certified

Cost per course reflects the cost per student, per .5 unit of credit. The cost per student, per .5 unit for Content Only courses is $25. The exceptions are the ACT Prep and AP Prep courses, which are $35 per student for the full year or $50 per student enrolled in both courses. The cost per student, per .5 unit for Credit Recovery enrollments will be $50.

REV 07.16.2020

ALL CORE COURSES ARE AVAILABLE AS CONTENT ONLY OPTIONS FOR SCHOOLS

K – 8 CONTENT ONLY COURSE OFFERINGS

378720 ARKANSAS HISTORY 7-8 **$25** **TERM: FALL & SPRING CREDIT: .5**

Arkansas History Grades 7-8 is an in-depth and rigorous study of civics/government, economics, geography, and history of the state. Throughout the course, students will develop and apply disciplinary literacy skills: reading, writing, speaking, and listening. As students seek answers to compelling and supporting questions, they will examine a variety of primary and secondary sources and communicate responses in multiple ways, including oral, visual, and written forms.

377510/388510 **VISUAL ART GRADES 7 - 8** **$25** **9 WEEK SESSION OR A SEMESTER**

The framework supports multiple modes of learning and assessment for the diverse needs of students.

SPECIALTY CONTENT ONLY

If you will be using any of the Specialty Content courses below, please send an email to Amanda.rauls@virtualarkansas.org that includes the teacher's first name, last name, email address, school affiliation, and daytime telephone number.

The Specialty Content Only Provided at no cost under Governor Hutchinson's Computer Science and Computing Initiative.

Virtual Arkansas and Shmoop have once again partnered to offer various ACT test preparation and Advanced Placement test preparation resources. Below are the various student enrollment options.

ACT PREP RESOURCES **$35** **TERM: YEAR CREDIT: NA**

The ACT Prep Resources include diagnostics tests, drills, videos, and content aligned to the reading, writing, math, science, and English portions of the ACT Test.

ADVANCED PLACEMENT PREP RESOURCES **$35** **TERM: YEAR CREDIT: NA**

The Advanced Placement Prep Resources contain lessons, practice tests, videos, and much more to help students prepare for their Advanced Placement end-of-year exam.

ACT PREP COURSE **$35** **TERM: YEAR CREDIT: NA**

Select this option to utilize these resources in a class format, which permits students to progress through the material in a structured manner. The local teacher can determine the pace and structure of the course.

ACT AND AP PREP RESOURCES **$50** **TERM: YEAR CREDIT: NA**

Get the ACT Prep Resources AND the Advanced Placement Prep Resources together for a discounted price.

950000 VISUAL ART EXPLORATION **$25** **TERM: YEAR** **CREDIT: .5**

Visual Arts Exploration is a one semester course designed to develop student's knowledge and skills related to the methods, materials, and qualities of visual art. Students will explore the fundamentals involved in the creative process of visual art and make connections with the visual arts and the world in which they live.

This course was designed for students who participate in the Arkansas Alternate Pathway to Graduation; this is not a credit-bearing course for students on the Core or Smart Core pathway to graduation. The course will meet the Fine Arts requirement as well as the digital course requirement for students on this pathway. This course may be utilized in whole-group or small-group instruction.

TEACHER-FACILITATED ADVANCED PLACEMENT – ALL AP COURSES MAY BE OFFERED FOR WEIGHTED CREDIT

Teacher Facilitated courses are true asynchronous online courses. The primary means of communication, instruction, and feedback is online. Whereas Virtual Arkansas Teacher Led courses fit a hybrid model of instruction and provide live interactive Zoom sessions with the teacher. Teacher Facilitated courses do not provide these live interactive sessions. Students who take Teacher Facilitated courses should be highly motivated, have the ability to self-direct via independent study, and should select the course due to interest in the topic and coursework.

559030 AP ART HISTORY **$90 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

The AP Art History course explores such topics as the nature of art, its uses, its meanings, art making, and responses to art. Through investigation of diverse artistic traditions of cultures from prehistory to the present, the course fosters in-depth and holistic understanding of the history of art from a global perspective. Students learn and apply skills of visual, contextual, and comparative analysis to engage with a variety of art forms, constructing understanding of individual works and interconnections of art-making processes and products throughout history. AP Art History is designed to be the equivalent of a two-semester introductory college or university art history survey course.

520030 AP BIOLOGY **$90 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

Given the speed with which scientific discoveries and research continuously expand scientific knowledge, many educators are faced with the challenge of balancing breadth of content coverage with depth of understanding. The revised AP® Biology course addresses this challenge by shifting from a traditional "content coverage" model of instruction to one that focuses on enduring, conceptual understandings and the content that supports them. This approach will enable students to spend less time on factual recall and more time on inquiry-based learning of essential concepts, and will help them develop the reasoning skills necessary to engage in the science practices used throughout their study of AP Biology.

Students who take an AP Biology course designed using this curriculum framework as its foundation will also develop advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. The revised AP Biology course is equivalent to a two-semester college introductory biology course. The prerequisites for AP Biology are high school courses in biology and chemistry.

534050 AP CALCULUS BC **$90 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

AP Calculus AB and AP Calculus BC focus on students' understanding of calculus concepts and provide experience with methods and applications. Through the use of big ideas of calculus (e.g., modeling change, approximation and limits, and analysis of functions), each course becomes a cohesive whole, rather than a collection of unrelated topics. Both courses require students to use definitions and theorems to build arguments and justify conclusions.

The courses feature a multi-representational approach to calculus, with concepts, results, and problems expressed graphically, numerically, analytically, and verbally. Exploring connections among these representations builds understanding of how calculus applies limits to develop important ideas, definitions, formulas, and theorems. A

sustained emphasis on clear communication of methods, reasoning, justifications, and conclusions is essential. Teachers and students should regularly use technology to reinforce relationships among functions, to confirm written work, to implement experimentation, and to assist in interpreting results. **Prerequisites:** Algebra I, Geometry, Algebra II, Pre Calculus or College Algebra

565110 AP COMPUTER SCIENCE A LEVEL I **FREE** **ADVANCED HS CS LEVEL 1** **TERM: FALL** **CREDIT: .5**

PROVIDED AT NO COST UNDER GOVERNOR HUTCHINSON'S COMPUTER SCIENCE AND COMPUTING INITIATIVE

The goals of the AP Computer Science A course are comparable to those in the introductory course for computer science majors offered in many college and university computer science departments. It is not expected that all students in the AP Computer Science A course will major in computer science at the university level. The AP Computer Science A course is intended to serve both as an introductory course for computer science majors and as a course for people who will major in other disciplines and want to be informed citizens in today's technological society. **Prerequisites:** None

565120 AP COMPUTER SCIENCE A LEVEL II **FREE** **ADVANCED HS CS LEVEL 2** **TERM: SPRING** **CREDIT: .5**

PROVIDED AT NO COST UNDER GOVERNOR HUTCHINSON'S COMPUTER SCIENCE AND COMPUTING INITIATIVE

The goals of the AP Computer Science A course are comparable to those in the introductory course for computer science majors offered in many college and university computer science departments. It is not expected that all students in the AP Computer Science A course will major in computer science at the university level. The AP Computer Science A course is intended to serve both as an introductory course for computer science majors and as a course for people who will major in other disciplines and want to be informed citizens in today's technological society. **Prerequisites:** 565110

523030 AP ENVIRONMENTAL SCIENCE **$90 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

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. Students will be reading at an accelerated pace and writing formal lab reports on a weekly basis. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. Yet there are several major unifying constructs, or themes, that cut across the many topics included in the study of environmental science.

579080 AP HUMAN GEOGRAPHY **$90 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

This course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012).

559010 AP MUSIC THEORY **$90 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

The ultimate goal of an AP Music Theory course is to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. It may emphasize one aspect of music, such as harmony; more often, however, it integrates aspects of melody, harmony, texture, rhythm, form, musical analysis, elementary composition and, to some extent, history and style. Musicianship skills such as dictation and other listening skills, sight-singing, and keyboard harmony are considered an important part of the theory course, although they may be taught as separate classes. The student's ability to read and write musical notation is fundamental to such a course. It is strongly recommended that the student will have acquired at least basic performance skills in voice or on an instrument.

579120 AP PSYCHOLOGY **$90 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice.

539030 AP STATISTICS **$90 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad conceptual themes: Exploring Data, Sampling and Experimentation, Anticipating Patterns, and Statistical Inference.

572010 AP U.S. GOVERNMENT AND POLITICS **$90 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

AP U.S. Government and Politics provides a college-level, nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students will study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes, and behaviors. They will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. In addition, they will complete a political science research or applied civics project.

TEACHER-LED ADVANCED PLACEMENT CORE

517030 AP ENGLISH LANGUAGE AND COMPOSITION **$90 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

This AP course in English Language and Composition engages students in becoming skilled readers of NONFICTION prose written in a variety of periods, disciplines, and rhetorical contexts and in becoming skilled writers who compose for a variety of purposes. This course emphasizes the development and use of critical thinking skills. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing. The college composition course for which the AP English Language and Composition course substitutes is one of the most varied in the curriculum.

517040 AP ENGLISH LITERATURE AND COMPOSITION **$90 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

This course is designed to comply with the curricular requirements described in the AP English Course Description. This course emphasizes the development and use of critical thinking skills. Students will be reading at an accelerated pace and writing on a weekly basis. American and British poetry and literature will be the emphasis of study throughout the course. Students must be willing to sacrifice several hours a week to this course in order to succeed. This course is designed to introduce students to the rigor and expectations of the college level English course.

534040 AP CALCULUS AB **$90 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

This course will focus on Functions, Graphs, and Limits; Asymptotic and unbounded behavior; Continuity as a property of functions; the concept of the derivative; Derivative at a point; Derivative as a function; Second derivatives; Applications of derivatives; Computation of derivatives; Interpretations and properties of definite integrals; Applications of integrals; Fundamental Theorem of Calculus; Techniques of anti-differentiation; Applications of anti- differentiation; Numerical approximations to definite

integrals. This course is considered a fifth high school math course and should be taken after successful completion of Algebra I, Geometry, Algebra II, Pre Calculus or College Algebra.

565010 AP COMPUTER SCIENCE PRINCIPLES LEVEL I **FREE** **ADVANCED HS CS LEVEL 1** **TERM: FALL** **CREDIT: .5**

PROVIDED AT NO COST UNDER GOVERNOR HUTCHINSON'S COMPUTER SCIENCE AND COMPUTING INITIATIVE

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles will give students the opportunity to use technology to address real-world problems and build relevant solutions. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science. **Prerequisites:** None

565020 AP COMPUTER SCIENCE PRINCIPLES LEVEL II **FREE** **ADVANCED HS CS LEVEL 2** **TERM: SPRING** **CREDIT: .5**

PROVIDED AT NO COST UNDER GOVERNOR HUTCHINSON'S COMPUTER SCIENCE AND COMPUTING INITIATIVE

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles will give students the opportunity to use technology to address real-world problems and build relevant solutions. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science. **Prerequisites:** 565010

570020 AP UNITED STATES HISTORY **$90 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

This challenging course is designed to provide a college-level experience and prepare students for the AP exam in early May. Over two 18 week semesters, the students are engaged in a wide variety of activities, with substantial emphasis on interpreting documents, writing analytical essays, and mastering factual content. Woven into the chronology of the course are the key themes of American History. Issues of American identity, diversity, religion and culture are examined. Economic transformations, the development of politic institutions and reform movements are evaluated. War, slavery, and demographic changes are assessed. Globalization and environmental issues are analyzed. These themes appear consistently in the course as the student journeys through broader course topics such as colonial and antebellum life, civil war and reconstruction, the gilded age and on to modern America.

571020 AP WORLD HISTORY: MODERN **$90 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

The AP World History Modern course will develop students' knowledge and understanding of global historical events, processes and interactions between civilizations and societies. Students will prepare for the rigors of college coursework, and the AP World History Modern Exam. The AP World History Modern course uses a skills-based thematic approach organized by historical periods with reoccurring themes. Historical thinking skills are taught throughout the course using the context and content of world history themes and overlapping, approximate time periods.

COMPUTER SCIENCE – STUDENTS SHOULD NOT BE ENROLLED IN BOTH LEVEL I OR LEVEL II COURSES CONCURRENTLY

PROVIDED AT NO COST UNDER GOVERNOR HUTCHINSON'S COMPUTER SCIENCE AND COMPUTING INITIATIVE.

*****ALL STUDENTS ENROLLED IN CYBERSECURITY LEVELS I, II, III, OR IV MUST OBTAIN A FREE STUDENT ACCOUNT AT TRINKET BY VISITING HTTPS://TRINKET.IO/SIGNUP.*****

465010 PROGRAMMING/CODING EMPHASIS LEVEL I **FREE** **TERM: FALL** **CREDIT: .5**

Introduction to Computer Science offers students the opportunity to explore three distinct areas in computer science: programming, networking, and information security. Students will develop knowledge and skills in computational thinking and problem solving; data and information; algorithms and programs; computers and communications; and community, global, and ethical impacts. Emphasis is placed on making real-world connections between students, course topics, and programming in the field of computer science. **Prerequisites:** None

465020 PROGRAMMING/CODING EMPHASIS LEVEL II **FREE** **TERM: SPRING** **CREDIT: .5**

This course expands upon the concepts covered in the Introduction to Computer Science (Level 1) course and places significant emphasis on developing proficiency in computer programming/coding. Students will learn to analyze problems and develop solutions to those problems in a collaborative learning environment. Multiple technologies will be engaged in order to equip students with fluencies that will enable them to adapt to the constantly-changing field of computer science. **Prerequisites:** None

465210 CYBERSECURITY EMPHASIS LEVEL I **FREE** **TERM: FALL** **CREDIT: .5**

These beginner level computer science courses offer students the opportunity to explore three distinct areas in computer science: programming, networking, and cybersecurity. This course emphasizes the cybersecurity component in the context of the other two components. Students will develop knowledge and skills in computational thinking and problem solving; data and information; algorithms and programs; computers and communications; and community, global, and ethical impacts.

Level I coursework focuses on introducing students to basic concepts and helping them make real-world connections between course topics and cybersecurity in the field of computer science. **Prerequisites:** None

465220 CYBERSECURITY EMPHASIS LEVEL II **FREE** **TERM: SPRING** **CREDIT: .5**

Level II coursework focuses on guiding students to deeper comprehension of cybersecurity concepts and helping them make real-world connections between course topics and cybersecurity in the field of computer science. **Prerequisites:** None

465230 CYBERSECURITY EMPHASIS LEVEL III **FREE** **TERM: FALL** **CREDIT: .5**

These intermediate level computer science courses offer students the opportunity to explore three distinct areas in computer science: programming, networking, and cybersecurity. Students will develop knowledge and skills in computational thinking and problem solving; data and information; algorithms and programs; computers and communications; and community, global, and ethical impacts.

Level III coursework focuses on guiding students to application of cybersecurity concepts and helping them make real-world connections between course topics and cybersecurity in the field of computer science. **Prerequisites:** None

465240 CYBERSECURITY EMPHASIS LEVEL IV **FREE** **TERM: SPRING CREDIT: .5**

Level IV coursework focuses on guiding students to application and analysis of cybersecurity concepts and helping them make real-world connections between course topics and cybersecurity in the field of computer science. **Prerequisites:** None

465250 ADVANCED CYBERSECURITY LEVEL I **(WEIGHTED CREDIT)** **FREE** **TERM: FALL CREDIT: .5**

This advanced level computer science course focuses on the skills necessary to identify, understand, and analyze threats to the digital and physical security of systems. Students will explore, apply, and advance toward mastery of the design and implementation of security protocols and policies. Students will ensure system and data integrity through troubleshooting, administration, auditing, and efficiency. Students will accomplish tasks and solve problems independently and collaboratively with the tools and skills needed to be successful in college and careers. **Prerequisites:** None

465260 ADVANCED CYBERSECURITY LEVEL II **(WEIGHTED CREDIT)** **FREE** **TERM: SPRING CREDIT: .5**

The level II advanced course will expand upon concepts learned in level I for application and demonstration. Students will accomplish tasks and solve problems independently and collaboratively with the tools and skills needed to be successful in college and careers. **Prerequisites:** None

ENGLISH LANGUAGE ARTS

410000 ENGLISH 9 **$100 (PER .5 UNIT)** **TERM: YEAR CREDIT: 1**

Students study various forms of literature that deal with the universal problems of human nature. Students develop skills in reading, writing, analysis, critical thinking, communication, and organization while building understanding of vocabulary and literary terminology. The course introduces students to the requirements and expectations of essay writing and offers the opportunity to write in various text types and for a variety of purposes.

411000 ENGLISH 10 **$100 (PER .5 UNIT)** **TERM: YEAR CREDIT: 1**

This course emphasizes the development of the core language arts components of reading, writing, speaking, and listening. Students analyze classic works of literature including plays, non-fiction, poetry, and short stories to understand the contexts in which the works were written. Class activities are designed to help students master the skills needed to meet state standards as well as to be successful in their future endeavors.

412000 ENGLISH 11 **$100 (PER .5 UNIT)** **TERM: YEAR CREDIT: 1**

In English 11 students will analyze works of poetry, short stories, drama, and speech from pre-colonial period to the present, emphasizing the philosophical, historical, political, and cultural movements of those eras. Students will study literary terminology as well as conventions of fiction and nonfiction and produce MLA-formatted works using research skills gained in this course.

413000 ENGLISH 12 **$100 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

This course is broken into four units of thematic study. Each unit allows students to analyze the political, social, economic, and cultural messages of the time as well as the relevance of the literary works to the world students live in today. As they read, students consider the work's structure, style, and themes as well as the use of elements such as figurative language, imagery, symbolism, and tone. Students will write in several forms about a variety of subjects in contexts designed to help them become increasingly aware of themselves as writers and of the techniques employed by the writers they read. Students will gain research skills, and in particular, the ability to evaluate, use, and cite primary and secondary sources. Students will cite sources using MLA Format.

414210 PROFESSIONAL COMMUNICATION **$80** **TERM: FALL & SPRING** **CREDIT: .5**

Professional Communication (0.5 Credit) will provide students with an understanding of the dynamics of effective communication while speaking, listening, and responding in the situations they will encounter in career settings. Students will practice the principles of communication competencies in professional settings, demonstrate the effect of intrapersonal and interpersonal communication of professional relationships, participate in collaborative communication activities that mirror the contemporary workplace, and deliver a variety of informal talks and addresses relevant to the business world. This course will include but is not limited to ethical communication, responsible social media usage, communication barriers, mass media, conflict resolution, leadership styles, business etiquette, and job interviews. Professional Communication (0.5) fulfills the 0.5 unit of Oral Communication required for graduation. Professional Communication (0.5 Credit) does not require Arkansas Department of Education approval.

415000 JOURNALISM I **$60 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

Understanding the role of the free press in America helps us to be better informed and more able to analyze media. In this course, students will explore the history of journalism in the United States from its inception in the colonies and its key role in the first amendment, all the way up to present day issues regarding "right to know" and the changing landscape of journalistic media in the 21st century. Students will acquire the skills and information needed to actively participate in the consumption, analysis, and creation of news media and will have the opportunity to investigate the constantly evolving career opportunities within the field of journalism.

FINE ARTS

450000 VISUAL ART I **$60 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

Visual Art I is a two-semester course designed to teach students to apply the elements of art and the principles of design to the creative process. Students are expected to use a variety of media, techniques, processes and tools to compose original works of art that demonstrate understanding of the elements of art and principles of design, awareness of aesthetic concerns and the ability to communicate ideas through artwork. Students will critique and reflect on their artwork and the art of others. Students will exhibit artwork and will assemble portfolios that demonstrate successful completion of Visual Art I student learning expectations. Students may not be enrolled in the second semester of Visual Art I unless they are transferring from another district and had the first semester of Visual Art I at the prior district.

453100 VISUAL ART APPRECIATION **$80** **TERM: FALL & SPRING** **CREDIT: .5**

Visual Art Appreciation is a one-semester course designed to develop perceptual awareness and aesthetic sensitivity, as well as a foundation for a lifelong relationship with the arts. Students will learn the elements of art and principles of design; explore the basic processes, materials, and inherent qualities of visual art; examine a broad range of methods; conduct critical analyses of the creative processes involved in the various art forms; and reflect on the connections between society and visual art. The Standards

for Accreditation require schools to offer a one-half unit of survey of fine arts or one-half unit of an advanced art or advanced music course. Visual Art Appreciation may be used to fulfill this requirement. Visual Art Appreciation also fulfills the requirement for one-half unit of fine arts for graduation.

550010 TODAY'S AMERICAN ART: EXPLORING THE FUNDAMENTALS OF ART **$60** **TERM: FALL** **CREDIT: .5**

In this course, you'll explore the works of several contemporary artists who employ a variety of techniques. You'll experiment with these artists' techniques, ideas, and concepts by creating artworks of your own, inspired by their work. These experimental art projects will help you find a concept or theme that you'll develop for a class art exhibition. Get ready to play with new ideas, create, have fun, and talk with other students about the process of making art! **ABOVE STATE REQUIREMENTS**.

553010 EXPLORING PERSONAL AND NATIONAL IDENTITY THROUGH ART **$60** **TERM: SPRING** **CREDIT: 5**

Brought to you by the Crystal Bridges Museum of American Art in Bentonville, Arkansas, this course is full of amazing artwork, fun activities and lots of opportunities to develop your ideas about your own identity and American identity. There is something unique about the United States of America. It is a country, but "America" also represents an ideal that encompasses people's dreams and ambitions. In this course, you will learn to see and understand art in context, and you will share your own perspectives on being American in two personally curated exhibits. Join us as we explore what it means to be American and how artists express the American experience through art. **ABOVE STATE REQUIREMENTS**.

MATHEMATICS

430000 ALGEBRA I **$100 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

The skills you'll acquire in Algebra 1 contain the basic foundation students need for all high school math courses. Students develop algebraic fluency by learning the skills needed to solve equations and perform manipulations with numbers, variables, equations, and inequalities. Upon completion, students will possess the skills and strategies needed for solving real-world applications in multiple real-life scenarios from sports and travel to business and health.

431000 GEOMETRY **$100 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

Geometry has been used by man since the beginning of time. The ancient pyramids are based on geometrical design. Geometry is everywhere, not just in pyramids. Engineers use geometry to build highways and bridges. Artists use geometry to create perspective in their paintings, and mapmakers help travelers find things using the points located on a geometric grid. Throughout this course, students travel a mathematical highway illuminated by spatial relationships, reasoning, connections, and problem solving. **Prerequisite:** Algebra I or Algebra AB

432000 ALGEBRA II **$100 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

This course builds on knowledge and skills gained from Algebra 1. Starting with a review of basic algebra, students will travel through quadratic equations, systems of equations, factoring, and polynomial functions. In the second segment, students will venture into the realms of radicals, rational equations, matrices, exponential and logarithmic relations, and land at sequences and series. This course allows students to learn while having fun. Interactive examples help guide students' journey through customized feedback and praise. **Prerequisite:** Algebra I

439050 ADVANCED TOPICS AND MODELING IN MATHEMATICS $80 (PER .5 UNIT) **TERM: YEAR CREDIT: 1**

This course builds on Algebra I, Geometry, and Algebra II to explore mathematical topics and relationships beyond Algebra II. Emphasis will be placed on applying modeling as the process of choosing and using appropriate mathematics and statistics to analyze, to better understand, and to improve decisions in analyzing empirical situations. Collection and use of student-generated data should be an aspect of the course. Students will represent and process their reasoning and conclusions numerically, graphically, symbolically, and verbally. Students will be expected to use technology, including graphing calculators, computers, and data gathering equipment throughout the course. **Prerequisites:** Algebra I, Geometry, Algebra II.

439120 QUANTITATIVE LITERACY $80 (PER .5 UNIT) **TERM: YEAR CREDIT: 1**

Quantitative literacy further builds on the knowledge and skills mastered in Algebra 1 by exploring and making connections between mathematical topics and the real world. Throughout the course, students will learn to make decisions, evaluate outcomes, and communicate results by choosing, modeling, and using appropriate mathematics and statistics. Students will represent and process their reasoning while gaining proficiency with mathematical technology. Emphasis is placed on areas of personal and business finance. **Prerequisite:** Algebra I

TEACHER-FACILITATED MATH

Teacher Facilitated courses are true asynchronous online courses. The primary means of communication, instruction, and feedback is online. Whereas Virtual Arkansas Teacher Led courses fit a hybrid model of instruction and provide live interactive Zoom sessions with the teacher. Teacher Facilitated courses do not provide these live interactive sessions. Students who take Teacher Facilitated courses should be highly motivated, have the ability to self-direct via independent study, and should select the course due to interest in the topic and coursework.

433000 PRE-CALCULUS $100 (PER .5 UNIT) **TERM: YEAR CREDIT: 1**

Pre-Calculus will emphasize a study of trigonometric functions and identities as well as applications of right triangle trigonometry and circular functions. Students will use symbolic reasoning and analytical methods to represent mathematical situations, express generalizations, and study mathematical concepts and the relationships among them. Students will use functions and equations as tools for expressing generalizations. Pre-Calculus does not require Arkansas Department of Education approval.
Prerequisites: Algebra I, Geometry, Algebra II

PHYSICAL EDUCATION AND HEALTH

480000 HEALTH AND WELLNESS $100 **TERM: FALL & SPRING CREDIT: .5**

Each day, hundreds of decisions are made that have a huge impact on personal life. Making good decisions becomes easier for those who are well informed before making those decisions that affect their overall health. Being equipped with the correct information will empower student's real life issues dealing with human growth, development, disease prevention, community health access, forming healthy relationships, substance use and abuse, personal health/safety, nutrition and physical fitness.

SCIENCE

420000 BIOLOGY – INTEGRATED **$100 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

The Arkansas K-12 Science Standards for biology - integrated is an integrated science course that focuses on conceptual understanding of foundational life and Earth science core ideas, science and engineering practices, and crosscutting concepts, and is an integration of life science, Earth and space science, and engineering design standards. It is recommended that students be enrolled in Geometry concurrently with this course. Students will earn 1 unit of Smart Core/biology credit for graduation.

421000 CHEMISTRY – INTEGRATED **$100 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

The Chemistry – Integrated is an integrated science course that focuses on conceptual understanding of the foundational chemistry and physics core ideas, science and engineering practices, and crosscutting concepts and is composed of chemistry, physics, Earth and space science, and engineering design standards. It is recommended that students be enrolled in Algebra II concurrently with this course. Students will earn a 1 unit of Smart Core/chemistry credit for graduation.

423000 PHYSICAL SCIENCE – INTEGRATED **$100 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

Physical Science - Integrated is an integrated science course that focuses on conceptual understanding of foundational core ideas, science and engineering practices, and crosscutting concepts, and is composed of physical science, Earth and space science, life science, and engineering design standards. Students will earn 1 unit of Smart Core/physical science credit for graduation. It is recommended that students be enrolled in Algebra I concurrently with this course. Students in physical science - integrated continue to develop their understanding of the core ideas in the physical, life, and earth and space sciences learned in middle school. These ideas include the most fundamental concepts from chemistry, physics, biology, and Earth and space science but are intended to leave room for expanded study in upper-level high school courses.

424020 ENVIRONMENTAL SCIENCE **$100 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

Environmental science is an integrated science course that continues to develop conceptual understanding of the interactions in Earth science, physical science, and life science systems. The standards for environmental science engage students in the core ideas, scientific and engineering practices, and crosscutting concepts to support the development of knowledge that can be applied to understanding, explaining, and improving human interactions with Earth systems and resources. There are strong connections to mathematical practices of analyzing and interpreting data with creating mathematical and computational models. Students will earn 1 Core requirement/career focus credit.

424030 HUMAN ANATOMY AND PHYSIOLOGY **$100 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

Human Anatomy and Physiology continues to develop conceptual understanding of the core ideas, science and engineering practices, and crosscutting concepts in Biology - Integrated. This is a career-focused course for students interested in medical professions and related fields. Human Anatomy and Physiology is an upper division life science course where students will study the structure, basic functions, and common disorders of the human body. The course will concentrate on the major systems of the body: integumentary, skeletal, muscular, respiratory, circulatory, digestive, nervous, endocrine, lymphatic, urinary, and reproductive.

SOCIAL STUDIES

470000 UNITED STATES HISTORY SINCE 1890 **$100 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

Students receive a strong foundation in United States History from pre-colonialism through the Progressive Era, allowing United States History since 1890 to focus in greater

depth on the effects of changing culture, technology, world economy, and environment, as well as the impact of global conflicts on contemporary society in the United States. The desired outcome of this course is for students to develop an understanding of the cause-and-effect relationship between past and present events, recognize patterns of interactions, and understand the impact of events in the United States within an interconnected world. United States History Since 1890 examines the emergence of the United States as a world power to the present. Students will examine the political, economic, geographic, social, and cultural development of the United States of America from the late nineteenth century into the twenty-first century. United States History Since 1890 references the eras and time periods from The National Center for History in the Schools.

471000 WORLD HISTORY SINCE 1450 **$100 (PER .5 UNIT)** **TERM: YEAR CREDIT: 1**

World History 9-12 provides an in-depth study of the history of human society from Era 6: Emergence of First Global Age 1450-1770 to Era 9: Contemporary World since 1945. World History is designed to assist students in understanding the human condition, how people and countries of the world have become increasingly interconnected across time and space, and the ways different people view the same event or issue from a variety of perspectives. This course develops an understanding of the historical roots of current world issues, especially as they pertain to international/global relations. It requires an understanding of world cultures and civilizations, including an analysis of important ideas, social and cultural values, beliefs, and traditions. Knowledge of past achievements and failures of different peoples and nations provides citizens of the 21st century with a broader context within which to address the many issues facing our nation and the world. World History references the eras and time periods from The National Center for History in the Schools.

472000 CIVICS **$100** **TERM: FALL & SPRING CREDIT: .5**

The focus of Civics is the application of civic virtues and democratic principles and investigation of problem solving in society. This course provides a study of the structure and functions of federal, state, and local government. Civics also examines constitutional principles, the concepts of rights and responsibilities, the role of political parties and interest groups, and the importance of civic participation in the democratic process.

474300 ECONOMICS WITH PERSONAL FINANCE **$100** **TERM: FALL & SPRING CREDIT: .5**

One-semester Economics for Grades 9-12 emphasizes economic decision making. Students will explore the interrelationships among consumers, producers, resources, and labor as well as the interrelationships between national and global economies. Additionally, students will examine the relationship between individual choices and the direct influence of these choices on occupational goals and future earning potential.

474400 PSYCHOLOGY **$80** **TERM: FALL & SPRING CREDIT: .5**

Psychology is a social studies elective course that introduces students to the science of behavior and mental processes. It includes an overview of the history of psychology as well as an opportunity to study individual and social psychology and how the knowledge and methods of psychologists are applied to the solution of human problems. The content of this course includes human development; biological bases of behavior; sensation and perception; learning, memory, and cognition; behavior patterns; and psychological disorders and their treatments. This course focuses on practical everyday application of the content.

474500 SOCIOLOGY **$80** **TERM: FALL & SPRING CREDIT: .5**

Sociology consists of two nine weeks units. This course introduces students to the social systems that are the foundation of society. An emphasis is placed on culture, social status, social institutions, and social problems, as well as resulting behaviors. Using the tools and techniques of sociologists, students will examine the causes, consequences, and possible solutions for various social issues. Students will read major sociological theorists as well as consider how sociologists approach issues.

WORLD LANGUAGES

440000 SPANISH I **$80 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

Spanish I students learn how to greet people, introduce themselves, and speak about their home, family, school, and community. As students learn basic vocabulary and grammar skills, they expand on their knowledge and learn to communicate about more complex topics such as weather, sports, entertainment and leisure activities. The course introduces new words and phrases with pictures, audio clips, and examples. Students learn basic Spanish grammar to help them build fluency and understand the structure of the Spanish language.

440020 SPANISH II **$80 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

Spanish II is a year-long course. The purpose of the course is to strengthen Spanish listening, speaking, reading, and writing skills. Students will learn practical communication skills, based on the Can-Do statements published by the American Council on the Teaching of Foreign Languages (ACTFL). The goal of the course is for all students to reach the Novice-High level of proficiency in speaking, listening, reading, and writing. The course meets all requirements set forth in the Arkansas Modern Languages framework for second-year language.

In Spanish II, students will participate in a range of collaborative and communicative tasks. They will explore the Spanish language and also the history and cultures of Spanish-speaking countries. Students will contribute regularly to spoken and written discussions, and will provide feedback to one another on the insights that they share. Student progress will be marked on rubrics designed around the ACTFL proficiency standards for speaking and writing.

Prerequisite: Students may be evaluated and placed based on their individual ability, regardless of how, when, or where they reached that ability level.

440030 SPANISH III **$80 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

Spanish III is an elective course that emphasizes oral and written expression to promote more proficient Spanish communication skills. It includes the review and expansion of essential Spanish grammar and vocabulary necessary for advanced communication. Cultural and literary selections are read and discussed. Compositions reflect comprehension and an increasing understanding of the complexities of the language and vocabulary. Aural comprehension is emphasized. The course is defined by the content standards of the Arkansas Foreign Language Curriculum Framework for Spanish III and includes applications, problem solving, higher-order thinking skills, and performance-based, open-ended assessments with rubrics.

Prerequisite: Students may be evaluated and placed based on their individual ability, regardless of how, when, or where they reached that ability level.

TEACHER-FACILITATED SPANISH IV

440040 SPANISH IV **$80 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

The course is completely immersive and students are expected to read, write, and speak Spanish with moderate level skill. Students will engage in intense language acquisition through listening, reading, speaking, writing, and culture. Students are encouraged to communicate in Spanish using vocabulary and grammar from previous levels of study. Students will perform assessments and create projects to build upon and improve communication skills in the Spanish language. Students will also work to analyze, debate, and discuss a variety of contemporary issues and texts in Spanish to build interpretive listening and reading skills and to refine interpersonal and intercultural competence in speaking and writing.

441000 FRENCH I **$80 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

Students will begin to develop the skills needed to communicate effectively in the French language and develop an in-depth awareness of the various French-speaking cultures. Upon successful completion of this course students will be able to understand elementary spoken French; use vocabulary for practical, everyday use; strive to speak with comprehensible pronunciation; read and write simple French sentences; and discuss and demonstrate appreciation for Francophone cultures.

441010 FRENCH II **$80 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

In this course, students will build on skills developed in French I and continue to work on communicating effectively in the French language and increasing awareness of French-speaking cultures. Upon successful completion of this course, students will be able to understand spoken French at the novice level; use vocabulary for practical, everyday use; speak with comprehensible pronunciation; read and write simple French paragraphs; discuss and demonstrate an appreciation for Francophone cultures. **Prerequisite:** Students may be evaluated and placed based on their individual ability, regardless of how, when, or where they reached that ability level.

442000 GERMAN I **$80 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

German I stresses correct pronunciation, aural comprehension, and simple speaking ability. As communication skills develop, the course includes additional vocabulary and basic grammar necessary for limited reading and writing. The course is defined by the content standards of the Arkansas Foreign Language Curriculum Framework and includes applications, problem solving, higher-order thinking skills, and performance-based, open-ended assessments with rubrics.

442010 GERMAN II **$80 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

German II develops and expands the fundamental skills introduced in German I. Speaking exercises facilitate oral communication. Additional vocabulary and grammar are introduced to lead to more advanced reading and writing. Authentic reading materials and audio-video recordings enrich instruction. The course is defined by the content standards of the Arkansas Foreign Language Curriculum Framework and includes applications, problem solving, higher-order thinking skills, and performance-based, open-ended assessments with rubrics. **Prerequisite:** Students may be evaluated and placed based on their individual ability, regardless of how, when, or where they reached that ability level.

449010 AMERICAN SIGN LANGUAGE I **$80 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

ASL I provides an introduction to the basic skills in production and comprehension of American Sign Language. The course focuses on the alphabet, numbers, fingerspelling, vocabulary, and grammar which will lead to increased communicative and cultural proficiency in ASL. The culture, history, current events and traditions of the Deaf community are introduced through selected readings, visual recordings, and other authentic materials. Visually attending, signing, individual feedback, and group activities are designed to instruct, reinforce, connect language skills, and develop signacy. This course will include applications, problem solving, higher-order thinking skills, and performance-based and project-based assessments. The goal is to be able to carry on a short conversation with another student by the end of the course. Also, students will develop the practical skills and knowledge necessary for basic interactions within the deaf community.

449020 AMERICAN SIGN LANGUAGE II **$80 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1**

Students will build upon the skills that were taught in ASL I and continue to increase their ability to comprehend and respond with increasing accuracy to expressive American Sign Language. ASL II provides basic instruction in production and comprehension, vocabulary, and grammar, and eventually leads to increased communicative and cultural proficiency in ASL. Emphasis is placed on the progressive development of expressive and receptive skills. The culture, history, current events, and traditions of the Deaf community are introduced on the appropriate level through selected readings, visual recordings, and other authentic materials. Visually attending, signing, individual

feedback, interactive activities and group activities are designed to instruct, reinforce, connect language skills, and develop signacy. This course includes applications, problem solving, higher-order thinking skills, and performance-based and project-based assessments. Students will be able to converse with another student or individuals within the Deaf community with emphasis on appropriate language used in common communication settings.

Prerequisite: Students may be evaluated and placed based on their individual ability, regardless of how, when, or where they reached that ability level.

AGRICULTURE, FOOD and NATURAL RESOURCES

PROGRAM OF STUDY: AGRIBUSINESS SYSTEMS

49103V AGRIBUSINESS MANAGEMENT (LEVEL II) **$60 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1** **GRADES: 10-12**

This course covers the principles of agribusiness including ways of doing business in a free market economic system, entrepreneurship, business start-up, business plans, management, facility needs, legal aspects and tax responsibilities, personnel, and ethics.

ARTS, A/V, COMMUNICATION AND TECHNOLOGY

PROGRAM OF STUDY: COMMERCIAL PHOTOGRAPHY

49435V DIGITAL PHOTOGRAPHY I (LEVEL I) **$80 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1** **GRADES: 9-12**

This core introductory program is designed to provide practical knowledge and skill in preparation for a career in photography.

49437V DIGITAL PHOTOGRAPHY II (LEVEL II) **$60 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1** **GRADES: 10–12**

This core production based program is designed to provide the second year photography student with fine-tuned knowledge and skills.
Prerequisite: Fundamentals of Photography

49438V DIGITAL PHOTOGRAPHY III (LEVEL III) **$60 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1** **GRADES: 11-12**

This independent production based program is designed to provide the advanced photography student with practical knowledge and highly advanced skills for a comprehensive career in photography.
Prerequisite: Intermediate Photography

CAREER EXPLORATION AND PREPARATION

49388V COLLEGE AND CAREER READINESS (SUPPLEMENTAL) **$80** **TERM: FALL** **CREDIT: .5** **GRADES: 9-12**

College and Career Readiness is a one-semester (.5 credit) course. It is designed to provide the student with the necessary skills to evaluate fundamental employment ready skills and what they need from education to be prepared to refine their choices through a decision-making process and master the skills most needed by 21st century employers. The course is recommended to be taken the first semester of the senior year to allow counselors working with seniors to prepare for graduation and college preparation. Students will assess labor market information, personal academic and career ready potential, and make application to postsecondary institutions. This course will use the Career Ready 101 curriculum to prepare students to take the ACT WorkKeys assessments to earn the Arkansas Career Readiness Certificate. **Important Note:** WorkKeys assessments covering Applied Math, Workplace Documents, and Graphic Literacy will be required tasks for students enrolled in this course. Successful completion of exams, and contingent on the score earned, will allow students the opportunity to earn a National Career Ready Certificate.

49390V CAREER READINESS (SUPPLEMENTAL) **$80** **TERM: SPRING** **CREDIT: .5** **GRADES: 9-12**

Career Readiness is a one-semester (.5 credit) course. It is designed to provide the student with the necessary skills to evaluate who they are, what they need in a career,

research postsecondary options and career information. The major goal of Career Readiness is to engage students to develop characteristics and skills employers most desire. Students will evaluate personal traits for a better understanding of self in their pursuit of finding a meaningful, fulfilling and rewarding career then compare their traits to the characteristics employers expect for the purpose of identifying and developing the lacking skills. This course uses the Career Ready 101 curriculum to teach the 21st Century SCANS skills but does not include the WorkKeys skills from College and Career Readiness. This course supplements 493880.

49391V WORK READY (SUPPLEMENTAL) **$80** **TERM: FALL & SPRING** **CREDIT: .5** **GRADES: 9-12**

Work Ready was formally titled Career Ready 101 Online and is a (.5 credit) course option to 493880 and 493900 that can count as an elective to complete any Career and Technical Education Program of Study. The major goal of Work Ready is to engage students in digital learning to meet ACT 1280 and to prepare for postsecondary education. This course contains the CR101 curriculum WorkKeys Skills--Locating Information, Applied Math and Reading for Information found in the College and Career Readiness Course (493880). It also contains key Career Skills found in the Career Readiness Course (493900). It is designed to provide students with the necessary skills to evaluate who they are, what they need in a career, and research postsecondary options and career information. This course is an alternative option for 493880 and 493900 and should not be taken in conjunction with either of the two since it is duplicative in the Career Preparation curriculum in many areas. **Important Note:** WorkKeys assessments covering Applied Math, Workplace Documents, and Graphic Literacy will be required tasks for students enrolled in this course. Successful completion of exams, and contingent on the score earned, will allow students the opportunity to earn a National Career Ready Certificate.

EDUCATION AND TRAINING

PROGRAM OF STUDY: EDUCATION AND TRAINING

49302V LIFE SPAN DEVELOPMENT (LEVEL I) **$100 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1** **GRADES: 9-12**

ACE is developing the course description and standards for this Level I course in Education and Training Program of Study. As soon as these are released, we will update the course catalog.

FINANCE

PROGRAM OF STUDY: ACCOUNTING

49212V SURVEY OF BUSINESS (LEVEL I) **$80 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1** **GRADES: 9-12**

Survey of Business is designed to introduce students to business and marketing programs of study and related technology to help students succeed in business and marketing careers. The clusters and related programs of study are: Business Management & Administration: Management, Medical Office Administration, and Office Administration; Finance: Accounting, Banking, and Securities, Investments, Risk and Insurance; Hospitality and Tourism: Hospitality and Tourism; Marketing: Marketing and Entrepreneurship; Information Technology: Web Technologies and Social Media and Communications; and Transportation, Distribution, and Logistics: Supply Chain and Logistics. Using industry recognized software, students will focus on skills in word processing, spreadsheets, database, presentations, and cloud computing as they relate to business and marketing careers. This course will focus on skills needed to obtain Microsoft Office Specialist (MOS) certifications.

49210V COMPUTERIZED ACCOUNTING I (LEVEL II) **$60 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1** **GRADES: 9-12**

Computerized Accounting I is a two-semester course with emphasis on basic accounting principles as they relate to both manual and computerized financial systems. Instruction is on an integrated basis using computers and electronic calculators as the relationships and processes of manual and computerized accounting are presented. Entry-level skills in the accounting occupations can be attained.

49211V COMPUTERIZED ACCOUNTING II (LEVEL III) **$60 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1** **GRADES: 10-12**

CAN FULFILL A CORE FOURTH MATHEMATICS REQUIREMENT, COUNTS AS A CAREER FOCUS CREDIT UNDER THE SMART CORE

Computerized Accounting II is a two-semester course designed to provide students with the knowledge, understanding, and skill necessary for successful careers in accounting. Partnership as well as departmental, corporate, and cost accounting systems are components of the course. Emphasis is given to the computerized/automated functions in accounting. **Prerequisite:** Computerized Accounting I. Can count as Beyond Algebra II for purposes of Smart Core.

HEALTH SCIENCE

PROGRAM OF STUDY : MEDICAL PROFESSIONS OR SPORTS MEDICINE

49405V FOUNDATIONS OF SPORTS MEDICINE (LEVEL I) **$60 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1** **GRADES: 9-12**

This course provides students with a general overview of sports medicine and its history from the perspective of the healthcare community that includes injury prevention, treatment, rehabilitation, psychosocial, and administration concerns. Students will gain an understanding of sports medicine and the role it plays in the athletic community.

49529V PATHOLOGY (LEVEL III) **$60** **TERM: FALL & SPRING** **CREDIT: .5** **GRADES: 9-12**

This course is devoted to the exploration of human pathology. Pathology is the branch of medical science that studies the causes, nature, and effects of diseases. This course of study begins with an introduction to pathology terminology, predisposing factors of diseases, diagnosis, prognosis, and disease treatments. Following the introduction, the course proceeds into a study of the immune system, then goes into infectious diseases and their transmission. Other types of diseases, such as genetic disorders, cancer, and reproductive pathology are also studied.
Recommended for student success: This course is designed for students who have an interest in medical topics and who enjoy science.
Prerequisite: Students should have completed one semester of Biology.

42403V HUMAN ANATOMY AND PHYSIOLOGY (LEVEL II) **$60 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1** **GRADES: 9-12**

This full year course provides an introduction to Human Anatomy and Physiology, exploring the structure and function of human body parts and how they function together. It also explores what happens when these parts do not function correctly. It begins with a study of anatomical terms and organization of the human body, and then proceeds to body chemistry, cells, cellular metabolism, and tissues. After this, it continues on to a study of bones and muscles, then to various other body systems.
Prerequisite: Students should have credit for both semesters of Biology

49532V HUMAN BEHAVIOR AND DISORDERS (LEVEL III) **$60** **TERM: SPRING** **CREDIT: .5** **GRADES: 9-12**

This course focuses on normal behavior and personality, abnormal behavior and personality, and behavior disorders and the therapies used to treat those disorders and abnormalities.

49535V FOUNDATIONS OF HEALTH CARE (LEVEL I) **$80 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1** **GRADES: 9-12**

This course is designed to introduce students to medical professions and the basic foundational skills for first aid and the treatment of patients. Along with Anatomy and Physiology, this is a foundation core course for subsequent education and training in health services. This course is a revised combination of Introduction to Medical Professions and Medical Procedures.

49536V MEDICAL TERMINOLOGY (LEVEL III) **$60** **TERM: FALL & SPRING** **CREDIT: .5** **GRADES: 9-12**

Terminology is a one semester course that assists students in developing the language used for communication in the health care profession.
Prerequisite: Biology

49537V ABNORMAL PSYCHOLOGY (LEVEL III) **$60** **TERM: FALL** **CREDIT: .5** **GRADES: 9-12**

This course provides a basic survey of maladaptive human behavior. Major psychological disorders, their causes, symptom behaviors, cultural influences, and relevant treatment approaches are discussed. Included topics are historical medical background, perspectives of treatment of the mentally ill, fundamental definitions, causes of anxiety disorders, disorders of mood, personality disorders, disorders of thought, including schizophrenia, substance- related disorders, and domestic violence. Legal, ethical, and social issues relating to the medical professional's role in treating psychological disorders are explored.

HOSPITALITY and TOURISM

PROGRAM OF STUDY: HOSPITALITY AND TOURISM

49212V SURVEY OF BUSINESS (LEVEL I) **$80 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1** **GRADES: 9-12**

Survey of Business is designed to introduce students to business and marketing programs of study and related technology to help students succeed in business and marketing careers. The clusters and related programs of study are: Business Management & Administration: Management, Medical Office Administration, and Office Administration; Finance: Accounting, Banking, and Securities, Investments, Risk and Insurance; Hospitality and Tourism: Hospitality and Tourism; Marketing: Marketing and Entrepreneurship; Information Technology: Web Technologies and Social Media and Communications; and Transportation, Distribution, and Logistics: Supply Chain and Logistics. Using industry recognized software, students will focus on skills in word processing, spreadsheets, database, presentations, and cloud computing as they relate to business and marketing careers. This course will focus on skills needed to obtain Microsoft Office Specialist (MOS) certifications.

49226V TOURISM INDUSTRY MANAGEMENT (LEVEL II) **$60 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1** **GRADES: 9-12**

The content includes but is not limited to customer service, management and supervisory development, management theory, decision making, organization, communications, human relations, leadership training, personnel training, travel counseling, reservationists, ticketing, tour development, security, sales, travel and tourism accounting, marketing, and convention management, applicable local, state, and federal laws and asset management.

49223V ARKANSAS HOSPITALITY AND TOURISM (LEVEL III) **$60** **TERM: SPRING** **CREDIT: .5** **GRADES: 9-12**

Arkansas Tourism is a one-semester course designed to familiarize students with Arkansas careers in hospitality and the opportunities available to promote travel and tourism in the state. Emphasis will be on the food industry, transportation industry, lodging industry, and tourist attractions within the various geographical locations in the state.

HUMAN SERVICES

PROGRAM OF STUDY: FAMILY CONSUMER SERVICES

49219V FASHION MERCHANDISING (SUPPLEMENTAL) $60 **TERM: FALL & SPRING CREDIT: .5 GRADES: 9-12**

Fashion Merchandising is a one-semester course designed to offer an overview of the fashion industry. It provides the foundation in preparing students for a wide range of careers available in the different levels of the fashion industry. Emphasis is given to historical development, textiles, manufacturers, merchandising, domestic and foreign markets, accessories, and retailing.

49199V PERSONAL FINANCE (SUPPLEMENTAL) $80 **TERM: FALL & SPRING CREDIT: .5 GRADES: 10-12**

This is a one-semester course designed to increase financial literacy and prepare students to successfully manage financial resources. This course also focuses on the individual's role and financial responsibilities as a student, citizen, consumer, and active participant in the business world. Emphasis is also placed also on activities and competitions within career technical student organizations (i.e., FBLA, FCCLA,and DECA)

INFORMATION TECHNOLOGY

PROGRAM OF STUDY: COMPUTER SCIENCE PROGRAMMING

PROVIDED AT NO COST UNDER GOVERNOR HUTCHINSON'S COMPUTER SCIENCE AND COMPUTING INITIATIVE

*****ALL STUDENTS ENROLLED IN CYBERSECURITY LEVELS I, II, III, OR IV MUST OBTAIN A FREE STUDENT ACCOUNT AT TRINKET BY VISITING HTTPS://TRINKET.IO/SIGNUP.*****

46501V PROGRAMMING/CODING EMPHASIS I LEVEL I FREE **TERM: FALL CREDIT: .5**

Introduction to Computer Science offers students the opportunity to explore three distinct areas in computer science: programming, networking, and information security. Students will develop knowledge and skills in computational thinking and problem solving; data and information; algorithms and programs; computers and communications; and community, global, and ethical impacts. Emphasis is placed on making real-world connections between students, course topics, and programming in the field of computer science. **Prerequisites:** None

46502V PROGRAMMING/CODING EMPHASIS II LEVEL I FREE **TERM: SPRING CREDIT: .5**

This course expands upon the concepts covered in the Introduction to Computer Science (Level 1) course and places significant emphasis on developing proficiency in computer programming/coding. Students will learn to analyze problems and develop solutions to those problems in a collaborative learning environment. Multiple technologies will be engaged in order to equip students with fluencies that will enable them to adapt to the constantly-changing field of computer science.

46521V CYBERSECURITY EMPHASIS I LEVEL I FREE **TERM: FALL CREDIT: .5**

These beginner level computer science courses offer students the opportunity to explore three distinct areas in computer science: programming, networking, and cybersecurity. This course emphasizes the cybersecurity component in the context of the other two components. Students will develop knowledge and skills in computational thinking and problem solving; data and information; algorithms and programs; computers and communications; and community, global, and ethical impacts.

Level I coursework focuses on introducing students to basic concepts and helping them make real-world connections between course topics and cybersecurity in the field of

computer science. **Prerequisites:** None

46522V CYBERSECURITY EMPHASIS II LEVEL I **FREE** **TERM: SPRING CREDIT: .5**

Level II coursework focuses on guiding students to deeper comprehension of cybersecurity concepts and helping them make real-world connections between course topics and cybersecurity in the field of computer science. **Prerequisites:** None

46523V CYBERSECURITY EMPHASIS III LEVEL II **FREE** **TERM: FALL CREDIT: .5**

These intermediate level computer science courses offer students the opportunity to explore three distinct areas in computer science: programming, networking, and cybersecurity. Students will develop knowledge and skills in computational thinking and problem solving; data and information; algorithms and programs; computers and communications; and community, global, and ethical impacts.

Level III coursework focuses on guiding students to application of cybersecurity concepts and helping them make real-world connections between course topics and cybersecurity in the field of computer science. **Prerequisites:** None

46524V CYBERSECURITY EMPHASIS IV LEVEL II **FREE** **TERM: SPRING CREDIT: .5**

Level IV coursework focuses on guiding students to application and analysis of cybersecurity concepts and helping them make real-world connections between course topics and cybersecurity in the field of computer science. **Prerequisites:** None

LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY

PROGRAM OF STUDY: CRIMINAL JUSTICE

49462V INTRODUCTION TO CRIMINAL JUSTICE (LEVEL I) **$80 (PER .5 UNIT)** **TERM: YEAR CREDIT: 1 GRADES: 9-12**

This course provides the historical background of the agencies that compose the criminal justice system. It focuses on the development of justice and law, crime and punishment, the administration of laws, the agencies' functions, career orientation and public relations.

49461V CRIMINAL LAW (LEVEL III) **$60 (PER .5 UNIT)** **TERM: YEAR CREDIT: 1 GRADES: 9-12**

This course emphasizes the study of substantive criminal law. Selected crimes most likely to be dealt with by the criminal justice professional are explored through discussion, where applicable, of the English Common Law precedents, general modern application and specific Arkansas Criminal Code.

STEM

PROGRAM OF STUDY: PRE-ENGINEERING

493960 INNOVATIONS IN SCIENCE AND TECHNOLOGY I (LEVEL I) **$100 (PER .5 UNIT)** **TERM: YEAR CREDIT: 1 GRADE LEVELS: 9-12**

This is a broad-based survey course designed to help students understand the field of engineering and engineering technology and its career possibilities. Students will develop engineering problem-solving skills that are involved in postsecondary education programs and engineering careers. They will explore various engineering systems and manufacturing processes.

TRANSPORTATION, DISTRIBUTION, AND LOGISTICS

PROGRAM OF STUDY: AVIATION FLIGHT

49425V FUNDAMENTALS OF FLIGHT (LEVEL I) **$60 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1** **GRADES: 10-12**

This course, the first in a series of three, will introduce students to the field of aviation, with special emphasis placed on becoming a pilot. This course will introduce students to different professions a pilot could pursue. It will also introduce: aircraft structure, principles of flight, flight controls, basic aerodynamics, and various introductory flight maneuvers. A flight training device or required software will be used to provide practical exposure to flight maneuvers.

49426V AIRPORTS, AIRSPACE, AND WEATHER (LEVEL II) **$60 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1** **GRADES: 10-12**

The second course in a series of three will introduce students to aircraft systems, aeronautical charts, airport structure, the national airspace system, basic weather theory, and aviation weather services. Flight maneuvers will be continued and a flight training device will be used to provide practical exposure to the flight maneuvers.
Prerequisite: Fundamentals of Flight

49002V PRIVATE PILOT OPERATIONS (LEVEL III) **$60 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1** **GRADES: 10-12**

The third course in a series of three will introduce students to Aircraft Performance, Flight Manuals, Regulations, Navigation, Aero-medical Factors, and Aeronautical Decision Making. Flight maneuvers and navigation will be introduced. A flight training device will be used to provide practical exposure to flight maneuvers and navigation.
Prerequisite: Fundamentals of Flight and Airports, Airspace, and Weather

49016V UNMANNED AERIAL SYSTEMS I **$100 (PER .5 UNIT)** **TERM: YEAR** **CREDIT: 1** **GRADES 9-12**

This course provides 9th-12th grade students the opportunity to acquire the knowledge and skills needed for jobs in the unmanned aerial systems industry. Students will learn about piloting remotely controlled aircraft, FAA regulations, and to apply the technical skills sought by employers in the workplace. The Part 107 Remote Pilot Knowledge Test will be offered at the conclusion of the course.

ALL OF THE COURSES ARE FOR CONCURRENT CREDIT. A 3 CREDIT HOUR COLLEGE COURSE EQUALS ONE (1) HIGH SCHOOL CREDIT. ALL CONCURRENT CREDIT COURSES ARE $80 PER SEMESTER. Classes are available to high school students who meet the admission requirements and prerequisites for Virtual Arkansas and ATU, as well as prerequisites for the specific course.

ARKANSAS TECH UNIVERSITY FALL 2020 – ATU ACCEPTS ACT, ASPIRE, ACCUPLACER, AND SAT FOR ADMISSION

514000 CONCURRENT CREDIT ORAL COMMUNICATION $80 **ATU COMM 2003 PUBLIC SPEAKING**

Fundamentals of composition, delivery, and logical reasoning. Effective utilization of basic visual aids will be included.

519930 CONCURRENT CREDIT ENGLISH 11 $80 **ATU ENGL 1013 COMPOSITION I**

A review of grammar, introduction to research methods, and practice in writing exposition using reading to provide ideas and patterns. Note: A grade of C or better must be earned in each of the two composition courses used to satisfy the general education requirement of English/Communication.

519940 CONCURRENT CREDIT ENGLISH 12 $80 **ATU ENGL 1013 COMPOSITION I**

A review of grammar, introduction to research methods, and practice in writing exposition using reading to provide ideas and patterns. Note: A grade of C or better must be earned in each of the two composition courses used to satisfy the general education requirement of English/Communication.

539900 CONCURRENT CREDIT BEYOND ALGEBRA II $80 **ATU MATH 1113 COLLEGE ALGEBRA**

Exponents and radicals, introduction to quadratic equations, systems of equations involving quadratics, ratio, proportion, variation, progressions, the binomial theorem, inequalities, logarithms, and partial fractions. Note: A grade of C of better must be earned in this course if being used to satisfy the general education mathematics requirement.

539900 CONCURRENT CREDIT BEYOND ALGEBRA II $80 **ATU MATH 1003 COLLEGE MATH**

The course focuses upon the mathematics of contemporary life. Topics include Planning and Scheduling schemes from Management Science, Data Analysis, Probability and Inference from Statistics, Voting Systems and Division Schemes from the science of Social Choice, and various Growth Models. Note: A grade of C of better must be earned in this course if being used to satisfy the general education mathematics requirement.

549900 CONCURRENT CREDIT FOREIGN LANGUAGE $80 **ATU SPAN 1013 BEGINNING SPANISH I**

Training in the elements of Spanish communication {speaking and writing) and comprehension (listening and reading) within a variety of cultural contexts.

559000 CONCURRENT CREDIT FINE ARTS $80 **ATU ART 2123 EXPERIENCING ART**

This course is designed to provide a background in art and the related processes so that a student may develop powers of observation and thereby respond to a work of art.

579910 CONCURRENT CREDIT WORLD HISTORY $80 **ATU HIST 1503 WORLD HIST TO 1500**

The history of humanity from prehistoric times to the sixteenth century.

579920 CONCURRENT CREDIT AMERICAN HISTORY **$80** **ATU HIST 2003** **U.S. HIST TO 1877**

The study of the development of the American nation to the Civil War and Reconstruction Era.

ARKANSAS TECH UNIVERSITY SPRING 2021 – ATU ACCEPTS ACT, ASPIRE, ACCUPLACER, AND SAT FOR ADMISSION

514000 CONCURRENT CREDIT ORAL COMMUNICATION **$80** **ATU COMM 2003** **PUBLIC SPEAKING**

Fundamentals of composition, delivery, and logical reasoning. Effective utilization of basic visual aids will be included.

519930 CONCURRENT CREDIT ENGLISH 11 **$80** **ATU ENGL 1023** **COMPOSITION II**

A continuation of ENGL 1013 with readings in poetry, fiction, and drama. Note: A grade of C or better must be earned in each of the two composition courses used to satisfy the general education requirement of English/Communication.

519940 CONCURRENT CREDIT ENGLISH 12 **$80** **ATU ENGL 1023** **COMPOSITION II**

A continuation of ENGL 1013 with readings in poetry, fiction, and drama. Note: A grade of C or better must be earned in each of the two composition courses used to satisfy the general education requirement of English/Communication.

539900 CONCURRENT CREDIT BEYOND ALGEBRA II **$80** **ATU MATH 1113** **COLLEGE ALGEBRA**

Exponents and radicals, introduction to quadratic equations, systems of equations involving quadratics, ratio, proportion, variation, progressions, the binomial theorem, inequalities, logarithms, and partial fractions. Note: A grade of C of better must be earned in this course if being used to satisfy the general education mathematics requirement.

549900 OTHER CONCURRENT CREDIT FOREIGN LANGUAGE **$80** **ATU SPAN 1023** **BEGINNING SPANISH II**

Continued training in basic Spanish communication (speaking and writing) and comprehension (listening and reading) skills to increase proficiency in the language within a variety of cultural contexts.

559000 CONCURRENT CREDIT FINE ARTS **$80** **ATU ART 2123** **EXPERIENCING ART**

This course is designed to provide a background in art and the related processes so that a student may develop powers of observation and thereby respond to a work of art.

579910 CONCURRENT CREDIT WORLD HISTORY **$80** **ATU HIST 1513** **WORLD HIST SINCE 1500**

The history of humanity from the sixteenth century to the present.

579920 CONCURRENT CREDIT AMERICAN HISTORY **$80** **ATU HIST 2013** **U.S. HIST SINCE 1877**

The study of the development of the American nation since the Civil War and Reconstruction Era.