ADE Course Catalog SY 2024-2025



Vision

The Division of Elementary and Secondary Education is transforming Arkansas to lead the nation in student-focused education.

Mission

The Division of Elementary and Secondary Education provides leadership, support, and service to schools, districts, and communities so every student graduates prepared for college, career, and community engagement.

Introduction

The Arkansas Department of Education (ADE) Course Catalog is an official publication of the Division of Elementary and Secondary Education (DESE) published annually by the Division of Learning Services.

The DESE is committed to students exhibiting evidence of learning through three lenses of application: actively literate, critical thinkers, and engaged in the community. Arkansas Academic Standards and courses outline the academic expectations in the state. The ADE Course Catalog is a comprehensive compilation of all courses available for schools in Arkansas. All available courses are in alignment with state statutes and rules.

The ADE Course Catalog informs all stakeholders of approved courses; however, each local community and school district are encouraged to use the catalog in consultation with students and families to select challenging academic courses and make informed decisions about educational paths to support high-wage, high-growth careers and technical studies in Arkansas.

This ADE Course Catalog is to be used in conjunction with the development of Student Success Plans (A.C.A. § 6-15-2911) to ensure each learner has a personalized and dynamic education plan to assist them in achieving their academic and life goals. This resource provides students, parents, and educators access to the most accurate and current information regarding available courses.

Annually, ADE Course Catalog updates may include newly introduced courses, modifications to existing courses, or other adjustments.

Students graduating from an Arkansas Public School or Public Charter School must meet or exceed the state minimum 22 graduation credit requirements as adopted by the Arkansas State Board of Education.

Additional information about graduation requirements and course offerings can be found on DESE's website: https://dese.ade.arkansas.gov.

Please note: The printed version is a replica of the Adobe PDF version available.

Copies of previous catalogs (Archived Versions) will be available in the catalog archive within the DESE website and hard copies of every year are kept in the Office of Learning Services.

Table of Contents

Career & Technical Education	4
Computer Science	74
English Language Arts	86
Fine Arts	
Health & Physical Education	1233
Mathematics	
Other	
Science	
Social Studies	142
World Languages	151
World LanguagesAppendix	166

FILE FELLIN

Note that all courses in this catalog are sorted by subject area and may be found in the ADE Course Management System. Within each subject area, courses are listed in increasing order by course code.



Career & Technical Education





JROTC Health (480950: 0.5 credit)

Prerequisite Course Codes: 495760 or 495790 or 494820 or 495850

Grade Range: 9 - 12

The JROTC curriculum includes coursework on leadership, civics, geography and global awareness, health, and wellness, language arts, life skills, and U.S. history. The curriculum is based on the principles of performance-based, learner-centered education and promotes development of core abilities: capacity for lifelong learning, communication, responsibility for actions and choices, good citizenship, respectful treatment of others, and critical thinking techniques.

Credit Fulfills: Career-Focused Elective

JROTC Physical Education (0.5 credit) (485950: 0.5 credit) Prerequisite Course Codes: 495760 or 495790 or 494820 or 495850

Grade Range: 9 - 12

The JROTC curriculum includes coursework on leadership, civics, geography and global awareness, health, and wellness, language arts, life skills, and U.S. history. The curriculum is based on the principles of performance-based, learner-centered education and promotes development of core abilities: capacity for lifelong learning, communication, responsibility for actions and choices, good citizenship, respectful treatment of others, and critical thinking techniques.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Physical Education

Automotive Collision Lab (490000: 1 credit) **Prerequisite Course Codes:** 494300, 494310

Grade Range: 9 - 12

This class serves as an extension of the skills and concepts learned in the previous courses within its pathway. The lab helps to develop these skills and concepts in simulated real-world environments.

Credit Fulfills: Career-Focused Elective

Automotive Service Lab (490010: 1 credit) **Prerequisite Course Codes:** 494180, 494190

Grade Range: 9 - 12

This class serves as an extension of the skills and concepts learned in the previous courses within its pathway. The lab helps to develop these skills and concepts in simulated real-world environments.

Credit Fulfills: Career-Focused Elective

Aviation Maintenance Lab (490020: 1 credit) **Prerequisite Course Codes:** 494250, 494260

Grade Range: 9 - 12

This class serves as an extension of the skills and concepts learned in the previous courses within its pathway. The lab helps to develop these skills and concepts in simulated real-world environments.



Certified Nursing Assistant (CNA) (0.5 credit) (490030: 0.5 credit)

Prerequisite Course Codes: 495350, 495360

Grade Range: 11 - 12

This course provides the knowledge and skills needed to perform basic care services in a long-term care setting. The course prepares students for the certification examination required to work in the nursing assistant field. The course covers the fundamental principles, skills, and attitudes needed to give nursing care and prevent the spread of disease. Procedures used in the care of the sick and the ability to adapt them to various situations are discussed. Students will learn to document their observations and interventions.

Credit Fulfills: Career-Focused Elective

Construction Lab (490040: 1 credit)

Prerequisite Course Codes: 494480, 494460 or 494480,493840

Grade Range: 9 - 12

This class serves as an extension of the skills and concepts learned in the previous courses within its pathway. The lab helps to develop these skills and concepts in simulated real-world environments.

Credit Fulfills: Career-Focused Elective

Emergency Services I (490050: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

The EMS Program is based off the National Emergency Medical Services Education Standards with three levels of course offerings (Emergency Services I, II, III) along with a lab course offering as an additional level 3 option. Each course increases in specificity, offering student opportunities as an Emergency Medical Responder, Emergency Medical Technician, Advanced Emergency Medical Technician, and/or Paramedic.

Credit Fulfills: Career-Focused Elective

MEP Systems Lab (490070: 1 credit)
Prerequisite Course Codes: None

Grade Range: 9 - 12

This class serves as an extension of the skills and concepts learned in the previous courses within its pathway. The lab helps to develop these skills and concepts in simulated real-world environments.

Credit Fulfills: Career-Focused Elective

Medium/Heavy Truck Lab (490090: 1 credit)

Prerequisite Course Codes: 494650

Grade Range: 9 - 12

This class serves as an extension of the skills and concepts learned in the previous courses within its pathway. The lab helps to develop these skills and concepts in simulated real-world environments.



Power Equipment Technology Lab (490100: 1 credit)

Prerequisite Course Codes: 495400, 495420

Grade Range: 9 - 12

This class serves as an extension of the skills and concepts learned in the previous courses within its pathway. The lab helps to develop these skills and concepts in simulated real-world environments.

Credit Fulfills: Career-Focused Elective

Pre-Apprenticeship I (490110: 1 credit)

Prerequisite Course Codes: None

Grade Range: 10 - 12

The Internship course is a paid or unpaid experiential work-based learning experience available for all students. This course integrates knowledge and theory in which students will connect with professionals and experience valuable workplace skills.

Credit Fulfills: Career-Focused Elective

Pre-Apprenticeship II (490120: 1 credit)

Prerequisite Course Codes: None

Grade Range: 10 - 12

The Internship course is a paid or unpaid experiential work-based learning experience available for all students. This course integrates knowledge and theory in which students will connect with professionals and experience valuable workplace skills.

Credit Fulfills: Career-Focused Elective

Pre-Apprenticeship III (490130: 1 credit)

Prerequisite Course Codes: None

Grade Range: 10 - 12

The Internship course is a paid or unpaid experiential work-based learning experience available for all students. This course integrates knowledge and theory in which students will connect with professionals and experience valuable workplace skills.

Credit Fulfills: Career-Focused Elective

Pre-Apprenticeship IV (490140: 1 credit)

Prerequisite Course Codes: None

Grade Range: 10 - 12

The Internship course is a paid or unpaid experiential work-based learning experience available for all students. This course integrates knowledge and theory in which students will connect with professionals and experience valuable workplace skills.



Unmanned Aerial Systems (UAS) Flex Course (490150: 1 credit)

Prerequisite Course Codes: 490160, 490180

Grade Range: 9 - 12

At the completion of the course, the student will be able to:

Understand the basic knowledge and skills to fly a UAS for a specific application.

This course is designed to be offered through multiple program areas to add the UAS emphasis.

Credit Fulfills: Career-Focused Elective

Unmanned Aerial Systems (UAS) I (490160: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

At the end of this course students will be able to successfully:

- 1. Pilot remotely controlled aircraft.
- 2. Demonstrate FAA regulations specific to UAS aircraft and operations.
- 3. Use basic tools and equipment safely.
- 4. Demonstrate design, troubleshooting and repair of Unmanned Aerial Systems.
- 5. Apply the technical skills sought by employers in today's UAS related industries.
- 6. Demonstrate oral and written communication as it pertains to the workplace.

Credit Fulfills: Career-Focused Elective

Unmanned Aerial Systems (UAS) II (490170: 1 credit)

Prerequisite Course Codes: 490160

Grade Range: 10 - 12

At the completion of the course, the student will be able to:

- 1. Pilot remotely controlled aircraft.
- 2. Demonstrate FAA regulations specific to UAS aircraft and operations.
- 3. Use basic tools and equipment safely.
- 4. Demonstrate design, troubleshooting and repair of Unmanned Aerial Systems.
- 5. Apply the technical skills sought by employers in today's UAS related industries.
- 6. Demonstrate oral and written communication as it pertains to the workplace.
- 7. Pass the Federal Aviation Administration Part 107 Remote Pilot Knowledge Test.

Credit Fulfills: Career-Focused Elective

Unmanned Aerial Systems (UAS) III (490180: 1 credit)

Prerequisite Course Codes: 490160, 490180

Grade Range: 10 - 12

This course is designed as a capstone course to enable students to plan and execute UAS flight mission(s) for an organization or business. The course may be in the form of an internship or project-based learning at the discretion of the school.



Welding Lab (490190: 1 credit)

Prerequisite Course Codes: 495570, 495580

Grade Range: 9 - 12

This class serves as an extension of the skills and concepts learned in the previous courses within its pathway. The lab helps to develop these skills and concepts in simulated real-world environments.

Credit Fulfills: Career-Focused Elective

ADE Approved Credit Transportation, Distribution and Logistics I (Requires

ADE Approval) (490220: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

ADE Approved Credit Transportation, Distribution and Logistics III (Requires

ADE Approval) (490240: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

ADE Approved Credit Transportation, Distribution and Logistics IV (Requires

ADE Approval) (490250: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.



ADE Approved Credit Transportation, Distribution and Logistics V (Requires

ADE Approval) (490260: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

ADE Approved Credit Transportation, Distribution and Logistics VI (Requires

ADE Approval) (490270: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

Career Practicum - FCS: Arts, A/V Technology & Communications (490280: 1

credit)

Prerequisite Course Codes: 493080, 490890

Grade Range: 11 - 12

Career Practicum is a paid or unpaid experience designed to assist students in grades 11 - 12 in their specific CTE program of study. A student must be at least 16 years of age. The student must have completed at least Level 1 and Level 2 courses in a chosen CTE program of study to be eligible for this course, and the job duties must align to this program of study.

Credit Fulfills: Career-Focused Elective

ADE Approved Credit Arts, A/V Technology & Communications I (Requires

ADE Approval) (490290: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.



ADE Approved Credit Arts, A/V Technology & Communications II (Requires

ADE Approval) (490300: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

ADE Approved Credit Arts, A/V Technology & Communications III (Requires

ADE Approval) (490310: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

ADE Approved Credit Arts, A/V Technology & Communications IV (Requires

ADE Approval) (490320: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

ADE Approved Credit Arts, A/V Technology & Communications V (Requires

ADE Approval) (490330: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.



ADE Approved T&I Architecture & Construction I (Requires ADE Approval)

(490360: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

Emergency Services II (490420: 1 credit)

Prerequisite Course Codes: 490050

Grade Range: 9 - 12

The EMS Program is based off the National Emergency Medical Services Education Standards with three levels of course offerings (Emergency Services I, II, III) along with a lab course offering as an additional level 3 option. Each course increases in specificity, offering student opportunities as an Emergency Medical Responder, Emergency Medical Technician, Advanced Emergency Medical Technician, and/or Paramedic.

Credit Fulfills: Career-Focused Elective

Firefighting I (490470: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

This Course is based on NFPA 1001, Standard for Fire Fighter Professional Qualifications. The course is designed for that person who seeks the knowledge and skills to function as an integral part of a firefighting team under direct supervision in hazardous environments. The Firefighter I course consists of a combination of classroom hours, drill field practices, and training evolutions that will prepare firefighters to perform most fireground functions under the supervision of an officer or more experienced firefighter.

Credit Fulfills: Career-Focused Elective

Firefighting II (490480: 1 credit)

Prerequisite Course Codes: 490470 or 580470

Grade Range: 9 - 12

This Course is based on NFPA 1001: Standard for Fire Fighter Professional Qualifications. This course is designed for the Fire Fighter I who is prepared to assume a leadership role in department. This course is made up of topics designed to give the student more knowledge of fire ground situations so that they can make basic evaluations of safety problems and assume leadership roles in carrying out the interior attack and search operations.



Community Preparedness & Response (490490: 1 credit)

Prerequisite Course Codes: 490470, 490480

Grade Range: 9 - 12

The course is to provide skills, knowledge, and hands-on training in disaster preparedness, disaster psychology, active shooter incidents, terrorism, CERT training, disaster medical operations, fire safety and utility controls, light search and rescue operations, types of natural disasters, and disaster simulation.

Credit Fulfills: Career-Focused Elective

Certified Nursing Assistant (CNA) (1.0) (490500: 1 credit)

Prerequisite Course Codes: 495350, 495360

Grade Range: 11 - 12

This course provides the knowledge and skills needed to perform basic care services in a long-term care setting. The course prepares students for the certification examination required to work in the nursing assistant field. The course covers the fundamental principles, skills, and attitudes needed to give nursing care and prevent the spread of disease. Procedures used in the care of the sick and the ability to adapt them to various situations are discussed. Students will learn to document their observations and interventions.

Credit Fulfills: Career-Focused Elective

Medical Lab (0.5 credit) (490510: 0.5 credit) Prerequisite Course Codes: 495350, 495360

Grade Range: 9 - 12

This course is a "How-To" manual for maintaining overall health and homeostasis in the body as students explore how to prevent and fight infection; how to screen and evaluate the code in human DNA; how to prevent, diagnose and treat cancer; and how to prevail when the organs of the body begin to fail.

Credit Fulfills: Career-Focused Elective

Medical Lab (1.0 credit) (490520: 1 credit) Prerequisite Course Codes: 495350, 495360

Grade Range: 9 - 12

This course is a "How-To" manual for maintaining overall health and homeostasis in the body as students explore how to prevent and fight infection; how to screen and evaluate the code in human DNA; how to prevent, diagnose and treat cancer; and how to prevail when the organs of the body begin to fail.

Credit Fulfills: Career-Focused Elective

Emergency & Fire Management Lab (490530: 1 credit)
Prerequisite Course Codes: 490050, 490420 or 490470, 490480

Grade Range: 9 - 12

This class serves as an extension of the skills and concepts learned in the previous courses within its pathway. The lab helps to develop these skills and concepts in simulated real-world environments.



Emergency Services III (490540: 1 credit) **Prerequisite Course Codes:** 490050, 490420

Grade Range: 11 - 12

The EMS Program is based off the National Emergency Medical Services Education Standards with three levels of course offerings (Emergency Services I, II, III) along with a lab course offering as an additional level 3 option. Each course increases in specificity, offering student opportunities as an Emergency Medical Responder, Emergency Medical Technician, Advanced Emergency Medical Technician, and/or Paramedic.

Credit Fulfills: Career-Focused Elective

ADE Approved Health Science I (Requires ADE Approval) (490570: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

Career Practicum - AG: Agriculture, Food, and Natural Resources (490600: 1

credit)

Prerequisite Course Codes: 491150, 491030 or 491150, 491100 or 491150, 491310 or 491150,

491470 or 491150, 491340 or 491150, 491170

Grade Range: 11 - 12

Career Practicum is a paid or unpaid experience designed to assist students in grades 11 - 12 in their specific CTE program of study. A student must be at least 16 years of age. The student must have completed at least Level 1 and Level 2 courses in a chosen CTE program of study to be eligible for this course, and the job duties must align to this program of study.

Credit Fulfills: Career-Focused Elective

Career Practicum - Bus: Finance (490610: 1 credit)

Prerequisite Course Codes: 492120, 492090 or 492120, 492100 or 492120, 492290

Grade Range: 11 - 12

Career Practicum is a paid or unpaid experience designed to assist students in grades 11 - 12 in their specific CTE program of study. A student must be at least 16 years of age. The student must have completed at least Level 1 and Level 2 courses in a chosen CTE program of study to be eligible for this course, and the job duties must align to this program of study.



Career Practicum - Bus: Hospitality and Tourism (490620: 1 credit)

Prerequisite Course Codes: 492120, 492260

Grade Range: 11 - 12

Career Practicum is a paid or unpaid experience designed to assist students in grades 11 - 12 in their specific CTE program of study. A student must be at least 16 years of age. The student must have completed at least two courses in a chosen CTE program of study to be eligible for this course.

Credit Fulfills: Career-Focused Elective

Career Practicum - Bus: Management and Administration (490630: 1 credit)

Prerequisite Course Codes: 492120, 492320 or 492120, 492380 or 492120, 492690

Grade Range: 11 - 12

Career Practicum is a paid or unpaid experience designed to assist students in grades 11 - 12 in their specific CTE program of study. A student must be at least 16 years of age. The student must have completed at least two courses in a chosen CTE program of study to be eligible for this course.

Credit Fulfills: Career-Focused Elective

Career Practicum - Bus: Marketing Sales and Services (490640: 1 credit)
Prerequisite Course Codes: 492120, 492330 or 492120, 492760 or 492120, 490820

Grade Range: 11 - 12

Career Practicum is a paid or unpaid experience designed to assist students in grades 11 - 12 in their specific CTE program of study. A student must be at least 16 years of age. The student must have completed at least Level 1 and Level 2 courses in a chosen CTE program of study to be eligible for this course, and the job duties must align to this program of study.

Credit Fulfills: Career-Focused Elective

Career Practicum - Bus: Transportation, Distribution and Logistics (490650: 1

credit)

Prerequisite Course Codes: 492120, 492770

Grade Range: 11 - 12

Career Practicum is a paid or unpaid experience designed to assist students in grades 11 - 12 in their specific CTE program of study. A student must be at least 16 years of age. The student must have completed at least Level 1 and Level 2 courses in a chosen CTE program of study to be eligible for this course, and the job duties must align to this program of study.

Credit Fulfills: Career-Focused Elective

Career Practicum - FCS: Education and Training (490660: 1 credit)

Prerequisite Course Codes: 493240, 493290

Grade Range: 11 - 12

Career Practicum is a paid or unpaid experience designed to assist students in grades 11 - 12 in their specific CTE program of study. A student must be at least 16 years of age. The student must have completed at least Level 1 and Level 2 courses in a chosen CTE program of study to be eligible for this course, and the job duties must align to this program of study.



Career Practicum - FCS: Hospitality and Tourism (490670: 1 credit)

Prerequisite Course Codes: 493110, 493260 or 493080, 493110

Grade Range: 11 - 12

Career Practicum is a paid or unpaid experience designed to assist students in grades 11 - 12 in their specific CTE program of study. A student must be at least 16 years of age. The student must have completed at least Level 1 and Level 2 courses in a chosen CTE program of study to be eligible for this course, and the job duties must align to this program of study.

Credit Fulfills: Career-Focused Elective

Career Practicum - FCS: Human Services (490680: 1 credit)

Prerequisite Course Codes: 493080, 493310 or 493080, 493020 or 493080, 493110

Grade Range: 11 - 12

Career Practicum is a paid or unpaid experience designed to assist students in grades 11 - 12 in their specific CTE program of study. A student must be at least 16 years of age. The student must have completed at least Level 1 and Level 2 courses in a chosen CTE program of study to be eligible for this course, and the job duties must align to this program of study.

Credit Fulfills: Career-Focused Elective

Career Practicum - STEM: Architecture and Construction (490690: 1 credit)

Prerequisite Course Codes: 494700, 494710 or 494700, 494740

Grade Range: 11 - 12

Career Practicum is a paid or unpaid experience designed to assist students in grades 11 - 12 in their specific CTE program of study. A student must be at least 16 years of age. The student must have completed at least Level 1 and Level 2 courses in a chosen CTE program of study to be eligible for this course, and the job duties must align to this program of study.

Credit Fulfills: Career-Focused Elective

Career Practicum - STEM: Health Science (490700: 1 credit)

Prerequisite Course Codes: 495000, 495010

Grade Range: 11 - 12

Career Practicum is a paid or unpaid experience designed to assist students in grades 11 - 12 in their specific CTE program of study. A student must be at least 16 years of age. The student must have completed at least Level 1 and Level 2 courses in a chosen CTE program of study to be eligible for this course, and the job duties must align to this program of study.



Career Practicum - STEM: STEM Cluster (490720: 1 credit)

Prerequisite Course Codes: 493960, 493970

Grade Range: 11 - 12

Career Practicum is a paid or unpaid experience designed to assist students in grades 11 - 12 in their specific CTE program of study. A student must be at least 16 years of age. The student must have completed at least Level 1 and Level 2 courses in a chosen CTE program of study to be eligible for this course, and the job duties must align to this program of study.

Credit Fulfills: Career-Focused Elective

Career Practicum - T&I: Architecture and Construction (490730: 1 credit)

Prerequisite Course Codes: 494480, 494460 or 494480,493840

Grade Range: 11 - 12

Career Practicum is a paid or unpaid experience designed to assist students in grades 11 - 12 in their specific CTE program of study. A student must be at least 16 years of age. The student must have completed at least Level 1 and Level 2 courses in a chosen CTE program of study to be eligible for this course, and the job duties must align to this program of study.

Credit Fulfills: Career-Focused Elective

Career Practicum - T&I: Arts, Audio/Video Technology and Communications

(490740: 1 credit)

Prerequisite Course Codes: 493680, 493380 or 493680, 493420 or 493680, 494150 or 493680,

494350

Grade Range: 11 - 12

Career Practicum is a paid or unpaid experience designed to assist students in grades 11 - 12 in their specific CTE program of study. A student must be at least 16 years of age. The student must have completed at least Level 1 and Level 2 courses in a chosen CTE program of study to be eligible for this course, and the job duties must align to this program of study.

Credit Fulfills: Career-Focused Elective

ADE Approved T&I Architecture & Construction II (Requires ADE Approval)

(490750: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.



Career Practicum - T&I: Health Science (490760: 1 credit)

Prerequisite Course Codes: 495350, 495360 or 495350, 494050 or 492120, 490820

Grade Range: 11 - 12

Career Practicum is a paid or unpaid experience designed to assist students in grades 11 - 12 in their specific CTE program of study. A student must be at least 16 years of age. The student must have completed at least Level 1 and Level 2 courses in a chosen CTE program of study to be eligible for this course, and the job duties must align to this program of study.

Credit Fulfills: Career-Focused Elective

Career Practicum - T&I: Law, Public Safety, Corrections and Security (490770: 1

credit)

Prerequisite Course Codes: 490050, 490420 or 490470, 490480 or 494620, 494630

Grade Range: 11 - 12

Career Practicum is a paid or unpaid experience designed to assist students in grades 11 - 12 in their specific CTE program of study. A student must be at least 16 years of age. The student must have completed at least Level 1 and Level 2 courses in a chosen CTE program of study to be eligible for this course, and the job duties must align to this program of study.

Credit Fulfills: Career-Focused Elective

Career Practicum - T&I: Manufacturing (490780: 1 credit) Prerequisite Course Codes: 495570, 494950 or 495570, 495580

Grade Range: 11 - 12

Career Practicum is a paid or unpaid experience designed to assist students in grades 11 - 12 in their specific CTE program of study. A student must be at least 16 years of age. The student must have completed at least Level 1 and Level 2 courses in a chosen CTE program of study to be eligible for this course, and the job duties must align to this program of study.

Credit Fulfills: Career-Focused Elective

Career Practicum - T&I: Transportation, Distribution and Logistics (490790: 1

credit)

Prerequisite Course Codes: 494250, 494260 or 494650, 494660 or 495400, 495420 or 494300,

494310 or 494180, 494190 **Grade Range:** 11 - 12

Career Practicum is a paid or unpaid experience designed to assist students in grades 11 - 12 in their specific CTE program of study. A student must be at least 16 years of age. The student must have completed at least Level 1 and Level 2 courses in a chosen CTE program of study to be eligible for this course, and the job duties must align to this program of study.



Advanced Plant Science (490800: 1 credit)

Prerequisite Course Codes: 491150, 491340 or 491150, 491170

Grade Range: 11 - 12

This course allows for an in-depth look at the Plant Science Industry while providing hands on laboratories and opportunities to participate in FFA and Supervised Agricultural Experiences.

Credit Fulfills: Career-Focused Elective

Advanced Agricultural Mechanics (490810: 1 credit)

Prerequisite Course Codes: 491150, 491390

Grade Range: 11 - 12

Students will cover agricultural technology terms, careers, systems, features and troubleshooting. They will develop industry partnerships to meet specific needs in agricultural settings with skills including agricultural power systems, small engine technology, agricultural electricity and CNC technology.

Credit Fulfills: Career-Focused Elective

Retail Business (490820: 1 credit) **Prerequisite Course Codes:** 492120

Grade Range: 9 - 12

The Retail Business course will provide students an overview of the retailing industry from a regional, national, and global perspective. Students will increase awareness and knowledge of key elements within the retail industry including business operations, marketing, sales, supply, and production, merchandising, promotion, selling, analyzing and forecasting sales, operations, and inventory control. The course will also focus on fundamental retail processes and related careers that are essential to maintaining production, purchasing, inventory, and a sustainable supply chain to help ensure products are readily available for consumers. Students will also explore retail operations used within different types of retail companies, on-line and e-commerce businesses, and future trends within the retail industry.

Credit Fulfills: Career-Focused Elective

Transportation and Distribution (490830: 1 credit)

Prerequisite Course Codes: 492120, 492770

Grade Range: 10 - 12

This year-long course covers concepts and skills related to planning and management of transportation and distribution activities affecting business operations. Students will learn essential knowledge for entry

into careers in the transportation, distribution, and logistics fields.

Credit Fulfills: Career-Focused Elective

Medical Coding and Billing (490840: 1 credit)

Prerequisite Course Codes: 492120, 492690

Grade Range: 11 - 12

Students will be introduced to healthcare systems and the electronic medical records as it pertains to the field of medical coding and billing. Students will be exposed to the medical terminology used to describe human anatomy and physiology. Students will also be introduced to the field of health informatics.



Advanced Business and Marketing Strategies (490850: 1 credit)

Prerequisite Course Codes: 492120, 492330

Grade Range: 11 - 12

This course encourages students to work in partnership with business and industry leaders in the community to analyze and solve real-world problems. Students completing projects in the course could benefit significantly from the use of resources and data from local businesses. Instructors are encouraged to leverage existing partnerships and to build on advisory committee relationships as they reach out to business owners or managers for authentic scenarios, materials, and other business information from which students could learn.

Credit Fulfills: Career-Focused Elective

Advanced Banking (490860: 1 credit) **Prerequisite Course Codes:** 492120, 492090

Grade Range: 10 - 12

This two-semester course addresses all aspects of consumer and commercial lending as well as financial and insurance statements. Other topics addressed in this course include managing loan files, assessing risk in lending understanding issues of regulation and compliance, bankruptcy, credit reports, and appraisals.

Credit Fulfills: Career-Focused Elective

Fashion and Interior Design (490890: 1 credit)

Prerequisite Course Codes: 493080

Grade Range: 10 - 12

The Fashion and Interior Design course will assist students in developing skills necessary for personal fashion and residential interior design. The student will gain knowledge and industry necessary skills needed in the fashion and interior design career fields. The skills introduced and taught are clothing care and selection, characteristics of natural and synthetic fibers, types of fabric and fabric finishes, laws and regulations related to the clothing and textile industry, use and care of basic sewing supplies and equipment, fabric selection for clothing and housing materials, clothing construction techniques, and careers related to the fashion and textile industry. Students will also gain knowledge related to the basics of home design, materials used in home design and construction, home maintenance and safety, and careers in housing and interior design. Upon completion of this course, the student should acquire textile construction skills and design skills enabling them to advance to the next level in the fashion and interior design field.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Fine Arts



Advanced Fashion and Interior Design (490900: 1 credit)

Prerequisite Course Codes: 493080, 490890

Grade Range: 11 - 12

Students in Advanced Fashion and Interior Design will develop necessary skills for the management and construction of commercial building, industrial garment construction and related projects. Basic construction techniques are integrated throughout the course in various projects. One or more advanced level projects will create projects using correct construction techniques and commercial interior design skills. Students will have in-depth experiences using advanced sewing techniques, such as pattern alterations exploring seams and constructions, use of facing and advanced hand stitching techniques and the use of advanced technology. The student will also develop skills for understanding commercial regulations pertaining to interior design. Upon completion of this course, students should master knowledge and skills needed for designing and constructing projects in both the fashion and interior design industry as well as develop a professional portfolio.

Credit Fulfills: Career-Focused Elective

Advanced Consumer Services (490910: 1 credit)

Prerequisite Course Codes: 493080, 493310

Grade Range: 11 - 12

The Advanced Consumer Services course is a school-based enterprise where students attain experience researching the market and identifying the need for a product of service. Students will create, produce, and market a product or service as part of the program. This program provides students the opportunity to determine the characteristics of entrepreneurs, and to track the establishment of a successful business from its inception as an entrepreneurial idea. Through the use of technology, students will learn to evaluate information that will attract and retain customers, provide customer satisfaction, and apply principles and processes to meet customer's expectations. Students will learn to use business procedures and apply them in the school based enterprise work experience. As an enrichment activity, students are encouraged to launch their own entrepreneurial effort outside the school-based enterprise.

Credit Fulfills: Career-Focused Elective

ADE Approved Consumer Science - Arts, A/V Technology & Communications (Requires ADE Approval) (490920: 1 credit)

Prerequisite Course Codes: None

Grade Range: 11 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

Advanced Animal Science (491010: 1 credit)

Prerequisite Course Codes: 491150, 491180 or 491150, 491160

Grade Range: 11 - 12

This course allows for an in-depth look at the Animal Science Industry while providing hands on laboratories and opportunities to participate in FFA and Supervised Agricultural Experiences.



Food Products and Processing I (491100: 1 credit)

Prerequisite Course Codes: 491150

Grade Range: 10 - 12

This course examines the food industry in production, manufacturing/processing, distribution and marketing. It also explores careers, consumer consumption, food safety, global commodities and food

companies.

Credit Fulfills: Career-Focused Elective

Food Products and Processing II (491110: 1 credit)

Prerequisite Course Codes: 491150, 491100

Grade Range: 11 - 12

This course examines the food industry in product development, storage, handling and safety of food

products

Credit Fulfills: Career-Focused Elective

Food Products and Processing Capstone (491120: 1 credit)

Prerequisite Course Codes: None

Grade Range: 12 - 12

The Capstone course is an opportunity for students to continue gaining skills in the Food Products & Processing program of study at an advanced level. Capstone courses should be rigorous, high level projects with direct industry connections and support.

Credit Fulfills: Career-Focused Elective

Survey of Agriculture Systems (491150: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

A foundation course for all agricultural programs of study. Topics covered include general agriculture, FFA, leadership, supervised agricultural experiences, animal systems, plant systems, agribusiness systems, food products and processing systems, biotechnology, natural resources systems, environmental service systems and power, structural and technical systems.



Principles of Agriculture Science-Animal (CASE) Weighted Credit (491160: 1

credit)

Prerequisite Course Codes: 491150 or 491150, 491030

Grade Range: 10 - 12

Student experiences will involve the study of animal anatomy, physiology, behavior, nutrition, reproduction, health, selection, and marketing. For example, students will acquire skills in meeting the nutritional needs of animals while developing balanced, economical rations. Throughout the course, students will consider the perceptions and preferences of individuals within local, regional, and world markets. Students will explore hands-on projects and activities to learn the characteristics of animal science and work on major projects and problems similar to those that animal science specialists, such as veterinarians, zoologists, livestock producers, and industry personnel, face in their respective careers. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community. Teachers are provided detailed professional development facilitate instruction. Every lesson is aligned with national standards for agriculture, science, mathematics, and English language arts.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Natural Science (3rd Science or Computer Science)

Principles of Agriculture Science-Plant (CASE) Weighted Credit (491170: 1 credit)

Prerequisite Course Codes: 491150, 491030 or 491150

Grade Range: 10 - 12

Students will learn how to apply scientific knowledge and skills to use plants effectively for agricultural and horticultural production. Students will discover the value of plant production and its impact on the individual, the local, and the global economy. Lessons throughout the course will provide an overview of the field of agricultural science with a foundation in plant science. These lessons include working in teams and exploring hands-on projects. Students will work on major projects and problems similar to those that plant science specialists, such as horticulturalists, agronomists, greenhouse and nursery managers, and plant research specialists, face in their respective careers. Teachers are provided detailed professional development to facilitate instruction. Every lesson is aligned with national standards for agriculture, science, mathematics, and English language arts.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Natural Science (3rd Science or Computer Science)

Animal Science (491180: 1 credit)

Prerequisite Course Codes: 491150 or 491150, 491030

Grade Range: 10 - 12

The Animal Science course encompasses the study of animal systems, including content areas such as life processes, health, nutrition, genetics, management and processing, as applied to small animals, aquaculture, exotic animals, livestock, dairy, horses and/or poultry.



Forestry & Wildlife Ecosystems (491260: 1 credit)
Prerequisite Course Codes: 491150, 491310 or 491150, 491470

Grade Range: 10 - 12

This course provides an overview of the forestry and wildlife industry and its importance to the economy of the nation. Tree and wildlife identification, management practices, harvesting and marketing processes, and business applications are major topics. GPS and GIS are included.

Credit Fulfills: Career-Focused Elective

Greenhouse Management (491270: 1 credit)

Prerequisite Course Codes: 491150, 491340 or 491150, 491170

Grade Range: 10 - 12

This course covers greenhouse management practices, including structural considerations, plant propagation, pesticide use, and product marketing. The student will also receive ample hands-on practice.

Credit Fulfills: Career-Focused Elective

Advanced Ag Leadership & Communications (491300: 1 credit)

Prerequisite Course Codes: 491150, 491030

Grade Range: 10 - 12

This course will provide the student with a sound understanding of public speaking, parliamentary procedure, organization, delegation, oral communication, conflict resolution, business etiquette and community service are major topics to assist students in development of their leadership skills for the future. Opportunities are provided for students to participate in FFA and supervised agricultural experience activities.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Oral Communications

Natural Resources Management (491310: 1 credit) Prerequisite Course Codes: 491150, 491030 or 491150

Grade Range: 10 - 12

The Natural Resources Management course encompasses the study of the management, protection, enhancement and improvement of soil, water, wildlife, forests and air as natural resources along with the study of systems, instruments and technology used to monitor and minimize the impact of human activity on environmental systems.

Credit Fulfills: Career-Focused Elective

Plant Science (491340: 1 credit)

Prerequisite Course Codes: 491150, 491030 or 491150

Grade Range: 10 - 12

The Plant Science course encompasses the study of plant life cycles, classifications, functions, structures, reproduction, media and nutrients, as well as growth and cultural practices through the study of crops, turf grass, trees, shrubs, and/or ornamental plants.



Ag Education Capstone (491370: 1 credit)

Prerequisite Course Codes: 491150, 491390 or 491150, 491030 or 491150, 491310 or 491150,

491470 or 491150, 491340 or 491150, 491170 or 491150, 491100

Grade Range: 11 - 12

The Capstone course is an opportunity for students to continue gaining skills in a specific program of study at an advanced level. School districts may submit a request to the Agriculture Science and Technology office to offer this course along with a syllabus outline for what topics will be covered in the capstone course. Capstone courses should be rigorous, high level projects with direct industry connections and support.

Credit Fulfills: Career-Focused Elective

Agricultural Metals (491380: 1 credit) **Prerequisite Course Codes:** 491150, 491390

Grade Range: 10 - 12

This course covers safety, technical information, tool fitting, sheet metal, hot and cold metal work, as well as an introduction to oxy acetylene welding and cutting and arc welding. It will also cover cold metal, hot metal, fabrication concepts, reading and implementing blueprints as they relate to metal work, arc welding, gas welding, MIG welding, TIG welding, plasma cutting, and careers related to metal work. Safety practices and performance skills will be emphasized in each area.

Credit Fulfills: Career-Focused Elective

Agricultural Mechanics (491390: 1 credit)

Prerequisite Course Codes: 491150

Grade Range: 10 - 12

The Ag Mechanics course encompasses the study of agricultural equipment, power systems and precision technology, as well as wood working, metal working, welding and project planning for agricultural structures.

Credit Fulfills: Career-Focused Elective

Agricultural Structures (491410: 1 credit) **Prerequisite Course Codes:** 491150, 491390

Grade Range: 10 - 12

Students will be introduced to basic practices used in farm building and construction of facilities for the farm. A more in-depth look will be given to the technical areas of the agriculture structural industry. Topics will include FFA, SAEs, safety, planning, tools, basic construction, surveying, concrete and masonry structures, basic carpentry, plumbing, electricity, metal fabrication, and painting and finishing.



Poultry Science (491440: 1 credit)

Prerequisite Course Codes: 491150, 491180 or 491150, 491160

Grade Range: 10 - 12

This course allows for an in-depth look at the Poultry Industry while providing hands on laboratories and opportunities to participate in FFA and Supervised Agricultural Experiences.

Credit Fulfills: Career-Focused Elective

Veterinary Science (491460: 1 credit)

Prerequisite Course Codes: 491150, 491180 or 491150, 491160

Grade Range: 11 - 12

This course will provide the student with a sound platform to master the knowledge and skills necessary to become a veterinary assistant. It will also prepare the student to pursue a rewarding career as part of the professional veterinarian team. It will also equip the next generation of veterinarians and veterinarian assistants with the new technological tools that reinforce our industry's expectations. Finally, it provides academic knowledge, higher order reasoning and problem solving skills, work attitudes, general employability skills, technical skills and occupational skills.

Credit Fulfills: Career-Focused Elective

Natural Resources & Ecology (CASE) Weighted Credit (491470: 1 credit)

Prerequisite Course Codes: 491150, 491030

Grade Range: 10 - 12

Students will explore hands-on projects and activities while studying topics such as land use, water quality, stewardship, and environmental agencies. Study of the natural world including biomes, land, air, water, energy, use and care as well as a focus on issues surrounding man's interaction with the Earth will be addressed in this course. Students will select an ecosystem to study throughout the course and apply principles of natural resources and ecology from each unit of study to that ecosystem.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Natural Science (3rd Science or Computer Science)

Food Science & Safety (CASE) (491480: 1 credit)

Prerequisite Course Codes: 491150

Grade Range: 10 - 12

Students will maintain a research level Laboratory Notebook throughout the course documenting their experiences in the laboratory. Research and experimental design will be highlighted as students develop and conduct industry appropriate investigations. In addition, students will explore connections between the Food Science and Safety lessons, Supervised Agricultural Experience, and FFA components that are important for the development of an informed agricultural education student. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating solutions to their peers and members of the professional community.



Ag, Power, and Technical (CASE) Weighted Credit (491630: 1 credit)

Prerequisite Course Codes: 491150, 491390

Grade Range: 10 - 12

Throughout the course, students apply technical skill while becoming competent in the process used to operate, repair, engineer, and design agricultural tools and equipment. Teachers are provided detailed professional development to facilitate instruction. CASE provides extensive preparation for the teacher to be proficient and confident in their ability to provide proper instruction of mechanical skills and concepts. Every lesson is aligned to national standards for agriculture, science, mathematics, and English language arts.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science)

Personal Finance (0.5 credit) (491990: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

This is a one-semester course designed to increase personal finance knowledge and skills 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 on activities and competitions within career and technical student organizations (i.e., FBLA, FCCLA, and DECA). This course is aligned with and will satisfy the requirements set forth in Arkansas Act 480.

Credit Fulfills: Career-Focused Elective

Securities, Investments, Risk, and Insurance (492000: 1 credit)

Prerequisite Course Codes: 492120, 492290

Grade Range: 10 - 12

Securities, Investments, Risk, and Insurance provides students with the tools and techniques needed for short-term earnings and long-term saving and investing strategies while emphasizing an understanding of the value of money. In addition, ethical and professional characteristics for career success will be addressed. Project-based learning opportunities will be used to introduce students to the real-world applications of insurance planning, risk management, and investment avenues of personal financial planning.

Credit Fulfills: Career-Focused Elective

ADE Approved Marketing (Requires ADE Approval) (492050: 1 credit)

Prerequisite Course Codes: None

Grade Range: 10 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.



Business Communications (.5 credit) (492060: 0.5 credit)

Prerequisite Course Codes: 492120

Grade Range: 9 - 12

This course is a semester course that will explore concepts, theories and skills that lead to communicating effectively and appropriately in a variety of workplace situations. This course will cover communications basics for verbal, nonverbal, and written communications as well as application of advanced level communication skills incorporating teamwork, collaboration, and technology.

Credit Fulfills: Career-Focused Elective

Business Law I (0.5 credit) (492070: 0.5 credit)

Prerequisite Course Codes: 492120, 492380

Grade Range: 10 - 12

Business Law I covers the history and evolution of our law, the fundamental elements of the American legal system, and its common law origins. The scope of the course will include: the application and operation of the legal system in the remedy of business disputes, the development and operation of the court system, regulatory law for business firms, consumer protection, and contract law.

Credit Fulfills: Career-Focused Elective

Business Law II (0.5 credit) (492080: 0.5 credit) **Prerequisite Course Codes:** 492120, 492380, 492070

Grade Range: 10 - 12

Business Law II covers the standards of law that govern our business and personal affairs in today's marketplace. It is designed to help students better understand the business world in which they live, gain confidence in conducting business, and be better prepared to recognize legal problems in management of an enterprise. Topics will include: credit and bankruptcy, commercial paper, employment and agency, forms of business organization (proprietorships, partnerships, and corporations), real and personal property, bailments, and insurance.

Credit Fulfills: Career-Focused Elective

Principles of Banking (492090: 1 credit)

Prerequisite Course Codes: 492120

Grade Range: 9 - 12

Banking is a one-year course that provides an introduction to banking services and financial institutions. Students will study principles of banking transactions and the services of a bank. Topics include soft skills in the workplace; history of banking; federal reserve; banking laws, ethics, and banks as business; banking services; bank security; ten-key touch; and banking transactions.



Accounting I (492100: 1 credit) **Prerequisite Course Codes:** 492120

Grade Range: 9 - 12

Computerized Accounting I is a year-long 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, spreadsheet software, and electronic calculators as the relationships and processes of manual computerized accounting are presented. Entry-level skills in the accounting occupations can be attained.

Credit Fulfills: Career-Focused Elective

Accounting II (492110: 1 credit)

Prerequisite Course Codes: 492120, 492100

Grade Range: 10 - 12

Computerized Accounting II is designed to provide students with the knowledge, understanding, and skills necessary for college and career readiness. Departmental and corporate accounting systems are components of the course with emphasis given to computerized software and automated systems.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Mathematics or Computer Science

(4th Mathematics or Computer Science)

Survey of Business (492120: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Survey of Business is a two-semester course. It 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 Business Finance; Hospitality and Tourism: Hospitality and Tourism; Marketing, Sales and Service: Digital Marketing, (Retail Management; and Transportation, Distribution, and Logistics: Supply Chain and Logistics. Using industry-recognized software (i.e., Microsoft), students will focus on skills in word processing, spreadsheets, presentations, and as they relate to business and marketing careers.

Credit Fulfills: Career-Focused Elective

Advanced Database Applications (492140: 1 credit)

Prerequisite Course Codes: 492120

Grade Range: 9 - 12

Students will work with multiple table operations, forms and reports. Student will learn advanced database features to manipulate and present data through advanced queries, calculated controls, macros, switchboards, custom forms/reports, sub forms, sub reports, joins, relationships, and more. Students will explore techniques in sharing, integrating, analyzing and managing a relational database.

Credit Fulfills: Career-Focused Elective, Meets Computer Science Requirement



Fashion Merchandising (.5 credit) (492190: 0.5 credit)

Prerequisite Course Codes: 492120

Grade Range: 9 - 12

Fashion Merchandising is designed to offer an overview of fashion and merchandising industry. It provides the foundation in preparing students for a wide range of careers available in the different levels of the fashion, merchandising and retail industry. Emphasis is given to historical development, marketing, customer service, retailing, fashion, merchandising, and design.

Credit Fulfills: Career-Focused Elective

Air Force JROTC Aviation Ground School (492210: 1 credit)

Prerequisite Course Codes: 495760

Grade Range: 9 - 12

The JROTC curriculum includes coursework on leadership, civics, geography and global awareness, health, and wellness, language arts, life skills, and U.S. history. The curriculum is based on the principles of performance-based, learner-centered education and promotes development of core abilities: capacity for lifelong learning, communication, responsibility for actions and choices, good citizenship, respectful treatment of others, and critical thinking techniques.

Credit Fulfills: Career-Focused Elective

Arkansas Hospitality and Tourism (0.5 credit) (492230: 0.5 credit) Prerequisite Course Codes: 492120 or 492120, 492260 or 493110, 493260

Grade Range: 9 - 12

Arkansas Hospitality 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.

Credit Fulfills: Career-Focused Elective

Hospitality Administration (.5 credit) (492250: 0.5 credit) **Prerequisite Course Codes:** 492120, 492260 or 493110, 493260

Grade Range: 9 - 12

(Business & Marketing) Hospitality Administration is a one-semester in depth study of the hospitality industry. Students will become familiar with careers in hospitality and the primary segments of the hospitality industry. The importance of personal presentation, communication skills, guest satisfaction, the ability to perform basic business math, along with basic marketing concepts will also be covered in this course.



Tourism Industry Management (492260: 1 credit)

Prerequisite Course Codes: 492120

Grade Range: 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.

Credit Fulfills: Career-Focused Elective

Air Force JROTC Drill and Ceremonies (492270: 1 credit)

Prerequisite Course Codes: 495760

Grade Range: 9 - 12

The JROTC curriculum includes coursework on leadership, civics, geography and global awareness, health, and wellness, language arts, life skills, and U.S. history. The curriculum is based on the principles of performance-based, learner-centered education and promotes development of core abilities: capacity for lifelong learning, communication, responsibility for actions and choices, good citizenship, respectful treatment of others, and critical thinking techniques.

Credit Fulfills: Career-Focused Elective

Financial Planning (492290: 1.5 credit)

Prerequisite Course Codes: 492120

Grade Range: 10 - 12

This course will introduce students to the basic concepts of economics and financial literacy then build on those topics to provide a more in-depth study of wealth management and personal financial planning. Components of financial planning and strategies used in the accumulation and conservation of wealth will be the focus. Strategies for investing, tax, insurance, and retirement planning, as well as estate planning will be studied. In addition, basics of business financial planning will also be discussed, including the purpose and use of financial statements in making business decisions.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Economics

Management (492320: 1 credit)
Prerequisite Course Codes: 492120

Grade Range: 9 - 12

Management is designed to prepare students for managerial careers. Students will study the value of soft skills in the business environment. Other topics will include: the role of a manager in a business organization, government regulations, information and communication systems and the use of technology, business finance principles, product/service development, production, marketing, distribution, pricing, and human resources management.



Marketing Business Enterprise (492330: 1 credit)

Prerequisite Course Codes: 492120

Grade Range: 10 - 12

Marketing Business Enterprise is a one-year course designed to offer an overview of the American business enterprise system. A study of various forms of ownership, internal organization, management functions, and financing as they relate to business. The course content focuses on the aspects of marketing and managing a small business enterprise; risk management; the use of technology; legal, ethical, and social obligation of businesses; savings and investments; taxes and government.

Credit Fulfills: Career-Focused Elective

Marketing Management (492350: 1 credit) Prerequisite Course Codes: 492120, 492330

Grade Range: 11 - 12

Marketing Management is a two-semester course designed to develop decision-making skills through the application of marketing and management principles. Competencies will be accomplished by utilizing various instructional methods, resources, and direct involvement with marketing businesses. The course will focus on organization, finance, risks, credit, technology, and social aspects. Although it is not mandatory, many students can benefit from the on-the-job training component (cooperative education) of this course. The student's job must relate to his/her career objectives.

Credit Fulfills: Career-Focused Elective

Business Procedures (492380: 1 credit)

Prerequisite Course Codes: 492120

Grade Range: 9 - 12

This is a two-semester course that will provide students with concepts and skills in technology, communication, human relations, financial and record management, and employability skills that can be applied in the management and administration of an office.

Credit Fulfills: Career-Focused Elective

Advanced Spreadsheet Applications (.5 credit) (492450: 0.5 credit)

Prerequisite Course Codes: 492120

Grade Range: 9 - 12

Advanced Spreadsheet is designed to provide students with in-depth coverage of higher-level skills, including: creating and working with tables, pivot tables, pivot charts, managing multiple worksheets and workbooks, using advanced functions and filtering, developing an application, and working with financial tools. A basic review of creating and formatting a workbook, working with functions, and creating charts and graphics is used as an introduction into this course also.



Air Force JROTC Leadership Development Lab (492550: 1 credit)

Prerequisite Course Codes: 495760

Grade Range: 9 - 12

The JROTC curriculum includes coursework on leadership, civics, geography and global awareness, health, and wellness, language arts, life skills, and U.S. history. The curriculum is based on the principles of performance-based, learner-centered education and promotes development of core abilities: capacity for lifelong learning, communication, responsibility for actions and choices, good citizenship, respectful treatment of others, and critical thinking techniques.

Credit Fulfills: Career-Focused Elective

Medical Office Management (492690: 1 credit)

Prerequisite Course Codes: 492120

Grade Range: 10 - 12

This course is designed to teach students concepts and skills that will be applied in the management and administration of a medical office. The course will focus on careers in the medical office environment, office management skills, patient billing and collections, patient/client service skills, ethics, medical terminology, and health information management.

Credit Fulfills: Career-Focused Elective

Small Business Operations (492700: 1 credit)

Prerequisite Course Codes: 492120, 492330 or 492120, 490820

Grade Range: 11 - 12

Small Business Operations is designed for students interested in learning how to manage a small business. Students will be required to participate in laboratory work. The lab experience will consist of operating a School Based Enterprise (SBE). In addition to the lab work, students will also complete a series of lessons designed to prepare them for the transition to higher education and/or an entrepreneurial career. The Small Business Operations (SBO) course requires that schools teaching this course also operate a fully operational small business enterprise (SBE).

Credit Fulfills: Career-Focused Elective

ADE Approved Health Science IV (requires ADE approval) (492750: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.



Digital Marketing (492760: 1 credit)

Prerequisite Course Codes: 492120 or 492120, 490820

Grade Range: 9 - 12

This is a two-semester project-based course that enhances technology skills, job search and employability skills along with communication skills. Students will create an online electronic career portfolio focused on an individual career path, create, digital marketing campaigns [including content marketing, social media, and viral marketing campaigns], participate in video conferencing, cloud-based collaboration, and learn and practice other workplace related communication technologies and channels. Students will apply verbal and nonverbal communication skills related to both spoken and written communications; technology will be used to enhance these skills. Productivity programs and apps will be used to teach time management, organization and collaboration skills, cloud storage and computing. Students will also create career-related documents according to professional layout and design principles, and will also learn the photo and video editing skills needed to create promotional and informational business communications and viral marketing campaigns.

Credit Fulfills: Career-Focused Elective

Introduction to Supply Chain and Logistics (492770: 1 credit)

Prerequisite Course Codes: 492120

Grade Range: 9 - 12

Introduction to Supply Chain Management & Logistics is a year-long course that introduces students to the supply chain and logistics industry. The content emphasizes beginning knowledge key to the success of working in the supply chain & logistics industries. Students study and gain a basic understanding of logistics, transportation, operations, warehousing, supply chain technology, transportation systems, SCOR model, and customer service skills ultimately learning how to buy, make and deliver products. Students will have the opportunity to explore careers in the supply chain and logistics industry.

Credit Fulfills: Career-Focused Elective

Organizational Leadership I (0.5 Credit) (492780: 0.5 credit)

Prerequisite Course Codes: 492120

Grade Range: 9 - 12

This project-based semester course offers a foundation for understanding and evaluating organizational leadership. It is designed to assist student leaders and aspiring student leaders in developing a framework for understanding and becoming effective leaders. This course examines topics such as professionalism, organizational behavior, trends and issues, creativity, innovation, leadership, and teamwork.



Organizational Leadership II (0.5 Credit) (492790: 0.5 credit)

Prerequisite Course Codes: 492120, 492780

Grade Range: 9 - 12

This project-based semester course offers a fundamental understanding and evaluation of organizational leadership. It is designed to assist student leaders and aspiring student leaders in developing a mindset of leadership with the skills and knowledge necessary to become an effective organizational leader. This course examines topics such as traits and motives of leaders, influence tactics, conflict resolution, leadership development, and succession planning.

Credit Fulfills: Career-Focused Elective

Markets and Analytics (492800: 1 credit) Prerequisite Course Codes: 492120, 492760

Grade Range: 10 - 12

This two-semester course extends training in managing digital marketing content and data to maintain brand integrity, customer satisfaction, and profitability of a business. Students will learn strategies for creating effective digital marketing content directed toward specific target markets and for specific online platforms. Students will also explore and practice various methods for gathering and analyzing data in order to maximize return on investment for digital and content marketing efforts.

Credit Fulfills: Career-Focused Elective

Child Care Guidance, Management, and Services (493010: 1 credit)

Prerequisite Course Codes: 493080, 493020

Grade Range: 11 - 12

This course provides students with information and experiences in the occupational field of childcare guidance, management and services. Employment opportunities include childcare and guidance, early childhood education, foster care, family day care, and teacher assistants. Emphasis in this course is given to development of competencies related to FCCLA, employability, understanding the child care profession, child development, health and safety of children, guiding children's behavior, guiding special needs children, planning and management of a child care program and facility, and the effect of technology in child care and guidance management and services. Upon successful completion of this course, students may apply for state certification as childcare teacher, childcare assistant, or child care aide. The level of certification depends on the number of FACS courses taken in the childcare program of study.



Child Growth and Development (493020: 1 credit)
Prerequisite Course Codes: 493240, 493290 or 493080

Grade Range: 9 - 12

Child Growth and Development explores human growth and development starting from the prenatal stages and going through adolescent maturation. The course content deals with in-depth theories, practices, trends, and environmental factors that influence the development of children and adolescents, including family dynamics and the role of a child educator. Students are expected to complete field work and observations with a licensed Arkansas teacher in order to observe and record the learning behaviors and dynamics of children in a classroom. This course requires up to 25 hours of practicum for the Pre-Educator Program of Study. The Human and Social Services Program of Study does not require the practicum hours.

Credit Fulfills: Career-Focused Elective

Family & Consumer Sciences (493080: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Family and Consumer Science provides students with the basic information and skills needed to function effectively in the family and the workforce, within a complex and changing society. Emphasis is on the development of competencies related to Family, Career, and Community Leaders of America, individual and family relationships, healthy lifestyle choices; housing and interior design; garment care, selection and construction; the physical, emotional, social and intellectual development of children; nutrition, meal planning, food preparation and foodservice; home management, money management. Upon completion of this course, the student should have developed skills that promote a positive influence on the quality of life.

Credit Fulfills: Career-Focused Elective

Food Safety and Nutrition (493110: 1 credit)

Prerequisite Course Codes: 493080

Grade Range: 9 - 12

This course focuses on the development of essential food safety practices needed to select, receive, store, prepare, and serve food, as well as the skills needed to select food that meets nutritional needs of individuals and families. Students will learn to create and implement an environment of food safety procedures based on the latest FDA Food Code and local regulations. This course gives emphasis to the development of competencies related to nutrition, weight control, the food consumer, the effect of technology on food and nutrition, and food preparation skills. With completion of this course, students should be able to apply sound sanitation practices, to apply sound nutritional practices for positive effect on their health, and food preparation skills necessary in various aspects of the food industry.



Food Production, Management, and Services (493120: 1 credit)

Prerequisite Course Codes: 493080, 493110

Grade Range: 10 - 12

Emphasis in this course is given to the development of competencies related to employability; technology in food production, management, and services; sanitation and safety; nutrition as related to food service; servicing of food; purchasing, receiving, and storing of food supplies; production and management of food; use, care, and storage of large and small commercial foodservice equipment; menu planning; and modified diets.

Credit Fulfills: Career-Focused Elective

Chemistry of Foods (493130: 1 credit)
Prerequisite Course Codes: 493080, 493110

Grade Range: 11 - 12

Chemistry of Foods focuses on the scientific method to study the various relationships between food science, nutrition, and food preparation. Laboratory skills in measuring, recording, and analyzing data used to explore these relationships. Experimental methods are employed to analyze food mixtures, food microbiology, food preservations, and complex food systems. Students are given insight into career possibilities as well as up to date information regarding technological advances and future trends in food preparation, preservation, evaluation, and utilization of food.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Natural Science (3rd Science or Computer Science)

Dynamics of Human Relationships (493150: 1 credit)

Prerequisite Course Codes: 493080, 493020

Grade Range: 11 - 12

Dynamics of Human Relationships focuses on the nature, function, and significance of human relationships within family, community and career settings. This course examines skills needed for positive and productive relationships. The course also includes the study of these relationships and their effects on an individual's life. The course includes the importance of mental wellness, positive coping techniques, and awareness of treatment options of mental illnesses. This course a provides a foundation for all career areas that involve interacting with families, mental health and wellness, treatment team members, clients, patients, customers, and the public.

Credit Fulfills: Career-Focused Elective

Life and Fitness Nutrition (493200: 1 credit) **Prerequisite Course Codes:** 493080, 493110

Grade Range: 11 - 12

Life Fitness Nutrition is a Level 3 course in the Nutrition Science and Dietetics program of study. It enables students to analyze the interaction of nutrition, foods, and fitness for overall wellness. In this course, students will develop nutrition and fitness habits to make wise decisions regarding healthy living. Students will develop higher order thinking skills and academic skills in the areas of math, science, language arts, and social studies through the evaluation of relevant nutrition and wellness information. The course is for students with interests in health and wellness, fitness, and foods and nutrition related career pathways.



Introduction to Education (493240: 1 credit)

Prerequisite Course Codes: None

Grade Range: 10 - 12

Introduction to Education is designed with the intent to prepare high school students to become prospective Arkansas teachers. Students in this course will study the foundations of American education including important historical moments and Acts, professional behavior, student needs and diversity, instructional methods, communication strategies for all stakeholders, and reflective practices to support learning. Students will collaborate with an Arkansas teacher to actively participate in classroom observations and field experience opportunities.

Credit Fulfills: Career-Focused Elective

Culinary Arts I (493260: 1 credit) **Prerequisite Course Codes:** 493110

Grade Range: 10 - 12

Culinary Arts I is a one-year course designed to expand students' knowledge in the culinary arts profession. The course emphasizes the study of kitchen staples, principles of cooking, soups, stocks and sauces, dairy products, eggs, fruit and vegetables, grains and pasta cookery, meat cookery and principles of baking. Upon completion of this course, students should have attained basic skills needed for entry-level employment in the food service industry, customer relations, purchasing and storage of foods, cooking techniques and principles of baking.

Credit Fulfills: Career-Focused Elective

Culinary Arts II (493270: 1 credit)

Prerequisite Course Codes: 493110, 493260

Grade Range: 11 - 12

Culinary Arts II is a one-year course designed to expand students' knowledge in the culinary arts profession. Emphasis is on the study of sauces, garde-manger, advanced meat preparation, advanced poultry preparation, fish and shellfish, candy making, chocolate, advanced baking and pastries, plating, presentation and garnishing, and career opportunities. Upon completion of this course, students should have obtained the basic skills needed for employment in the food service industry or further education in culinary arts.



Education Technology (493290: 1 credit)

Prerequisite Course Codes: 493240

Grade Range: 11 - 12

Education Technology is a project-based course that introduces students to the role of technology in the classroom. Students will explore various technologies being used as digital learning tools in multiple modes of learning including online, face-to-face, and hybrid classroom environments. This course will expose students to the skills and strategies needed to integrate technology into the classroom, develop methods of digital communication and collaboration, support practices for digital citizenship, and reflect on their own performance in a digital environment. Students are expected to gain field experience by completing classroom observations, both online and face-to-face, with a licensed Arkansas teacher and to complete an initial Google certification to become a Google certified Educator. This course requires 25 hrs of field experience; partnering universities and local schools may have additional requirements.

Credit Fulfills: Career-Focused Elective

Consumer Services (493310: 1 credit) **Prerequisite Course Codes:** 493080

Grade Range: 10 - 12

Consumer Services is a course that introduces applications with a consumer service industry. Students will obtain a broad-based knowledge in consumer products and industry equipment in order to obtain and maintain a profession in consumer services, to allow demonstration of product/equipment features and associated uses, to read and understand current research information to include in presentations to consumers, and to recognize and apply current ethical and legal practices in consumer services. Course content includes using technology to manage various aspects of consumer services to meet consumer expectations and to utilize consumer information and resources.

Credit Fulfills: Career-Focused Elective

Advanced Nutrition & Dietetics (493340: 1 credit)

Prerequisite Course Codes: 493080, 493110

Grade Range: 11 - 12

Advanced Nutrition and Dietetics emphasizes the profession of nutrition and dietetics, the professional role of the dietitian, and career opportunities in nutrition and dietetics. The student will explore nutritive processes, nutritional needs for various stages of the life cycle, therapeutic diets, dietary modifications, and timely nutrition-related issues. Critical thinking skills will be used to investigate scientific, consumer oriented, and global aspects of nutrition, as well as programs, policies, and institutions that influence nutrition services at the local, state, and national levels. Laboratory instruction and work-based learning opportunities should be provided through the course curriculum. Leadership development will be provided through the Family, Career and Community Leaders of America (FCCLA) student organization.



Radio Broadcasting I (493380: 1 credit)

Prerequisite Course Codes: 493680

Grade Range: 9 - 12

Principles of announcing/audio engineering: study of voice, diction, pronunciation, and delivery will be explored in this course. Experience in various types of announcing, concepts and techniques of sound production, including the coordinating and directing processes, hands-on experience with equipment, sound sources, and direction of talent, equipment maintenance and operations. Experience will include sports casting, audio reinforcement/ recording/editing, PSA's, commercial copywriting, and newswriting.

Credit Fulfills: Career-Focused Elective

Radio Broadcasting II (493390: 1 credit)

Prerequisite Course Codes: None

Grade Range: 10 - 12

Extension of study in announcing, audio production, broadcasting, and sound engineering: study of voice, diction, pronunciation and delivery as well as audio recording/editing is emphasized. With experience in various types of announcing, concepts and techniques of sound production, including the coordinating and directing processes, hands-on experience with equipment, sound sources, and direction of talent, equipment maintenance, and operations.

Credit Fulfills: Career-Focused Elective

Radio Broadcasting III (493400: 1 credit)

Prerequisite Course Codes: None

Grade Range: 11 - 12

This independent production-based course is designed to provide the advanced radio student the opportunity to master the skills and knowledge needed to begin a comprehensive career in radio broadcasting.

Credit Fulfills: Career-Focused Elective

Radio Broadcasting Lab (493410: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

This class serves as an extension of the skills and concepts learned in the previous courses within its pathway. The lab helps to develop these skills and concepts in simulated real-world environments.

Credit Fulfills: Career-Focused Elective

Digital Cinema Productions I (493420: 1 credit)

Prerequisite Course Codes: 493680

Grade Range: 9 - 12

In this course, students will gain media awareness and develop a fundamental understanding of production principles. Students will learn digital video camera basics, non-linear (computer based) video editing, script writing, audio production, and digital broadcasting.



Digital Cinema Productions II (493430: 1 credit)

Prerequisite Course Codes: None

Grade Range: 10 - 12

Emphasis is on the concept and technique of production of television broadcasts in practical situations. Practical experience in the operation of television studio and control room equipment, including both pre-

and post-production needs, will be emphasized.

Credit Fulfills: Career-Focused Elective

Digital Cinema Productions III (493440: 1 credit)

Prerequisite Course Codes: None

Grade Range: 11 - 12

In this course, students will gain media awareness and develop an understanding of production principles. Students will learn advanced digital video camera techniques, non-linear video editing, script writing, audio production, and digital broadcasting.

Credit Fulfills: Career-Focused Elective

Digital Cinema Productions Lab (493450: 1 credit)

Prerequisite Course Codes: 493680, 493420

Grade Range: 9 - 12

This class serves as an extension of the skills and concepts learned in the previous courses within its pathway. The lab helps to develop these skills and concepts in simulated real-world environments.

Credit Fulfills: Career-Focused Elective

ADE Approved Human Services (Requires ADE Approval) (493630: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

A/V Productions I (493640: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

This course will include a comprehensive introduction to basic film and video production techniques and equipment. Proper procedures are explained for the use of digital and film cameras, filters, lights, microphones, audio equipment, editing systems, and other motion picture equipment. Attention is also given to production planning and post-production.



A/V Productions II (493650: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

This course will incorporate extensive production experience to aid students in proficiency in the use of film and video production techniques and equipment. Proper procedures are explained for the use of digital and film cameras, filters, lights, microphones, audio equipment, editing systems, and other motion picture equipment. Attention is also given to production planning and post-production.

Credit Fulfills: Career-Focused Elective

A/V Productions III (493660: 1 credit)

Prerequisite Course Codes: None

Grade Range: 11 - 12

This course incorporates project-based instruction and is an extension of the AVT &F program of study. It provides classroom training and instruction for the advanced student that is above the basic core course requirement. The content of this course builds on the knowledge, skills, and abilities taught in the Fundamental and Intermediate courses.

Credit Fulfills: Career-Focused Elective

A/V Productions Lab (493670: 1 credit)

Prerequisite Course Codes: None

Grade Range: 11 - 12

This class serves as an extension of the skills and concepts learned in the previous courses within its pathway. The lab helps to develop these skills and concepts in simulated real-world environments.

Credit Fulfills: Career-Focused Elective

Media Communications (493680: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

The purpose of this course is to assist students in making informed decisions regarding their future academic and occupational goals and to provide information regarding careers in the Arts, A/V Technology and Communication Career Cluster. The content includes, but is not limited to, technology literacy; understanding the importance of Arts and A/V; understanding the role of science, math, reading, writing, history, and technology in Arts and A/V; and Digital Media.Reinforcement of academic skills occurs through classroom instruction and applied laboratory procedures. Instruction and learning activities are provided through theory and hands-on experiences with the equipment, materials and technology appropriate to the course content and in accordance with current practices.



ADE Approved Agribusiness, Food, & Natural Resources (Requires ADE

Approval) (493830: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 11 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

Mechanical, Plumbing, and Electrical Systems (493840: 1 credit)

Prerequisite Course Codes: 494480

Grade Range: 9 - 12

This instructional program prepares individuals to apply technical knowledge and skills in heating, ventilation, and air conditioning; electrical and mechanical systems; and plumbing. It is a foundation course to combine electrical, plumbing and HVAC courses into a one credit introductory course.

Credit Fulfills: Career-Focused Elective

Keystone (493850: 0.5 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 10

The Keystone course is designed to help ninth and tenth graders successfully navigate high school. Students will receive instruction in self-realization, interpersonal skills, study skills, self-management skills and goal setting and planning strategies. This transition course will create a sense of belonging among students by having them become productive citizens of their school and community. Students will receive guidance in investigating their own interests, values and aptitudes in relation to possible Career Pathways and life-long learning and will begin developing a flexible education plan for high school and beyond.

Credit Fulfills: Career-Focused Elective

Internship (493860: 1 credit)
Prerequisite Course Codes: None

Grade Range: 10 - 12

The Internship course is a paid or unpaid experiential work-based learning experience available for all students. This course integrates knowledge and theory in which students will connect with professionals and experience valuable workplace skills.



College and Career Readiness (493880: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 11 - 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 who they are, what they need in a career, and what they need from education to be prepared to refine their choices through a decision-making process. It helps the student master the skills most needed by 21st century employers. This course is recommended for the junior or senior year to assess labor market information, personal academic and career ready potential, and make application to postsecondary institutions.

Credit Fulfills: Career-Focused Elective

Career Readiness (0.5 Credit) (493900: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Career Readiness is a one-semester .5 credit course. The major goal of Career Readiness is to engage students to develop characteristics and skills employers most desire. It is designed to provide the student with the necessary skills to evaluate who they are, what they need in a career, research college and career information, refine their choices through a decision-making process and master the essential/soft skills most needed by 21st Century employers.

Credit Fulfills: Career-Focused Elective

Engineering I (493960: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Students are introduced to the engineering design process, applying math, science, and engineering standards to identify and design solutions to a variety of real problems. They work both individually and in collaborative teams to develop and document design solutions using engineering notebooks and 3D modeling software.

Credit Fulfills: Career-Focused Elective

Engineering II (493970: 1 credit) **Prerequisite Course Codes:** 493960

Grade Range: 10 - 12

Engineering II 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 problem-solving skills that are involved in postsecondary education programs and engineering careers. They will explore various engineering sub-types such as mechanical engineering, robotics, and manufacturing processes.



Engineering III (493980: 1 credit)

Prerequisite Course Codes: 493960, 493470

Grade Range: 10 - 12

Engineering III is a broad-based survey course designed to help students understand the fields of engineering and engineering technology and the career possibilities. Students will continue to develop engineering problem-solving skills that are involved in postsecondary education programs and engineering careers. They will explore engineering sub-types such as aerospace, environmental, civil, and electrical.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Natural Science (3rd Science or

Computer Science)

Engineering Capstone (493990: 1 credit) **Prerequisite Course Codes:** 493960, 493970 AND

(494980 OR 493980 OR 495460 OR 495440 OR 495450 OR 495450)

Grade Range: 10 - 12

In this course, students will work in teams of two to four to design and construct the solution to an

engineering problem, applying the principles developed in the preceding three courses.

Credit Fulfills: Career-Focused Elective

ETE I-Intro to Engineering and Technology Education (semester course) (.5

credit) (494010: 0.5 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 9

This course is designed to provide students with a comprehensive overview of the fields of information and communication, construction, manufacturing, energy, power, and transportation technologies. Students will also develop an understanding of the history of technology and how the design loop is used to solve technological problems. Emphasis will be placed on the exploration of principles and concepts as well as the application of technological concepts and practices through the completion of experiments, learning exercises, field trips, writing activities, and design projects.

Credit Fulfills: Career-Focused Elective

ETE II-Fundamentals of Engineering and Technology Education (semester

course) (.5 credit) (494020: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 9

This course is designed to provide students with a comprehensive overview of the fields of information and communication, construction, manufacturing, energy, power, and transportation technologies. Students will also develop an understanding of the history of technology and how the design loop is used to solve technological problems. Emphasis will be placed on the exploration of principles and concepts as well as the application of technological concepts and practices through the completion of experiments, learning exercises, field trips, writing activities, and design projects.



ADE Approved Manufacturing I (Requires ADE Approval) (494030: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

ADE Approved Manufacturing II (Requires ADE Approval) (494040: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

Principles of Sports Medicine (494050: 1 credit)

Prerequisite Course Codes: 495350

Grade Range: 9 - 12

This course is designed for students interested in fields such as athletic training, physical therapy, medicine, fitness, exercise physiology, kinesiology, nutrition, and other sports medicine related fields. This class includes both theory-based and practicum instruction that exposes students to various sports medicine careers. Through these connections students will understand the importance of medical terminology and how it relates to exercise, nutrition, treatment modalities, and preventative/rehabilitative care

Credit Fulfills: Career-Focused Elective

Sports Medicine Injury Assessment (494070: 1 credit)

Prerequisite Course Codes: 495350, 495360 or 494050

Grade Range: 9 - 12

This course provides students with a more specific look at sports medicine from the perspective of injury evaluation that includes advanced injury assessment, and understand of common injuries that affect the physically active population. Students will gain a more complete understanding injury evaluation and the role it plays in the career field of Sports Medicine. It is recommended that Human Anatomy and Physiology, Sports Medicine I and Sports Medicine II be completed prior to enrolling in this course.



Exercise Science (494080: 1 credit)

Prerequisite Course Codes: 495350, 495360 or 494050

Grade Range: 9 - 12

This course provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Health Science career cluster. It will specifically provide technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects Exercise Science.

Credit Fulfills: Career-Focused Elective

Advertising and Graphic Design III (494130: 1 credit)

Prerequisite Course Codes: 494150

Grade Range: 11 - 12

This course is designed to introduce students to the fundamental skills and knowledge needed to create graphic works using industry-standard hardware and software for a variety of purposes and outputs. Areas of study include the understanding of the industry history, terminology, color, design principles, typography and ethical and legal issues related to graphic designs. The main emphasis will include layout design and the creation and manipulation of graphics and how they are applied in today's industry standards.

Credit Fulfills: Career-Focused Elective

First Responder (494140: 1 credit)

Prerequisite Course Codes: 494620 and 494630, or 495350 and 495360

Grade Range: 9 - 12

It is obvious that First Responders provide a service in an environment requiring special skills and knowledge. They also serve as liaisons with other emergency services. This course provides an introduction to these concepts. Individual orientation to the specific systems and services with which the First Responder will be affiliated is necessary to achieve a full level of competency within a specific organization.

Credit Fulfills: Career-Focused Elective

Advertising and Graphic Design I (494150: 1 credit)

Prerequisite Course Codes: 493680

Grade Range: 9 - 12

This course is designed to introduce students to the fundamental skills and knowledge needed to create graphic works using industry-standard. hardware and software for a variety of purposes and outputs. Areas of study include the understanding of the industry history, terminology, color, design principles, typography and ethical and legal issues related to graphic designs. Emphasis is placed on layout design and the creation and

manipulation of graphics and how they are applied in today's industry standards. **Credit Fulfills:** Career-Focused Elective, Graduation Requirement for Fine Arts



Advertising and Graphic Design Lab (494160: 1 credit)

Prerequisite Course Codes: 493680

Grade Range: 9 - 12

This class serves as an extension of the skills and concepts learned in the previous courses within its pathway. The lab helps to develop these skills and concepts in simulated real-world environments.

Credit Fulfills: Career-Focused Elective

Advertising and Graphic Design II (494170: 1 credit)

Prerequisite Course Codes: 494150

Grade Range: 10 - 12

This course is designed to build upon basic knowledge and skills learned in Advertising and Graphic Design Level 1. Students will be acquiring additional knowledge and skills needed to create graphic works using industry-standard hardware and software for a variety of purposes and outputs. Areas of study include the understanding of the industry history, terminology, color, design principles, typography, photography, web graphics, animation and ethical and legal issues related to the graphic design. Emphasis is placed on layout design and the creation and manipulation of graphics and how they are applied in today's industry standards.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Fine Arts

Brakes/Manual Drive Train (494180: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

The student will learn to diagnose and repair drum and disc brake systems. Also covered will be diagnosing and repairing the entire hydraulic brake system, which will include the master cylinder, lines, proportioning valves and stop light operation. The student will learn to diagnose and repair power assist units. Finally, this course will cover diagnosis and service of wheel bearings, to include how to replace bearings and races, as well as clean, repack and adjust wheel bearing preload.

Credit Fulfills: Career-Focused Elective

Automotive Electrical Systems/HVAC (494190: 1 credit)

Prerequisite Course Codes: 494180

Grade Range: 9 - 12

This course prepares individuals to engage in the diagnosis and repair of electrical/electronic systems. Instruction will include units on general electrical system diagnosis and service.

Credit Fulfills: Career-Focused Elective

Engine Performance/Engine Repair (494200: 1 credit)

Prerequisite Course Codes: 494180, 494190

Grade Range: 9 - 12

In this course the student will learn the theory, operation, and diagnosis of vehicle ignition and emission control systems. This includes catalytic converters, and computer-controlled ignition systems. This course meets all applicable National Automotive Technicians Education Foundation (NATEF) standards.



Suspension & Steering/Automatic Transmissions (494210: 1 credit)

Prerequisite Course Codes: 494180, 494190

Grade Range: 9 - 12

In this course the student will learn the design, operation, and repair of vehicle steering and suspension systems. This will include two and four-wheel alignment on conventional and McPherson strut suspension systems, tire balance and service. This course meets all applicable National Automotive Technicians Education Foundation (NATEF) standards.

Credit Fulfills: Career-Focused Elective

Damage Analysis, Estimating, and Customer Service (494220: 1 credit)

Prerequisite Course Codes: 494300, 494310

Grade Range: 9 - 12

This course will educate the student on how to assess and analyze collision damaged vehicles. The student will also learn the fundamentals of damage patterns and different types of damage. Handwritten and computer-generated estimates using the latest estimating software and resources will be taught.

Credit Fulfills: Career-Focused Elective

Medium/Heavy Steering & Suspension/Hydraulics (494230: 1 credit)

Prerequisite Course Codes: 494650

Grade Range: 9 - 12

Medium/Heavy Steering & Suspension/Hydraulics is a program that prepares individuals to apply technical knowledge to diagnose and repair Steering & Suspension/Hydraulics in trucks, buses, and other commercial and industrial vehicles.

Credit Fulfills: Career-Focused Elective

Medium/Heavy Diesel Engines/CAB (494240: 1 credit)

Prerequisite Course Codes: 494650

Grade Range: 9 - 12

This course prepares individuals to apply technical knowledge to diagnose and repair diesel engines and

CAB in trucks, buses, and other commercial and industrial vehicles.

Credit Fulfills: Career-Focused Elective

Aviation I (494250: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

This program will include instruction on the general core curriculum required by the Federal Aviation

Administration.



Aviation II (494260: 1 credit) **Prerequisite Course Codes:** 494250

Grade Range: 9 - 12

This program will include instruction on the general core curriculum required by the Federal Aviation Administration. This course will have an emphasis on Power Plant Theory, Maintenance, Systems and

Components.

Credit Fulfills: Career-Focused Elective

Non-Structural Analysis/Repair (494300: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Students will be taught how to identify and describe the current types of body/frame construction; identify and describe the individual components of both conventional and unitized construction. They will learn how to identify & repair damage to metal, plastic, fiberglass, rubber & SMC. Students will learn about general body repair, Metal straightening, Glass, Trim, & Hardware

Credit Fulfills: Career-Focused Elective

Painting/Refinishing (494310: 1 credit)

Prerequisite Course Codes: 494300

Grade Range: 9 - 12

This course introduces the proper procedures for using automotive refinishing equipment and materials in surface preparation and application. Topics include federal, state, and local regulations, personal safety, refinishing equipment and materials, surface preparation, masking, application techniques, and other related topics. Upon completion, students should be able to identify and use proper equipment and materials in refinishing following accepted industry standards.

Credit Fulfills: Career-Focused Elective

Structural Analysis/Repair (494320: 1 credit)

Prerequisite Course Codes: 494300, 494310

Grade Range: 9 - 12

Structural Analysis and Damage Repair is a course that prepares students to analyze structural collision damage to a vehicle, determine the extent of the damage and the direction of impact, initiate an appropriate repair plan, and correctly use equipment to fit metal to a specified dimension within tolerances. Course content includes repairs to vehicle frames and glass. The course prepares students for entry-level employment and advanced training in collision repair technology, and post-secondary education.



Digital Photography I (494350: 1 credit)

Prerequisite Course Codes: 493680

Grade Range: 9 - 12

This course is an introduction to the basics of photography, and it includes camera operation, techniques, and presentation skills. An emphasis on design, history, and contemporary trends as a means of developing an understanding of photographic aesthetics is included.

Credit Fulfills: Career-Focused Elective

Digital Photography Lab (494360: 1 credit) **Prerequisite Course Codes:** 493680, 494350

Grade Range: 9 - 12

This course is designed to introduce students to the fundamental skills and knowledge needed to create graphic works using industry-standard. hardware and software for a variety of purposes and outputs. Areas of study include the understanding of the industry history, terminology, color, design principles, typography and ethical and legal issues related to graphic designs. Emphasis is placed on layout design and the creation and manipulation of graphics and how they are applied in today's industry standards.

Credit Fulfills: Career-Focused Elective

Digital Photography II (494370: 1 credit)

Prerequisite Course Codes: 494350

Grade Range: 10 - 12

Extends the student's knowledge of technique and guides them in developing personal outlooks toward specific applications of the photographic process.

Credit Fulfills: Career-Focused Elective

Digital Photography III (494380: 1 credit)

Prerequisite Course Codes: 494370

Grade Range: 11 - 12

This independent production based course will provide the advanced photography student with the practical knowledge and highly advanced skills for a comprehensive career in commercial photography.

Credit Fulfills: Career-Focused Elective

ADE Approved Health Science II (Requires ADE Approval) (494400: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.



ADE Approved Health Science III (Requires ADE Approval) (494420: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

Carpentry (494460: 1 credit)

Prerequisite Course Codes: 494480

Grade Range: 9 - 12

This instructional program prepares individuals to apply technical knowledge and skills to layout, fabricate, erect, install, and repair wooden structures and fixtures, using hand and power tools.

Credit Fulfills: Career-Focused Elective

Cabinetry (494470: 1 credit)

Prerequisite Course Codes: 494480, 494460 or 494480,493840

Grade Range: 9 - 12

Cabinetmaking introduces advanced trainees and experienced carpenters to the construction of highquality finished products such as cabinets and furniture. Many companies build and install custom cabinets designed to fit into a specific area or serve a particular need.

Credit Fulfills: Career-Focused Elective

Skilled Trades: Construction (494480: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Skilled Trades Construction is a foundational course in the Architecture & Construction cluster covering essential knowledge, skills, and concepts required for careers in construction. Students will learn to describe various construction fields and outline the steps necessary to advance in specific construction careers. Students will learn to employ tools safely and interpret construction drawings to complete projects demonstrating proper measurement and application of mathematical concepts. Standards in this course also include an overview of the construction industry and an introduction to building systems and materials.

Credit Fulfills: Career-Focused Elective

Electrical (494500: 1 credit)

Prerequisite Course Codes: 494480, 494460 or 494480,493840

Grade Range: 9 - 12

This instructional program prepares individuals to apply technical knowledge and skills to install and repair residential electrical systems.



Plumbing (494510: 1 credit)

Prerequisite Course Codes: 494480, 494460 or 494480,493840

Grade Range: 9 - 12

This course connects plumbing students to the many career options available in today's plumbing profession. This course also provides a history of plumbing and discusses the current technology, industrials and professions.

industries, and associations that make up the modern plumbing profession.

Credit Fulfills: Career-Focused Elective

Crime Scene Investigation (494600: 1 credit)

Prerequisite Course Codes: 494620, 494630

Grade Range: 9 - 12

The course provides students with methods and procedures employed in a crime scene investigation from discovery of evidence to its presentation in courts of law. Topics include how to secure a crime scene, how to recognize various types of forensic evidence, how to collect, and preserve evidence. The topic of how to maintain a chain of custody and avoid contamination of physical evidence and biological specimens while gathering, transporting, and analyzing each item found at a scene.

Credit Fulfills: Career-Focused Elective

Criminal Law (494610: 1 credit)

Prerequisite Course Codes: 494620, 494630

Grade Range: 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.

Credit Fulfills: Career-Focused Elective

Introduction to Criminal Justice (494620: 1 credit)

Prerequisite Course Codes: None

Grade Range: 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.

Credit Fulfills: Career-Focused Elective

Foundations of Law Enforcement (494630: 1 credit)

Prerequisite Course Codes: 494620

Grade Range: 9 - 12

This course is designed to teach students the necessary background and practical skills to function as law enforcement officers. Topics reviewed in lecture and in applied exercises include administration of justice, basic law and procedures and patrol functions.



Medium/Heavy Brake/Drive Train (494650: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Medium/Heavy Brakes/Drive Train is a program that prepares individuals to apply technical knowledge to

repair brakes and drive trains of trucks, buses, and other commercial and industrial vehicles.

Credit Fulfills: Career-Focused Elective

Medium/Heavy Electrical Systems/HVAC (494660: 1 credit)

Prerequisite Course Codes: 494650

Grade Range: 9 - 12

Medium/Heavy Electrical Systems/HVAC is a program that prepares individuals to apply technical knowledge to diagnose and repair electrical systems and HVAC in trucks, buses, and other commercial

and industrial vehicles.

Credit Fulfills: Career-Focused Elective

Drafting & Design (494700: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Drafting and Design focuses on the basic knowledge and skills required to produce engineering and architectural drawings. Emphasis is given to the development of competencies related to the use of drafting equipment, the production of beginning level engineering drawings, and the production of beginning level architectural drawings.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Fine Arts

Architecture/CADD I (494710: 1 credit)

Prerequisite Course Codes: 494700

Grade Range: 10 - 12

Architectural/CAD I focuses on the knowledge and skills required to plan and prepare scale pictorial interpretations of plans and design concepts for residential buildings. Emphasis is given to the development of competencies related to solving drafting and design problems that require the individual to understand and apply a wide range of technical knowledge and critical thinking skills. The course is designed to allow the student to produce drawings as traditional or computer-aided drawings.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Fine Arts

Architecture/CADD Lab (494720: 1 credit) **Prerequisite Course Codes:** 494700, 494710

Grade Range: 10 - 12

This production-based program is designed to allow for the development of skills and knowledge needed to execute a comprehensive architectural product.



Architecture/CADD II (1 credit) (494730: 1 credit)

Prerequisite Course Codes: 494700, 494710

Grade Range: 11 - 12

Architectural/CAD II focuses on the knowledge and skills required to plan and prepare scale pictorial interpretations of plans and design concepts for residential buildings. Emphasis is given to the development of real-world experiences in applying the application of architectural drafting standards. The course is designed to allow the student to produce drawings as traditional drawings or advanced use of various CAD software to produce drawings.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science)

Engineering/CADD I (494740: 1 credit)

Prerequisite Course Codes: 494700

Grade Range: 10 - 12

Engineering/CAD I focuses on the knowledge and skills required to produce advanced level engineering drawings. Emphasis is given to the development of competencies related to solving drafting and design problems that require the individual to understand and apply a wide range of technical knowledge and critical- thinking skills. The course is designed to allow the student to produce drawings of mechanical parts, engineering diagrams, electronics, etc. as traditional drawings or as computer-aided drawings.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Fine Arts

Engineering/CADD Lab (494750: 1 credit) Prerequisite Course Codes: 494700, 494740

Grade Range: 11 - 12

This production-based program is designed to allow for the development of skills and knowledge needed

to execute a comprehensive engineering product.

Credit Fulfills: Career-Focused Elective

Engineering/CADD II (1 credit) (494760: 1 credit)

Prerequisite Course Codes: 494700, 494740

Grade Range: 11 - 12

Engineering/CAD II focuses on the knowledge and skills required to produce advanced level engineering drawings. Emphasis is given to putting into practice real-world experience related to solving problems that require the individual to understand and use various engineering software and techniques.

Credit Fulfills: Career-Focused Elective

Electronics Lab (494810: 1 credit) Prerequisite Course Codes: None

Grade Range: 9 - 12

This class serves as an extension of the skills and concepts learned in the previous courses within its pathway. The lab helps to develop these skills and concepts in simulated real-world environments.



Electronics II (494820: 1 credit) **Prerequisite Course Codes:** 494800

Grade Range: 10 - 12

Electronics is an applied course in the manufacturing cluster for students interested in learning more about careers as an electronic technician, maintenance technician, electromechanical technician, and manufacturing engineer. This course covers basic electrical and mechanical components of electronic systems with instrument controls and embedded software designs. Manufacturing Technology teaches the design, building, and maintaining of equipment that combines electronics, mechanics, pneumatics, hydraulics, and computer control systems.

Credit Fulfills: Career-Focused Elective, Meets Computer Science Requirement

Furniture Manufacturing I (494850: 1 credit)

Prerequisite Course Codes: 494480, 494460 or 494480,493840

Grade Range: 9 - 12

This course will introduce the beginning furniture and cabinetmaking student to the various stages of construction and assembly of wood products and related materials. This course is intended to provide students with the basic knowledge and skills necessary to design, construct, and finish furniture and/or cabinets in the woodworking industry. Through the course activities the student will gain an understanding of safety procedures, machine operation, and industrial applications. The appropriate use of technology and industry-standard equipment is an integral part of this course.

Credit Fulfills: Career-Focused Elective

ADE Approved Manufacturing III (Requires ADE Approval) (494860: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

Furniture Manufacturing II (494870: 2 credit)

Prerequisite Course Codes: None

Grade Range: 10 - 12

This course is a continuation of Furniture and Cabinetmaking I. This course provides intermediate furniture and cabinetmaking student with the necessary knowledge and skills to pursue employment in related industries. This course will increase knowledge gained in Furniture and Cabinetmaking I. Laboratory activities will include advanced processes using tools and equipment currently being used by the industry. The appropriate use of technology and industry standard equipment is an integral part of this course.



Design for Manufacturing (494950: 1 credit)

Prerequisite Course Codes: 495570

Grade Range: 9 - 12

This course will introduce students to the role that manufacturing plays in the design and development, manufacturing and marketing of products that are purchased by consumers, including food products, toys, clothing, vehicles, technology and many other items found around the world. The focus areas of this course include basic design concepts, computer skills, and drawing skills used within the manufacturing and machining industries. Students will also increase knowledge and application of computer-aided design (CAD) software programs that are commonly used within the manufacturing to design tools, parts and products.

Credit Fulfills: Career-Focused Elective

Manufacturing Production Processes (494960: 1 credit)

Prerequisite Course Codes: 495570, 494950

Grade Range: 10 - 12

The focus areas of study of this course include electrical and mechanical systems, the role of automation, hydraulics, pneumatics and vacuum systems in the manufacturing process. Students will also increase knowledge and applications of Computer Numerical Control (CNC) and Programmable Logic Control (PLC) concepts and equipment that is an important part of production and assembly line operations within the manufacturing and machining industries. Students will also gain knowledge in lean manufacturing concepts and strategies that increase efficiency and consistency in the production process.

Credit Fulfills: Career-Focused Elective

Aerospace Engineering Weighted Credit (494980: 1 credit)

Prerequisite Course Codes: 493960, 493970

Grade Range: 10 - 12

Students explore fundamentals of flight in air and space through software simulations and hands-on experiences. Students learn how these concepts apply to a career in aerospace engineering and to other engineering fields.

Credit Fulfills: Career-Focused Elective

ADE Approved Manufacturing IV (Requires ADE Approval) (494990: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.



Principles of Biomedical Sciences (495000: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Student work involves the study of human medicine, research processes, an introduction to bioinformatics, and the use of computer science, mathematics, and information theory to model and analyze biological systems. Students investigate the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases

Credit Fulfills: Career-Focused Elective

Human Body Systems (495010: 1 credit)

Prerequisite Course Codes: 495000

Grade Range: 9 - 12

Students engage in the study of the processes, structures, and interactions of the human body systems. Important concepts in the course include: communication, transport of substances, locomotion, metabolic processes, defense, and protection. The central theme is how the body systems work together to maintain homeostasis and good health.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Natural Science (3rd Science or Computer Science)

Medical Interventions Weighted Credit (495020: 1 credit)

Prerequisite Course Codes: 495000, 495010

Grade Range: 9 - 12

Students investigate a variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the lives of a fictitious family. The course is a "How-To" manual for maintaining overall health and homeostasis in the body as students explore how to prevent and fight infection; how to screen and evaluate the code in human DNA; how to prevent, diagnose and treat cancer; and how to prevail when the organs of the body begin to fail.

Credit Fulfills: Career-Focused Elective

Biomedical Innovations (495030: 1 credit) **Prerequisite Course Codes:** 495000, 495010

Grade Range: 11 - 12

Course resumes showcase the technical skills students obtain in each PLTW course. Each resume outlines the computational skills, analytical skills, and knowledge acquired in the course. Course resumes also detail student experience with tools, software, lab work, and engineering design. The detailed skills listed within course resumes illustrate the immediate, applicable contributions that students can make within a workplace.



HVACR I (495100: 1 credit)

Prerequisite Course Codes: 494480, 494460 or 494480,493840

Grade Range: 9 - 12

HVAC/R provides a broad introduction to the world of the HVAC technician. The most basic operating principles of HVAC systems are presented along with a review of technician licensing and trade-governing regulations. The final portion describes potential career paths for the well-trained HVAC technician.

Credit Fulfills: Career-Focused Elective

HVACR II (495110: 1 credit)

Prerequisite Course Codes: 495100

Grade Range: 10 - 12

HVAC/R 2 provides a detailed look into the world of the HVAC technician. The most basic operating principles of HVAC systems are presented along with a review of technician licensing and trade-governing regulations. The latter portion of the training includes many of the principles and topics facing a well-trained HVAC technician.

Credit Fulfills: Career-Focused Elective

Machine Tool I (495200: 1 credit)

Prerequisite Course Codes: 495570, 494950

Grade Range: 9 - 12

This course is designed to provide students with a basic understanding of the precision machining processes used in industry, manufacturing, maintenance, and repair. The course instructs students in industrial safety, terminology, tools and machine tools, measurement and layout. Students will become familiar with the setup and operation of power saws, drill press, lathe, milling machine, grinders and receive an introduction to CNC (computer controlled) machines.

Credit Fulfills: Career-Focused Elective

Machine Tool Lab (495210: 1 credit)
Prerequisite Course Codes: 495200, 495220

Grade Range: 9 - 12

This class serves as an extension of the skills and concepts learned in the previous courses within its pathway. The lab helps to develop these skills and concepts in simulated real-world environments.

Credit Fulfills: Career-Focused Elective

Machine Tool II (495220: 1 credit)

Prerequisite Course Codes: 495570, 494950

Grade Range: 10 - 12

This course is a more in-depth study of skills learned in Machine Tool I, with a stronger focus on CNC setup/operation/programming. Classroom activities will concentrate on precision set-up and inspection work, as well as machine shop calculations. Students will develop skills in advanced machining and measuring parts involving tighter tolerances. A continued focus on safety will also be presented.



Medical Math (495240: 1 credit)

Prerequisite Course Codes: 495350, 495360 or 494050

Grade Range: 9 - 12

This course is designed to increase students' ability to identify, solve, and apply mathematical principles involving temperature, weights, and measures used in the healthcare delivery system.

Credit Fulfills: Career-Focused Elective

ADE Approved Manufacturing V (Requires ADE Approval) (495250: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

Advanced Manufacturing Lab (495260: 1 credit)

Prerequisite Course Codes: 495570, 494950 or 495570, 495580

Grade Range: 9 - 12

This class serves as an extension of the skills and concepts learned in the previous courses within its pathway. The lab helps to develop these skills and concepts in simulated real-world environments.

Credit Fulfills: Career-Focused Elective

ADE Approved Manufacturing VI (Requires ADE Approval) (495270: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

Pharmacological Science (495280: 1 credit) Prerequisite Course Codes: 495350, 495360

Grade Range: 9 - 12

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the healthcare industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.



Pathology (.5 credit) (495290: 0.5 credit) Prerequisite Course Codes: 495350, 495360

Grade Range: 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-related terms, predisposing factors of diseases, the relationship between diagnosis and prognosis, and disease treatments. Following the introduction, the course delves into a range of pathology-related topics and their relationships to specific systems of the human body. The topics include signs and symptoms of pathology, the effects of trauma, the effects of age, and characteristics of common diseases.

Credit Fulfills: Career-Focused Elective

Human Behavior and Disorders (.5 credit) (495320: 0.5 credit)

Prerequisite Course Codes: 495350, 495360

Grade Range: 9 - 12

This course provides students with a general overview of psychology from the perspective of the health care community that includes history of psychology, research methods, major theories, and applications of the knowledge to the problems and challenges faced by today's health care professionals. Other areas addressed are biological foundations of behavior, consciousness, memory, learning, emotion, personality, psychological disorders, and methods of therapy. Students gain a better understanding of mental health and the impact it has on providing quality health care.

Credit Fulfills: Career-Focused Elective

Foundations of Health Care (495350: 1 credit)

Prerequisite Course Codes: None

Grade Range: 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.

Credit Fulfills: Career-Focused Elective

Medical Terminology (495360: 1 credit)

Prerequisite Course Codes: 495350

Grade Range: 9 - 12

This course builds skills in pronouncing, spelling, and defining new words encountered in verbal and written information. Students have the opportunity to acquire skills in interpreting medical records and communications accurately and logically. Emphasis is on forming a foundation for a medical vocabulary including meaning, spelling, and pronunciation. Medical abbreviations, signs, and symbols are included.



Abnormal Psychology (0.5 credit) (495370: 0.5 credit)

Prerequisite Course Codes: 495350, 495360

Grade Range: 9 - 12

This course provides a basic survey of maladaptive human behavior.

Credit Fulfills: Career-Focused Elective

Medical Professions Expanded (.5 Credit) (495380: 0.5 credit)

Prerequisite Course Codes: 495350, 495360

Grade Range: 9 - 12

This course is designed as an extension to the Foundations of Healthcare course. The course provides students with a general overview of the more crucial content areas of the Medical Professions Education program core courses. Areas covered are: medical terminology, medical math, human growth and development, processes of disease, and employability skills needed within the healthcare field.

Credit Fulfills: Career-Focused Elective

Medical Procedures Expanded (.5 credit) (495390: 0.5 credit)

Prerequisite Course Codes: 495350, 495360

Grade Range: 9 - 12

The Medical Procedures Expanded course focuses on the specific skills needed in several different areas of entry-level positions in health care. Students are able to build upon the skills gained in Medical Procedures. The different skill areas addressed are: dental assisting, laboratory assisting, medical assisting, nurse assisting, physical therapy assisting, and veterinary assisting.

Credit Fulfills: Career-Focused Elective

Power Equipment Technology I (495400: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Power Equipment Technology I & II prepares students for careers in the Power Equipment industry. The course sequence focuses on duties and tasks performed by professionals in power equipment repair occupations, as well as pre-employment and employment skills.

Credit Fulfills: Career-Focused Elective

Power Equipment Technology II (495420: 1 credit)

Prerequisite Course Codes: 495400

Grade Range: 9 - 12

Power Equipment Technology I & II prepares students for careers in the Power Equipment industry. The course sequence focuses on duties and tasks performed by professionals in Power Equipment repair occupations, as well as pre-employment and employment skills.



Environmental Sustainability (495430: 1 credit)

Prerequisite Course Codes: 493960, 493970

Grade Range: 10 - 12

Students investigate and design solutions to solve real-world challenges related to clean drinking water, a stable food supply, and renewable energy. Students are introduced to environmental issues and use the engineering design process to research and design potential solutions.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Natural Science (3rd Science or Computer Science)

Civil Engineering & Architecture Weighted Credit (495440: 1 credit)

Prerequisite Course Codes: 493960, 493970

Grade Range: 11 - 12

This course builds upon the computer solid modeling design skills developed in Engineering I and Engineering II. Students will be presented with design problems that require the use of computer-aided drafting skills to develop solutions to the problems. Students apply math, science and standard engineering practices to design both residential and commercial projects.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science)

Computer Integrated Manufacturing Weighted Credit (495450: 1 credit)

Prerequisite Course Codes: 493960, 493970

Grade Range: 11 - 12

Students learn about manufacturing processes, product design, robotics, and automation. Students develop their knowledge and skills of Computer Aided Design and Manufacturing to produce products using a Computer Numerical Controlled (CNC) mill. Students apply the knowledge and skills gained in this course as they collaborate to design, build, and program factory system models.

Credit Fulfills: Career-Focused Elective

Digital Electronics Weighted Credit (495460: 1 credit)

Prerequisite Course Codes: 493960, 493970

Grade Range: 11 - 12

Digital Electronics is a course of study in applied digital logic. The course is patterned after the first-semester course in digital electronics taught in two-and four-year colleges. Students will study the application of electronic logic circuits and devices and apply Boolean logic to the solution of problems.

Credit Fulfills: Career-Focused Elective, Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Meets Computer Science Requirement



Advanced Shielded Metal Arc Welding (495540: 1 credit)

Prerequisite Course Codes: 495570, 495580

Grade Range: 10 - 12

This course prepares individuals to apply technical knowledge and skills to join or cut metal surfaces. Includes instruction in arc welding, resistance welding, brazing and soldering, cutting, high-energy beam welding and cutting, solid state welding, ferrous and non-ferrous materials, oxidation-reduction reactions, welding metallurgy, welding processes and heat treating, structural design, safety, and applicable codes and standards.

Credit Fulfills: Career-Focused Elective

Gas Metal Arc Welding (495550: 1 credit) **Prerequisite Course Codes:** 495570, 495580

Grade Range: 9 - 12

This program prepares individuals to apply technical knowledge and skills to join or cut metal surfaces. Includes instruction in arc welding, resistance welding, brazing and soldering, cutting, high-energy beam welding and cutting, solid state welding, ferrous and non-ferrous materials, oxidation reduction reactions, welding metallurgy, welding processes and heat treating, structural design, safety, and applicable codes and standards

Credit Fulfills: Career-Focused Elective

Gas Tungsten Arc Welding (495560: 1 credit)

Prerequisite Course Codes: 495570, 495580

Grade Range: 9 - 12

This course prepares individuals to apply technical knowledge and skills to join or cut metal surfaces. Includes instruction in arc welding, resistance welding, brazing and soldering, cutting, high-energy beam welding and cutting, solid state welding, ferrous and non-ferrous materials, oxidation-reduction reactions, welding metallurgy, welding processes and heat treating, structural design, safety, and applicable codes and standards.

Credit Fulfills: Career-Focused Elective

Skilled Trades: Manufacturing (495570: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

The Skilled Trades Manufacturing course is designed to introduce students to many different types of manufacturing and machining-related career fields. Students will increase knowledge of the job skills that align with the different types of manufacturing processes, equipment and products that are produced by companies within the manufacturing and machining industries. Students will also gain valuable skills related to safety, proper use of equipment, communication, work ethic and other effective career skills that will be expected within the workplace. In the Manufacturing I course, students will also increase knowledge of essential math and literacy skills that relate to manufacturing. Students will gain foundational knowledge in the identification of and proper use of equipment and machine commonly used in the industry, including manual and power lathes, milling machines, robotic arm, CNC machine, drill press and bench grinders.



Shielded Metal Arc Welding (495580: 1 credit)

Prerequisite Course Codes: 495570

Grade Range: 9 - 12

A program that prepares individuals to apply technical knowledge and skills to join or cut metal surfaces. Includes instruction in arc welding, resistance welding, brazing and soldering, cutting, high-energy beam welding and cutting, solid state welding, ferrous and non-ferrous materials, oxidation-reduction reactions, welding metallurgy, welding processes and heat treating, structural design, safety, and applicable codes and standards.

Credit Fulfills: Career-Focused Elective

ADE Approved Law, Public Safety, Corrections & Security (Requires ADE

Approval) (495590: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

ADE Approved Law, Public Safety, Corrections & Security (Requires ADE

Approval) (495590: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

This course may be used in specific instances such as when set courses in approved Career and Technical Education pathway do not align with local industry needs, when a pilot program is in the developmental stage and does not align with existing course standards, or when an additional course is needed in an existing pathway. Approval is required to use this course code.

Credit Fulfills: Career-Focused Elective

Air Force JROTC I (495760: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

The Air Force JROTC I (year-long) course is designed to acquaint students with the historical development of flight and the role of the military in history. Additionally, wearing of the uniform, Air Force U.S. customs and courtesies, and basic drill skills are introduced.



Air Force JROTC II (495770: 1 credit) **Prerequisite Course Codes:** 495760

Grade Range: 10 - 12

The Air Force JROTC II (year-long) course is designed to acquaint students with the aerospace environment, the human requirements of flight, and the principles of flight and navigation. Students develop an understanding of the environment, and how the environment affects flight.

Credit Fulfills: Career-Focused Elective

Air Force JROTC III (495780: 1 credit) **Prerequisite Course Codes:** 495770

Grade Range: 11 - 12

The Air Force JROTC III (year-long) course is designed to emphasize the propulsion systems of aircraft. Both reciprocal and jet engines are studied in some detail. Rocketry and spacecraft portions of the course include rocket propulsion, guidance and control, and orbits. Seniors enrolled in JROTC III will be administered the NOCTI JROTC Leadership and Employability Skills credential exam.

Credit Fulfills: Career-Focused Elective

Army JROTC I (495790: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

The Army JROTC I (year-long) course is designed to present the history, purpose, and objectives of the JROTC program; the wearing of the uniform; respect for the flag and National Anthem; and organizational principles

Credit Fulfills: Career-Focused Elective

Army JROTC II (495800: 1 credit) **Prerequisite Course Codes:** 495790

Grade Range: 10 - 12

The Army JROTC II (year-long) course is designed to present discussion of self-concept; the definition of management: the elements of the leadership process; practical exercise in the development of leadership skills; the school of the cadet; the role of cadets as leaders; and the value of physical exercise and conditioning.



Army JROTC III (495810: 1 credit) **Prerequisite Course Codes:** 495800

Grade Range: 11 - 12

The Army JROTC III (year-long) course is designed to present discussion of military leadership and managerial techniques, the aspect of mutual respect (leader/subordinate relationship), the duties of a leader/manager the building of teamwork and team spirit, the flow of communication, the management to operating level and back, the problem-solving process, staff supervision of assigned tasks, and staff functions and procedures. Seniors enrolled in JROTC III will be administered the NOCTI JROTC Leadership and Employability Skills credential exam.

Credit Fulfills: Career-Focused Elective

Marine JROTC I (495820: 1 credit)
Prerequisite Course Codes: None

Grade Range: 9 - 12

The Marine Corps JROTC I (year-long) course focuses on introducing and integrating students to the JROTC program and its objectives. Classes focus on introducing leadership concepts such as definition, traits, morals & ethics, and responsibilities.

Credit Fulfills: Career-Focused Elective

Marine JROTC II (495830: 1 credit) Prerequisite Course Codes: 495820

Grade Range: 10 - 12

The Marine Corp JROTC II (Leadership Education II) (year-long) course is a continuation of the Marine

Corps JROTC I course with the further development of individual leadership skills.

Credit Fulfills: Career-Focused Elective

Marine JROTC III (495840: 1 credit)
Prerequisite Course Codes: 495830

Grade Range: 11 - 12

The Marine Corps JROTC III (year-long) course focuses on the development of advanced leadership skills. Seniors enrolled in JROTC III will be administered the NOCTI JROTC Leadership and Employability Skills credential exam.



Navy JROTC I (495850: 1 credit) Prerequisite Course Codes: None

Grade Range: 9 - 12

The Navy JROTC I (year-long) course is designed to present the history, purpose, and objectives of the Navy JROTC program; introduce cadets to the precepts of citizenship, the elements of leadership, and basic military discipline. This course is also designed to engender a sound appreciation for the heritage and traditions of America, with recognition that the historically significant role of sea power will be important in America's future, and develop in each cadet a growing sense of pride in his/her organization, associates, and self.

Credit Fulfills: Career-Focused Elective

Navy JROTC II (495860: 1 credit) Prerequisite Course Codes: 495850

Grade Range: 10 - 12

The Navy JROTC II (year-long) course is designed to provide definition of management; the elements of the leadership process; practical exercise in the development of leadership skill; the role of cadets as leaders; the value of physical exercise and conditioning, and to learn about the basic elements and requirements for national security and their personal obligations as American citizens to contribute toward national security

Credit Fulfills: Career-Focused Elective

Navy JROTC III (495870: 1 credit) Prerequisite Course Codes: 495860

Grade Range: 11 - 12

The Navy JROTC III (year-long) course is designed to focus on the development of advanced leadership and management skills. Seniors enrolled in JROTC III will be administered the NOCTI JROTC Leadership and Employability Skills credential exam.

Credit Fulfills: Career-Focused Elective

Air Force JROTC IV (495880: 1 credit) **Prerequisite Course Codes:** 495780

Grade Range: 12 - 12

The Air Force JROTC IV (year-long) course is designed to present the primary features of civil aviation and its impact on our society careers available in the civil and military aerospace community, and descriptions and uses of modern aerospace vehicles. Students enrolled in this course will be administered the NOCTI JROTC Leadership and Employability Skills credential exam.



Army JROTC IV (495890: 1 credit) **Prerequisite Course Codes:** 495810

Grade Range: 12 - 12

The Army JROTC IV (year-long) course is designed to present the psychology of leadership; review of LD-3 instruction; the moral aspects of leadership; group relations and behavior; indicators of leadership, communications, and management of resources; the problem-solving process; and practical exercises in problem solving and management. Students enrolled in this course will be administered the NOCTI JROTC Leadership and Employability Skills credential exam.

Credit Fulfills: Career-Focused Elective

Marine JROTC IV (495900: 1 credit) Prerequisite Course Codes: 495840

Grade Range: 12 - 12

The Marine Corps JROTC IV (year-long) course focuses entirely on the application of all previously learned leaderships training and sub-course contents. The students serve in the highest leadership billets in the Marine Corps JROTC program and under the guidance of the JROTC Instructor staff, serve as assistant instructors in the presentation of specified periods of instruction, inspections, and the lower level Marine Corps JROTC courses. Students enrolled in this course will be administered the NOCTI JROTC Leadership and Employability Skills credential exam.

Credit Fulfills: Career-Focused Elective

Navy JROTC IV (495910: 1 credit) Prerequisite Course Codes: 495870

Grade Range: 12 - 12

The Navy JROTC IV (year-long) course focuses entirely on the application of all previously learned leadership and management skills and trainings. The students serve in the highest leadership billets in the Navy JROTC program. Students enrolled in this course will be administered the NOCTI JROTC Leadership and Employability Skills credential exam.

Credit Fulfills: Career-Focused Elective

International Baccalaureate (IB) Computer Science SL - Advanced Year 3 -

Weighted Credit (565230: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

The IB DP Computer science SL course requires an understanding of the fundamental concepts of computational thinking as well as knowledge of how computers and other digital devices operate. The course, underpinned by conceptual thinking, draws on a wide spectrum of knowledge, and enables and empowers innovation, exploration and the acquisition of further knowledge. Students study how computer science interacts with and influences cultures, society and how individuals and societies behave, and the ethical issues involved.



International Baccalaureate (IB) Computer Science HL - Advanced Year 3 -

Weighted Credit (565330: 1 credit)
Prerequisite Course Codes: None

Grade Range: 9 - 12

The IB DP computer science HL course requires an understanding of the fundamental concepts of computational thinking as well as knowledge of how computers and other digital devices operate. The course, underpinned by conceptual thinking, draws on a wide spectrum of knowledge, and enables and empowers innovation, exploration and the acquisition of further knowledge. Students study how computer science interacts with and influences cultures, society and how individuals and societies behave, and the ethical issues involved.

Credit Fulfills: Career-Focused Elective

Concurrent Credit Firefighting I (580470: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

This Course is based on NFPA 1001, Standard for Fire Fighter Professional Qualifications. The course is designed for that person who seeks the knowledge and skills to function as an integral part of a firefighting team under direct supervision in hazardous environments. The Firefighter I course consists of a combination of classroom hours, drill field practices, and training evolutions that will prepare firefighters to perform most fireground functions under the supervision of an officer or more experienced firefighter.

Credit Fulfills: Career-Focused Elective

Concurrent Credit Firefighting II (580480: 1 credit)

Prerequisite Course Codes: 490470 or 580470

Grade Range: 9 - 12

This Course is based on NFPA 1001: Standard for Fire Fighter Professional Qualifications. This course is designed for the Fire Fighter I who is prepared to assume a leadership role in department. This course is made up of topics designed to give the student more knowledge of fire ground situations so that they can make basic evaluations of safety problems and assume leadership roles in carrying out the interior attack and search operations.

Credit Fulfills: Career-Focused Elective

Razorback AgCademy Foundation of Ag Education (590140: 1 credit)

Prerequisite Course Codes: 491150, 491030

Grade Range: 11 - 12

A preparatory course evaluating the historical foundations of agricultural education with an introduction to the psychological, sociological and philosophical foundations of education. This course will encourage reflective practice through understanding of educational trends, classroom environment creation and utilization, and effective program planning.



Razorback AgCademy Intro to Animal Science (590150: 1 credit)

Prerequisite Course Codes: 491150, 491180 or 491150, 491160

Grade Range: 11 - 12

Students will be introduced to biological sciences associated with modern systems of care and management of livestock. Foundation sciences include topics in genetics, growth and development, physiology, nutrition, animal health, and animal behavior.

Credit Fulfills: Career-Focused Elective

Razorback AgCademy Fundamentals of Ag Systems (590180: 1 credit)

Prerequisite Course Codes: 491150, 491390

Grade Range: 11 - 12

Study of basic mathematical and physical science concepts important in the mechanization of agriculture.

Credit Fulfills: Career-Focused Elective

Concurrent Credit Emergency Services I (590940: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

The EMS Program is based off the National Emergency Medical Services Education Standards with three levels of course offerings (Emergency Services I, II, III) along with a lab course offering as an additional level 3 option. Each course increases in specificity, offering student opportunities as an Emergency Medical Responder, Emergency Medical Technician, Advanced Emergency Medical Technician, and/or Paramedic.

Credit Fulfills: Career-Focused Elective

Concurrent Credit Emergency Services II (590950: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

The EMS Program is based off the National Emergency Medical Services Education Standards with three levels of course offerings (Emergency Services I, II, III) along with a lab course offering as an additional level 3 option. Each course increases in specificity, offering student opportunities as an Emergency Medical Responder, Emergency Medical Technician, Advanced Emergency Medical Technician, and/or Paramedic.

Credit Fulfills: Career-Focused Elective

Concurrent Credit Emergency & Fire Management Lab (591000: 1 credit)

Prerequisite Course Codes: 490470 or 580470 and 490480 or 580480

Grade Range: 9 - 12

This class serves as an extension of the skills and concepts learned in the previous courses within its pathway. The lab helps to develop these skills and concepts in simulated real-world environments.



Concurrent Credit Emergency Services III (593250: 1 credit) **Prerequisite Course Codes:** 490470 or 580470 and 490480 or 580480

Grade Range: 9 - 12

The EMS Program is based off the National Emergency Medical Services Education Standards with three levels of course offerings (Emergency Services I, II, III) along with a lab course offering as an additional level 3 option. Each course increases in specificity, offering student opportunities as an Emergency Medical Responder, Emergency Medical Technician, Advanced Emergency Medical Technician, and/or Paramedic.

Credit Fulfills: Career-Focused Elective

Concurrent Credit Animal Science (593600: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

The Animal Science course encompasses the study of animal systems, including content areas such as life processes, health, nutrition, genetics, management and processing, as applied to small animals, aquaculture, exotic animals, livestock, dairy, horses and/or poultry.

Credit Fulfills: Career-Focused Elective

National Military Service and Security (593610: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

This course will explore the history and role of US military and civil service from a national perspective. Topics will include the military's distinct service components, origins, evolution over time, missions and capabilities, and contributions to national security at home and abroad. The course will also examine the challenges and opportunities facing the military in the 21st century, such as homeland security, natural disaster response, and overseas deployments.

Credit Fulfills: Career-Focused Elective

Arkansas Military Service and Security (593620: 1 credit)

Prerequisite Course Codes: 593610

Grade Range: 9 - 12

This course will explore the history and role of US military and civil service from a state perspective. Topics will include the military's distinct service components, origins, evolution over time, missions and capabilities, and contributions to national security at home and abroad. The course will also examine the challenges and opportunities facing the military in the 21st century, such as homeland security, natural disaster response, and overseas deployments.



Military Service and Security Careers (593630: 1 credit)

Prerequisite Course Codes: 593610, 593620

Grade Range: 9 - 12

This course will explore careers in the US military, civil service and security from a local, state and

national perspective.

Credit Fulfills: Career-Focused Elective

Business Intelligence (593640: 1 credit)

Prerequisite Course Codes: 492120

Grade Range: 9 - 12

This course provides students with an introduction to key concepts in business, programming, and major technologies that have a significant impact on the business landscape. The course aims to equip students with practical knowledge and skills that will be valuable in various professional and academic pursuits.

Credit Fulfills: Career-Focused Elective, Meets Computer Science Requirement

Precision Agriculture (593650: 1 credit)

Prerequisite Course Codes: 491150, 491390, 491180 or 491160, 491340 or 491170

Grade Range: 9 - 12

This course equips you with the skills and knowledge for data-driven agriculture. Learn to apply science, engineering, and technology to solve problems, analyze data, and utilize precision ag tools for informed decision-making and career success.

Credit Fulfills: Career-Focused Elective, Meets Computer Science Requirement

Computer Science





Programming - Year 1 (465070: 1 credit)

Prerequisite Course Codes: None

Grade Range: 8 - 12

Explore the fundamentals of programming through this comprehensive course, where students develop computational thinking skills and problem-solving techniques related to programming. From understanding data management and security principles to mastering algorithms and program creation, students will develop the skills to analyze, evaluate, and modify software solutions. With a focus on professionalism and the societal impacts of computing, students will learn to effectively and ethically communicate and problem solve in the dynamic world of computer programming.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Graduation Requirement for Career Focus

Programming - Year 2 (465080: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Building upon the foundational knowledge from Year 1, this course delves deeper into algorithm development, data analysis, and cybersecurity concepts. Students will create and evaluate more complex algorithms and programs while gaining a deeper understanding of computer utilization in various industries and communication methods among computing devices. Programming concepts include the use of classes, file input and output, and version control systems.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (ADE-Approved Mathematics or Computer Science), Graduation Requirement for Career Focus

Programming - Advanced Year 3 - Weighted Credit (465090: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

In this advanced course, students further refine their problem-solving abilities and explore the use of real world data to solve problems. Content includes the creation of sophisticated algorithms, expansion on object-oriented programming, advanced data analysis techniques, and cybersecurity strategies. Additionally, students will learn effective communication skills for technical information and storytelling with data, preparing them for real-world applications in the computing field.



Networking - Year 1 (465170: 1 credit)

Prerequisite Course Codes: None

Grade Range: 8 - 12

Explore the fundamentals of networking through this comprehensive course, where students delve into computational thinking and problem-solving techniques related to networking. From understanding data management and security principles to mastering algorithms and program creation, students will develop the skills to analyze, evaluate, and modify networking solutions. With a focus on professionalism and the societal impacts of computing, students will learn to effectively and ethically communicate and problem solve in the dynamic world of computer networking.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (ADE-Approved Mathematics or Computer Science), Graduation Requirement for Career Focus

Networking - Year 2 (465180: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Develop a deeper understanding of networking by analyzing advanced data management techniques and cybersecurity concepts. Refine skills in the utilization and communication of computer systems within a variety of applications.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Graduation Requirement for Career Focus

Networking - Advanced Year 3 - Weighted Credit (465190: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Examine the intricacies of networking protocols and communication systems while also delving into industry-relevant hardware and software utilization. Emphasis is placed on understanding the impacts of technology, professionalism, and effective communication of technical information in the computing community.



Cybersecurity - Year 1 (465270: 1 credit)

Prerequisite Course Codes: None

Grade Range: 8 - 12

Explore the fundamentals of cybersecurity through this comprehensive course, where students develop computational thinking skills and problem-solving techniques related to cybersecurity. From understanding data management and security principles to mastering algorithms and program creation, students will develop the skills to analyze, evaluate, and modify cybersecurity solutions. With a focus on professionalism and the societal impacts of computing, students will learn to effectively and ethically communicate and problem solve in the dynamic world of cybersecurity.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Graduation Requirement for Career Focus

Cybersecurity - Year 2 (465280: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Explore advanced cybersecurity concepts that relate to a multitude of computer science concepts including networking, cryptography, digital forensics and incident response, algorithmic analysis, and more. Take an ethical approach to diving into information security and analysis and make clear connections to how cybersecurity impacts our lives daily.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Graduation Requirement for Career Focus

Cybersecurity - Advanced Year 3 - Weighted Credit (465290: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Take an advanced approach to Cybersecurity with more focus on industry-relevant concepts and deeper understanding of core concepts that relate to security on a holistic scale. Develop a portfolio and build stronger skills as they relate to things like network, operational, and data security.



Mobile Application Development - Year 1 (465370: 1 credit)

Prerequisite Course Codes: None

Grade Range: 8 - 12

Explore the fundamentals of mobile application development through this comprehensive course, where students develop computational thinking skills and problem-solving techniques related to mobile application development. From understanding data management and security principles to mastering algorithms and program creation, students will develop the skills to analyze, evaluate, and modify software solutions. With a focus on professionalism and the societal impacts of computing, students will learn to effectively and ethically communicate and problem solve in the dynamic world of mobile application development.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Graduation Requirement for Career Focus

Mobile Application Development - Year 2 (465380: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Building on the foundational knowledge from Year 1, students expand upon their programming skills to create and evaluate more complex applications for mobile devices. Students consider data security and common attacks on mobile platforms to create secure applications. Student created programs will take advantage of common hardware and sensors found in mobile devices.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Graduation Requirement for Career Focus

Mobile Application Development - Advanced Year 3 - Weighted Credit (465390:

1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

In this advanced course, students further refine their problem-solving abilities and create mobile applications leveraging more sophisticated algorithms and programming concepts. Students consider the features and limitations of mobile devices while developing mobile applications. Additionally, students will engage in industry relevant collaborative workflow and project development life-cycles.



Artificial Intelligence and Machine Learning - Year 1 (465410: 1 credit)

Prerequisite Course Codes: None

Grade Range: 8 - 12

Explore the fundamentals of artificial intelligence and machine learning through this comprehensive course, where students develop computational thinking skills and problem-solving techniques related to AI/ML. From understanding data management and security principles to mastering algorithms and program creation, students will develop the skills to analyze, evaluate, and modify software solutions. With a focus on professionalism and the societal impacts of computing, students will learn to effectively and ethically communicate and problem solve in the dynamic world of AI/ML.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Graduation Requirement for Career Focus

Artificial Intelligence and Machine Learning - Year 2 (465420: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Building upon the groundwork laid in Year 1, students deepen their understanding of AI and ML by exploring advanced algorithms, programming techniques, and cybersecurity principles. They analyze and utilize decision theory techniques and the concepts of intelligent agents. Concepts such as Bayes Theorem, data mining, and machine learning software are explored.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Graduation Requirement for Career Focus

Artificial Intelligence and Machine Learning - Advanced Year 3 - Weighted

Credit (465430: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

In this capstone course, students advance their expertise in AI and ML by honing their skills in creating, evaluating, and modifying algorithms, designing sophisticated programs, and implementing advanced data analysis techniques. They further explore concepts of probabilistic reasoning, supervised and unsupervised learning algorithms, and reinforcement learning algorithms.



Computer Engineering - Year 1 (465470: 1 credit)

Prerequisite Course Codes: None

Grade Range: 8 - 12

Explore the fundamentals of computer engineering through this comprehensive course, where students develop computational thinking skills and problem-solving techniques related to computer engineering. From understanding data management and security principles to mastering algorithms and program creation, students will develop the skills to analyze, evaluate, and modify solutions. With a focus on professionalism and the societal impacts of computing, students will learn to effectively and ethically communicate and problem solve in the dynamic world of computer engineering.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Graduation Requirement for Career Focus

Computer Engineering - Year 2 (465480: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

In the second year of the computer engineering course, students deepen their understanding and practical skills in advanced hardware and software concepts. Building on the foundational knowledge acquired in the first year, this course explores the fundamental laws of electricity and how to represent basic electrical quantities. Through hands-on projects and collaborative activities, students further develop their expertise in designing intricate circuits, illustrate the flow of combinational and sequential logic circuits, and explore finite state machines.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Graduation Requirement for Career Focus

Computer Engineering - Advanced Year 3 - Weighted Credit (465490: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

In the third year of the computer engineering course, students continue to build on their understanding of the fundamental laws of electricity as well as refine their skills in designing and utilizing advanced algorithms. Course topics include further exploration of finite state machines, logic gate implementation, and assembly language programs.



Robotics - Year 1 (465570: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 8 - 12

Explore the fundamentals of robotics through this comprehensive course, where students develop computational thinking skills and problem-solving techniques related to robotics. From understanding data management and security principles to mastering algorithms and program creation, students will develop the skills to analyze, evaluate, and modify solutions. With a focus on professionalism and the societal impacts of computing, students will learn to effectively and ethically communicate and problem solve in the dynamic world of robotics.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Graduation Requirement for Career Focus

Robotics - Year 2 (465580: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Building upon the fundamentals, this intermediate course deepens students' understanding of computer communications and hardware/software utilization, cybersecurity, data analysis, and algorithm development. Students gain proficiency in programming to solve complex problems, while exploring robotics technology within various industries and its effects on the future.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Graduation Requirement for Career Focus

Robotics - Advanced Year 3 - Weighted Credit (465590: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

In this advanced course, students further refine problem-solving skills utilizing computational thinking and the engineering design process. Students apply concepts of mechanical and electrical engineering to solve problems using robotics systems. Additional topics include furthering program writing skills, development of troubleshooting strategies, and analysis of data collected from robotic sensors.



Game Development and Design - Year 1 (465670: 1 credit)

Prerequisite Course Codes: None

Grade Range: 8 - 12

Explore the fundamentals of game development and design through this comprehensive course, where students develop computational thinking skills and problem-solving techniques related to game development and design. From understanding data management and security principles to mastering algorithms and program creation, students will develop the skills to analyze, evaluate, and modify software solutions. With a focus on professionalism and the societal impacts of computing, students will learn to effectively and ethically communicate and problem solve in the dynamic world of game development and design.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Graduation Requirement for Career Focus

Game Development and Design - Year 2 (465680: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Year 2 Game Development and Design builds upon foundational knowledge by delving deeper into game mechanics and programming concepts. Students gain hands-on experience in algorithm creation and program development while utilizing mathematical principles to adapt to more immersive game mechanics. Students gain more experience with game design, game asset creation and utilization, and the workflow of game creation.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (ADE-Approved Mathematics or Computer Science), Graduation Requirement for Career Focus

Game Development and Design - Advanced Year 3 - Weighted Credit (465690: 1

credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Year 3 Game Development and Design advances students' skills in program creation, game mechanics, and asset creation. Students apply advanced programming, mathematical, and physics concepts to create immersive game experiences, and experience industry relevant collaborative workflow and project development life-cycles.



Data Science - Year 1 (465710: 1 credit)

Prerequisite Course Codes: None

Grade Range: 8 - 12

Explore the fundamentals of data science through this comprehensive course, where students develop computational thinking skills and problem-solving techniques related to data science. From understanding data management and security principles to mastering algorithms and program creation, students will develop the skills to analyze, evaluate, and modify data solutions. With a focus on professionalism and the societal impacts of computing, students will learn to effectively and ethically communicate and problem solve in the dynamic world of data science.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (ADE-Approved Mathematics or Computer Science), Graduation Requirement for Career Focus

Data Science - Year 2 (465720: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Building on foundational knowledge, Year 2 focuses on refining problem-solving skills and deepening the integration of mathematics and computer science concepts. Students will further explore algorithms and programs, data analysis techniques, and the ethical implications of data use. Students will work with qualitative and quantitative data, apply best-practices of data visualization, and utilize more advanced algorithmic design.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (ADE-Approved Mathematics or Computer Science), Graduation Requirement for Career Focus

Data Science - Advanced Year 3 - Weighted Credit (465730: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Take an advanced approach to Cybersecurity with more focus on industry-relevant concepts and deeper understanding of core concepts that relate to security on a holistic scale. Develop a portfolio and build stronger skills as they relate to things like network, operational, and data security.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (ADE-Approved Mathematics or Computer Science), Graduation Requirement for Career Focus

Computer Science Independent Study - Weighted Credit (465930: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

A Computer Science and Computing Independent Study Program shall be designed to enrich the student's computer science educational experience. The student will be required to develop an educational plan, submit it to a local advisor or advisory board responsible for reviewing, monitoring, and approving the plan. The student will produce a final product for presentation.



Computer Science Internship - Weighted Credit (465940: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

A Computer Science and Computing Internship Program aims to aid high school students in transitioning to careers or college by providing workplace experience. Whether students pursue immediate careers after graduation or seek further education, they stand to gain by advancing their computer science skills, soft skills, and learning new competencies. The program is designed to foster strong business partnerships, offering intensive, competency-based immersion in advanced computer science concepts for participants, facilitated by computing professionals.

Credit Fulfills: Graduation Requirement for Computer Science Flex, Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (ADE-Approved Mathematics or Computer Science), Graduation Requirement for Career Focus

College Board Advanced Placement (AP) Computer Science Principles - Year

1 (565030: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Introductory college-level computing course introducing the breadth of the field of computer science. Design and evaluate solutions and apply computer science to solve problems through the development of algorithms and programs. Incorporate abstraction into programs and use data to discover new knowledge. 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. This is a College Board Advanced Placement course.

Credit Fulfills: Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Career-Focused Elective

College Board Advanced Placement (AP) Computer Science A - Advanced

Year 3 - Weighted Credit (565130: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Introductory college-level course. Cultivate understanding of coding through analyzing, writing, and testing code while exploring concepts like modularity, variables, and control structures. The course is taught using one of the most in-demand programming languages, Java. This is a College Board Advanced Placement course.

Credit Fulfills: Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Career-Focused Elective



International Baccalaureate (IB) Computer Science SL (565230: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Following the International Baccalaureate program, students use critical skills to program.

Credit Fulfills: Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science),

Career-Focused Elective

International Baccalaureate (IB) Computer Science HL - Year A (565330: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Following the International Baccalaureate program, students use critical skills to program.

Credit Fulfills: Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Career-Focused Elective

International Baccalaureate (IB) Computer Science HL — Year B (565340: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

During the second year of the International Baccalaureate program, students use critical skills to program with Java and additional topics, including resource management, control, abstract data structures, and advanced object-oriented programming.

Credit Fulfills: Graduation Requirement for Natural Science (3rd Science or Computer Science), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Career-Focused Elective

English Language Arts





English 9 (410000: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Demonstrate independence; build strong content knowledge; respond to the varying demands of audience, task, purpose, and discipline; comprehend as well as critique; value evidence; use technology and digital media strategically and capably; come to understand other perspectives. The English student focuses on reading and analyzing literature and literary nonfiction, studying the English language, and writing about related topics.

Credit Fulfills: Graduation Requirement for English 9

Pre-AP English 1 (410100: 1 credit) Prerequisite Course Codes: None

Grade Range: 9 - 12

Observe small details in a text to arrive at a deeper understanding of the whole. Appreciate authors' sometimes-subtle choices, developing an awareness of how words produce effects and how the conventions of the English language are used for both precision and style. Create complex sentences, building this foundational skill en route to sophisticated, longer-form analyses.

Credit Fulfills: Graduation Requirement for English 9, Career-Focused Elective

English 10 (411000: 1 credit)
Prerequisite Course Codes: 410000

Grade Range: 9 - 12

Demonstrate independence; build strong content knowledge; respond to the varying demands of audience, task, purpose, and discipline; comprehend as well as critique; value evidence; use technology and digital media strategically and capably; come to understand other perspectives and cultures. The English student focuses on reading and analyzing literature and literary nonfiction, studying the English language, and writing about related topics.

Credit Fulfills: Graduation Requirement for English 10

Pre-AP English 2 (411100: 1 credit)
Prerequisite Course Codes: None

Grade Range: 9 - 12

Develop an awareness of poets, playwrights, novelists, and writers of nonfiction manipulation of language to serve their purposes. Compose more nuanced analytical essays with focus on craft and cohesion.



English 11 (412000: 1 credit)
Prerequisite Course Codes: 411000

Grade Range: 9 - 12

Demonstrate independence; build strong content knowledge; respond to the varying demands of audience, task, purpose, and discipline; comprehend as well as critique; value evidence; use technology and digital media strategically and capably; come to understand other perspectives. The English student focuses on reading and analyzing literature and literary nonfiction, studying the English language, and writing about related topics.

Credit Fulfills: Graduation Requirement for English 11

English 12 (413000: 1 credit)
Prerequisite Course Codes: 412000

Grade Range: 9 - 12

Demonstrate independence; build strong content knowledge; respond to the varying demands of audience, task, purpose, and discipline; comprehend as well as critique; value evidence; use technology and digital media strategically and capably; come to understand other perspectives. The English student focuses on reading and analyzing literature and literary nonfiction, studying the English language, and writing about related topics.

Credit Fulfills: Graduation Requirement for English 12

Transitional English 12 (413010: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Accelerate students' literacy skills essential for college and career readiness. Students receive instruction in reading, writing, speaking and listening, and language, emphasizing literary and informational texts from diverse genres in print and digital formats. The course closely examines unique characteristics of literary and informational texts and emphasizes the specific strategies needed to comprehend them; and focuses on developing the requisite literacy skills for success in higher education and the workforce.

Credit Fulfills: Graduation Requirement for English 12, Career-Focused Elective

Forensics I (414020: 1 credit)
Prerequisite Course Codes: None

Grade Range: 9 - 12

Understand the dynamics of effective oral communication when speaking, listening, and responding. Students will develop basic communication competencies including ethical practices in communication, recognition of communication barriers, effective use of interpersonal communication through verbal and nonverbal messages, and use of digital media.

Credit Fulfills: Graduation Requirement for Oral Communications, Career-Focused Elective



Forensics II (414030: 1 credit)
Prerequisite Course Codes: None

Grade Range: 9 - 12

Understand the dynamics of effective oral communication when speaking, listening, and responding. Students will build communication competencies including ethical practices in communication, recognition of communication barriers, effective use of interpersonal communication through verbal and nonverbal messages, and use of digital media.

Credit Fulfills: Career-Focused Elective

Forensics III (414040: 1 credit)
Prerequisite Course Codes: None

Grade Range: 9 - 12

Understand the dynamics of effective oral communication when speaking, listening, and responding. Students will build communication competencies including ethical practices in communication, recognition of communication barriers, effective use of interpersonal communication through verbal and nonverbal messages, and use of digital media.

Credit Fulfills: Career-Focused Elective

Debate I (414050: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Understand the fundamentals of argumentation and will express ideas and present information in a variety of oral advocacy situations from small group discussions to formal debates. Special emphasis will be given to research proficiencies and analytical thinking and listening skills. The skills listed in Strand 1: Communication Skills will be embedded throughout the course, providing students with an understanding of the dynamics of effective oral communication when speaking, listening, and responding.

Credit Fulfills: Graduation Requirement for Oral Communications

Debate II (414060: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Build on the fundamentals of argumentation and express ideas and present information in a variety of oral advocacy situations from small group discussions to formal debates. Special emphasis will be given to research proficiencies and analytical thinking and listening skills.

Credit Fulfills: Career-Focused Elective

Debate III (414070: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Build on the fundamentals of argumentation and express ideas and present information in a variety of oral advocacy situations from small group discussions to formal debates. Special emphasis will be given to research proficiencies and analytical thinking and listening skills.



Debate IV (414080: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Build on the fundamentals of argumentation and express ideas and present information in a variety of oral advocacy situations from small group discussions to formal debates. Special emphasis will be given to research proficiencies and analytical thinking and listening skills.

Credit Fulfills: Career-Focused Elective

Forensics IV (414090: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Understand the dynamics of effective oral communication when speaking, listening, and responding. Students will build communication competencies including ethical practices in communication, recognition of communication barriers, effective use of interpersonal communication through verbal and nonverbal messages, and use of digital media.

Credit Fulfills: Career-Focused Elective

Oral Communication: Personal Communication (0.5 credit) (414200: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Understand the dynamics of effective communication while speaking, listening, and responding in the situations they encounter in day-to-day life. Students will practice communication competencies in both intrapersonal and interpersonal environments, prepare for both informal and formal communication, and participate in a variety of formal and informal personal communication experiences.

Credit Fulfills: Graduation Requirement for Oral Communications

Oral Communication: Professional Communication (0.5 credit) (414210: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Understand 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.

Credit Fulfills: Graduation Requirement for Oral Communications



Journalism I (415000: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Analyze media and technology to enhance communication skills. Writing, technology, and visual and electronic media are used as tools for learning as students create, clarify, critique, and produce effective communication. Students will learn and apply journalistic guidelines for writing, design, and photography, which include objectivity, responsibility, and credibility.

Credit Fulfills: Career-Focused Elective

Journalism II (415010: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Create, assess, and produce writing, technology, and visual and electronic media tools. Students will be active participants in the world of media to enhance their communication skills and progress in their academic knowledge through the roles of reporters, photographers, ad sales, and marketing team members.

Credit Fulfills: Career-Focused Elective

Journalism III (415020: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Create, critique, and produce writing, technology, and visual and electronic media tools. Students will immerse in the production process through an advanced study of media production and employ journalistic skills in media. Students will use academic knowledge gained in Journalism I and II to assume leadership roles and/or become advanced writers, designers, and photographers.

Credit Fulfills: Career-Focused Elective

Journalism IV (415030: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Lead, create, evaluate, and produce writing, technology, and visual and electronic media tools. Students will be provided with media leadership opportunities to facilitate the production process and use their advanced journalistic knowledge and leadership skills to facilitate all aspects of media production. Students will ensure that journalistic guidelines for writing and design, which include objectivity, responsibility, and credibility, are followed.



ELA Drama (0.5 credit) (416000: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Engage in an examination of written plays to become informed, perceptive, and appreciative audience members. Students will analyze and evaluate dramatic elements by studying classical to contemporary plays; examine and compare historical influences and contexts, universal themes, and authorial treatment of tragic heroes from various literary periods in dramatic literature; and demonstrate understanding of dramatic literature by creating written adaptations and original works.

Credit Fulfills: Career-Focused Elective

ELA Drama (416010: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Engage in an examination of written plays to become informed, perceptive, and appreciative audience members. Students will analyze and evaluate dramatic elements by studying classical to contemporary plays; examine and compare historical influences and contexts, universal themes, and authorial treatment of tragic heroes from various literary periods in dramatic literature; and demonstrate understanding of dramatic literature by creating written adaptations and original works.

Credit Fulfills: Graduation Requirement for English 9

Creative Writing - One Semester (0.5 credit) (417010: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Engage in the writing of poetry, short fiction, personal narratives, and other genres with an emphasis on developing and exercising imagination. Students will read closely for multiple purposes to analyze and evaluate exemplary texts to develop creative writing skills and critique; and refine writing through guided discussions, collaborative revisions, and individual reflections. Students will produce a portfolio of creative work that reflects student growth and understanding of the techniques of published authors and share writing in a variety of ways and research methods for publishing original work.

Credit Fulfills: Career-Focused Elective

Creative Writing - One Year 1 Credit (417020: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Engage in the writing of poetry, short fiction, personal narratives, and other genres with an emphasis on developing and exercising imagination. Students will read closely for multiple purposes to analyze and evaluate exemplary texts to develop creative writing skills and critique; and refine writing through guided discussions, collaborative revisions, and individual reflections. Students will produce a portfolio of creative work that reflects student growth and understanding of the techniques of published authors and share writing in a variety of ways and research methods for publishing original work.



English 11/12: U.S. History Seminal Documents (0.5 credit) (418010: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 11 - 12

Examine U.S. Historical Seminal Documents government documents, speeches, hymns, ballads, current events articles, and U.S. Supreme Court cases. Students will analyze how the past shapes the present and future, and why it is important to corroborate documents from multiple sources.

Credit Fulfills: Graduation Requirement for English 11, Graduation Requirement for English 12, Career-Focused Elective

English 11/12: Cross-Cultural Literature (0.5 credit) (418020: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 11 - 12

Compare and contrast a variety of of texts across cultures, analyzing their literary and rhetorical features. Examine the historical and contemporary significance of texts.

Credit Fulfills: Graduation Requirement for English 11, Graduation Requirement for English 12, Career-

Focused Elective

English 11/12: Comparative Literature (0.5 credit) (418030: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 11 - 12

Compare a variety of literature, using one of the following models: Topic - two units of study, each focusing on a specific topic; Topic Across Genres / Periods - study of one topic from two different genres of literary periods; Retellings of a Story - study the retellings of one story from different time periods and/or text types.

Credit Fulfills: Graduation Requirement for English 11, Graduation Requirement for English 12, Career-Focused Elective

English 11/12: Film as Literature (0.5 credit) (418040: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 11 - 12

Analyze and evaluate the similarities and differences in the interpretation of a story between film and novels and/or short stories. Students will analyze the similarities and differences in the compositional structure of a wide range of texts and formats.

Credit Fulfills: Graduation Requirement for English 11, Graduation Requirement for English 12, Career-Focused Elective



English 11/12: Public Relations (0.5 credit) (418100: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 11 - 12

Compare the communications mediums used in public relations, sales, and marketing. Students will analyze a wide range of texts, examining changes over time in the presentation and delivery advertising materials.

Credit Fulfills: Graduation Requirement for English 11, Graduation Requirement for English 12, Career-Focused Elective

English 11/12: Reading and Writing for Business Professions (0.5 credit)

(418110: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 11 - 12

Analyze texts within business and professional communications on topics such as contracts, insurance, resumes, professional branding, and collaboration. Students will explore the idea of professionalism within varied contexts.

Credit Fulfills: Graduation Requirement for English 11, Graduation Requirement for English 12, Career-Focused Elective

English 11/12: Mass Communications (0.5 credit) (418120: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 11 - 12

Examine the varied methods of delivery and texts within mass communications such as podcasts, social media, news programs, and websites. Students will explore how media influences the decisions people make, and how media mirrors the society of a respective time period.

Credit Fulfills: Graduation Requirement for English 11, Graduation Requirement for English 12, Career-Focused Elective

English 11/12: Reading and Writing for STEM Professions (0.5 credit) (418200:

0.5 credit)

Prerequisite Course Codes: None

Grade Range: 11 - 12

Evaluate a wide range of STEM themed fictional works and STEM nonfiction articles. Students will analyze how logic contributes to the quality of people's daily lives and the role data plays in people's everyday lives.

Credit Fulfills: Graduation Requirement for English 11, Graduation Requirement for English 12, Career-Focused Elective



English 11/12: Entrepreneurship and Innovation (0.5 credit) (418210: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 11 - 12

Examine texts relating to entrepreneurship and innovation. Students will analyze what success looks like and the written and visual process involved with developing innovative solutions while learning from failure.

Credit Fulfills: Graduation Requirement for English 11, Graduation Requirement for English 12, Career-Focused Elective

English 11/12: Technical Reading and Writing for Trade and Industry (0.5

credit) (418220: 0.5 credit) **Prerequisite Course Codes:** None

Grade Range: 11 - 12

Compare trade and industry texts as related to a specified field. Students interpret texts (e.g., words, symbols, blueprints) to perform tasks and learn processes for writing authentic and precise technical procedures.

Credit Fulfills: Graduation Requirement for English 11, Graduation Requirement for English 12, Career-Focused Flective

Strategic Reading Grade 9 (419110: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 9

Accelerate reading growth by strengthening comprehension outcomes in grade 9. In a context of meaningful content, ongoing assessment, and focused explicit instruction, students will evaluate fiction and nonfiction texts and multicultural literature of diverse formats (e.g., print media, Web-based texts, fiction and nonfiction books and articles) and genres.

Credit Fulfills: Career-Focused Elective

Strategic Reading Grade 10 (419120: 1 credit)

Prerequisite Course Codes: None

Grade Range: 10 - 10

Accelerate reading growth by strengthening comprehension outcomes in grade 10. In a context of meaningful content, ongoing assessment, and focused explicit instruction, students will evaluate fiction and nonfiction texts and multicultural literature of diverse formats (e.g., print media, Web-based texts, fiction and nonfiction books and articles) and genres.



Academic Reading Grade 9 (419130: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 9

This course may be offered to students in grade 9 as a dyslexia intervention course for students exhibiting characteristics of dyslexia. The teacher will implement a dyslexia program that meets the requirements of Arkansas dyslexia law and rule with fidelity to teach the standards of this course.

Credit Fulfills: Career-Focused Elective

Academic Reading Grade 10 (419140: 1 credit)

Prerequisite Course Codes: None

Grade Range: 10 - 10

This course may be offered to students in grade 10 as a dyslexia intervention course for students exhibiting characteristics of dyslexia. The teacher will implement a dyslexia program that meets the requirements of Arkansas dyslexia law and rule with fidelity to teach the standards of this course.

Credit Fulfills: Career-Focused Elective

Academic Reading Grade 11 (419150: 1 credit)

Prerequisite Course Codes: None

Grade Range: 11 - 11

This course may be offered to students in grade 11 as a dyslexia intervention course for students exhibiting characteristics of dyslexia. The teacher will implement a dyslexia program that meets the requirements of Arkansas dyslexia law and rule with fidelity to teach the standards of this course.

Credit Fulfills: Career-Focused Elective

Academic Reading Grade 12 (419160: 1 credit)

Prerequisite Course Codes: None

Grade Range: 12 - 12

This course may be offered to students in grade 12 as a dyslexia intervention course for students exhibiting characteristics of dyslexia. The teacher will implement a dyslexia program that meets the requirements of Arkansas dyslexia law and rule with fidelity to teach the standards of this course.



Strategic Reading Grade 11 (419170: 1 credit)

Prerequisite Course Codes: None

Grade Range: 11 - 11

Accelerate reading growth by strengthening comprehension outcomes in grade 11. In a context of meaningful content, ongoing assessment, and focused explicit instruction, students will evaluate fiction and nonfiction texts and multicultural literature of diverse formats (e.g., print media, Web-based texts, fiction and nonfiction books and articles) and genres.

Credit Fulfills: Career-Focused Elective

Strategic Reading Grade 12 (419180: 1 credit)

Prerequisite Course Codes: None

Grade Range: 12 - 12

Accelerate reading growth by strengthening comprehension outcomes in grade 12. In a context of meaningful content, ongoing assessment, and focused explicit instruction, students will evaluate fiction and nonfiction texts and multicultural literature of diverse formats (e.g., print media, Web-based texts, fiction and nonfiction books and articles) and genres.

Credit Fulfills: Career-Focused Elective

Academic Study of the Bible (0.5 credit) (479050: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Examine the Bible and its impact upon American culture. This nonsectarian, nonreligious, academic course integrates the study of the Bible as a piece of literature with art, music, literature, culture, and politics in order to understand the relationships between the Bible, society, and culture. As an English Language Arts elective, students will develop and apply literacy skills of reading, writing, speaking, and listening.

Credit Fulfills: Career-Focused Elective

Transitional Literacy Ready (496030: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

In Transitional Literacy, students receive instruction in reading, writing, speaking and listening, and language, emphasizing literary and informational texts from diverse genres in print and digital formats. The course develops the requisite literacy skills for success in higher education and the workforce by incorporating texts from ELA, history/social studies, science, and technical subjects.



Transitional Literacy (496040: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Develop strategies for reading and fully understanding specific kinds of complex texts in all subjects. Students read texts to develop knowledge and formulate opinions in order to communicate in a variety of written formats. Transitional Literacy Ready prepares high school students to read and write about college-level texts in core subjects using two (2) history, two (2) English, and two (2) science modules/units.

Credit Fulfills: Career-Focused Elective

ESL English 9 (510040: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Demonstrate independence; build strong content knowledge; respond to the varying demands of audience, task, purpose, and discipline; comprehend as well as critique; value evidence; use technology and digital media strategically and capably; come to understand other perspectives. Instruction simultaneously introduces both language and content using specialized and research-based techniques to accommodate English Learners' (ELs) linguistic needs. Supports Newcomer ELs in attaining meaningful access to English 9 core content.

Credit Fulfills: Graduation Requirement for English 9

ESL English 10 (511030: 1 credit)

Prerequisite Course Codes: 410000 or 510040

Grade Range: 9 - 12

Demonstrate independence; build strong content knowledge; respond to the varying demands of audience, task, purpose, and discipline; comprehend as well as critique; value evidence; use technology and digital media strategically and capably; come to understand other perspectives. Instruction simultaneously introduces both language and content using specialized and research-based techniques to accommodate English Learners' (ELs) linguistic needs; instruction focuses on teaching academic content. Supports Newcomer ELs in attaining meaningful access to English 10 core content.

Credit Fulfills: Graduation Requirement for English 10

ESL English 11 (512030: 1 credit)

Prerequisite Course Codes: 411000 or 511030

Grade Range: 9 - 12

Demonstrate independence; build strong content knowledge; respond to the varying demands of audience, task, purpose, and discipline; comprehend as well as critique; value evidence; use technology and digital media strategically and capably; come to understand other perspectives. Instruction simultaneously introduces both language and content using specialized and research-based techniques to accommodate English Learners' (ELs) linguistic needs; instruction focuses on teaching academic content. Supports Newcomer ELs in attaining meaningful access to English 11 core content.

Credit Fulfills: Graduation Requirement for English 11



ESL English 12 (513030: 1 credit)

Prerequisite Course Codes: 412000 or 512303

Grade Range: 9 - 12

Demonstrate independence; build strong content knowledge; respond to the varying demands of audience, task, purpose, and discipline; comprehend as well as critique; value evidence; use technology and digital media strategically and capably; come to understand other perspectives. Instruction simultaneously introduces both language and content using specialized and research-based techniques to accommodate English Learners' (ELs) linguistic needs; instruction focuses on teaching academic content. Supports Newcomer ELs in attaining meaningful access to English 12 core content.

Credit Fulfills: Graduation Requirement for English 12

AP English Language and Composition (517030: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Introductory college-level composition course. Cultivate understanding of writing and rhetorical arguments through reading, analyzing, and writing texts while exploring topics like rhetorical situation, claims and evidence, reasoning and organization, and style. This is a College Board Advanced Placement course.

Credit Fulfills: Graduation Requirement for English 9, Graduation Requirement for English 10, Graduation Requirement for English 11, Graduation Requirement for English 12, Career-Focused Elective

AP English Literature and Composition (517040: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Introductory college-level literary analysis course. Cultivate understanding of literature through reading and analyzing texts as they explore concepts like character, setting, structure, perspective, figurative language, and literary analysis in the context of literary works. This is a College Board Advanced Placement course.

Credit Fulfills: Graduation Requirement for English 10, Graduation Requirement for English 11, Graduation Requirement for English 12, Graduation Requirement for English 13, Career-Focused Elective

AP Seminar (517060: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 10 - 12

Foundational course in the AP Capstone experience. Engage in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Investigate a problem or issue, analyze arguments, compare different perspectives, synthesize information from multiple sources, and communicate ideas. This is a College Board Advanced Placement course.

Credit Fulfills: Graduation Requirement for English 9, Graduation Requirement for English 10, Graduation Requirement for English 11, Graduation Requirement for English 12, Career-Focused Elective



AP Research (517070: 1 credit) Prerequisite Course Codes: None

Grade Range: 11 - 12

Second course in the AP Capstone experience. Deeply explore an academic topic, problem, issue, or idea of individual interest. Design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, further skills acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Reflect on skill development, document processes, and curate the artifacts of scholarly work through a process and reflection portfolio. This is a College Board Advanced Placement course.

Credit Fulfills: Graduation Requirement for English 10, Graduation Requirement for English 11, Graduation Requirement for English 12, Career-Focused Elective

International Baccalaureate (IB) English 11 (517100: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Following the International Baccalaureate curriculum, students will demonstrate independence; build strong content knowledge; respond to the varying demands of audience, task, purpose, and discipline; comprehend as well as critique; value evidence; use technology and digital media strategically and capably; come to understand other perspectives. The English student focuses on reading and analyzing literature and literary nonfiction, studying the English language, and writing about related topics.

Credit Fulfills: Graduation Requirement for English 11, Career-Focused Elective

International Baccalaureate (IB) English 12 (517200: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Following the International Baccalaureate curriculum, students will demonstrate independence; build strong content knowledge; respond to the varying demands of audience, task, purpose, and discipline; comprehend as well as critique; value evidence; use technology and digital media strategically and capably; come to understand other perspectives. The English student focuses on reading and analyzing literature and literary nonfiction, studying the English language, and writing about related topics.

Credit Fulfills: Graduation Requirement for English 12, Career-Focused Elective

English Language Development (ELD) I (Requires ADE approval) (596600: 1

credit)

Prerequisite Course Codes: English learner with Emerging English Language Proficiency

Grade Range: 9 - 12

Provides targeted English Language Development instructional practice and assessment of speaking, writing, reading, and listening in English with each level one descriptor of the 9-12 English Language Proficiency Standards. This course provides English learners operating with emerging or beginning English language proficiency functional practice using the English necessary to begin meaningful engagement with and responding to the rigorous demands of life and their grade-level content standards in English.



English Language Development (ELD) II (Requires ADE approval) (596610: 1 credit)

Prerequisite Course Codes: English learner with Early Intermediate English Language Proficiency **Grade Range:** 9 - 12

Provides targeted English Language Development instructional practice and assessment of speaking, writing, reading, and listening in English with each level two descriptor of the 9-12 English Language Proficiency Standards. This course provides English learners operating with early intermediate English language proficiency functional practice developing the English necessary to meaningfully interact with and respond to the rigorous demands of life and the other grade-level content standards in English.

Credit Fulfills: Career-Focused Elective

English Language Development (ELD) III (Requires ADE approval) (596620: 1 credit)

Prerequisite Course Codes: English learner with Intermediate English Language Proficiency **Grade Range:** 9 - 12

Provides targeted English Language Development instructional practice and assessment of speaking, writing, reading, and listening in English with each level three descriptor of the 9-12 English Language Proficiency Standards. This course provides English learners operating with Intermediate English Language proficiency the functional practice in English necessary to meaningfully choose and refine their language choices while interacting with and responding to the rigorous demands of life and other grade-level content standards in English.

Credit Fulfills: Career-Focused Elective

English Language Development (ELD) IV (Requires ADE approval) (596630: 1 credit)

Prerequisite Course Codes: English learner with proficient or nearly proficient English Language Proficiency

Grade Range: 9 - 12

Provides targeted English Language Development instructional practice and assessment of speaking, writing, reading, and listening in English with each level four or five descriptors of the 9-12 English Language Proficiency Standards. This course provides English learners operating with proficient or nearly proficient English language proficiency the functional practice in English necessary to meaningfully choose and refine their academic language choices while interacting with and responding to the rigorous demands of life and other grade-level content standards in English.

Fine Arts





Visual Art Foundations I (450000: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Apply the elements of art and the principles of design by using a variety of media, techniques, processes, and tools to create original artwork that demonstrates understanding of aesthetic concerns and complex compositions. Basic concepts are introduced at the Visual Art Foundations I level, as students progress through each course, they will develop, expand, and increase real life application of problem solving through artistic maturation. Students will create, critique, reflect, make connections to art, exhibit original artwork and develop portfolios that reflect their personal growth.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Visual Art Foundations II (450030: 1 credit)

Prerequisite Course Codes: 450000

Grade Range: 9 - 12

Apply the elements of art and the principles of design by using a variety of media, techniques, processes, and tools to create original artwork that demonstrates understanding of aesthetic concerns and complex compositions. Basic concepts are introduced at the Visual Art Foundations I level, as students progress through each course, they will develop, expand, and increase real life application of problem solving through artistic maturation. Students will create, critique, reflect, make connections to art, exhibit original artwork and develop portfolios that reflect their personal growth.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Visual Art Foundations III (450040: 1 credit)

Prerequisite Course Codes: 450000, 450030

Grade Range: 9 - 12

Apply the elements of art and the principles of design by using a variety of media, techniques, processes, and tools to create original artwork that demonstrates understanding of aesthetic concerns and complex compositions. Basic concepts are introduced at the Visual Art Foundations I level, as students progress through each course, they will develop, expand, and increase real life application of problem solving through artistic maturation. Students will create, critique, reflect, make connections to art, exhibit original artwork and develop portfolios that reflect their personal growth.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Visual Art Foundations IV (450050: 1 credit)
Prerequisite Course Codes: 450000, 450030, 450040

Grade Range: 9 - 12

Apply the elements of art and the principles of design by using a variety of media, techniques, processes, and tools to create original artwork that demonstrates understanding of aesthetic concerns and complex compositions. Basic concepts are introduced at the Visual Art Foundations I level, as students progress through each course, they will develop, expand, and increase real life application of problem solving through artistic maturation. Students will create, critique, reflect, make connections to art, exhibit original artwork and develop portfolios that reflect their personal growth.



Art History (Prehistoric to Renaissance) (0.5 credit) (450060: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Examine periods of art history from around the world, with emphasis on art from ancient civilizations, classic civilizations, the Middle Ages, and the Early and High Renaissance. Examine characteristics of art including themes, artists, major works of art, media, and processes involved in creating works of art that is unique to each period of art; explore societal influences on art from each period and the impact art from each period has had on society; apply basic terminology and higher order thinking skills; and draw inferences from works of art and artists from each period of art history.

Credit Fulfills: Career-Focused Elective

Art History (Baroque to Contemporary) (0.5 credit) (450070: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Examine periods of art history from around the world, with emphasis on Baroque, Rococo, Pre-Modern, Modern, Postmodern, and Contemporary art. Examine characteristics of art including themes, artists, major artworks, media, and processes involved in creating artwork that is unique to each period of art. Explore societal influences on art from each period, and the impact art from each period has had on society, and apply basic terminology and higher order thinking skills and draw inferences from artwork and artists from each period of art history.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Studio Art 2-D (0.5 credit) (450080: 0.5 credit)

Prerequisite Course Codes: 450000

Grade Range: 10 - 12

Explore, apply, and move toward mastery of the elements of art and principles of design in specific areas of art, such as painting, drawing, printmaking, digital art, photography, mixed media, surface design, or other 2-D media. Demonstrate evidence of complex problem-solving skills, higher order thinking, risk taking, imagination, and innovation. Exhibit art and will assemble portfolios that reflect personal growth in media, techniques, processes, and tools used to create complex 2-D compositions.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Studio Art 3-D (0.5 credit) (450090: 0.5 credit)

Prerequisite Course Codes: 450000

Grade Range: 10 - 12

Explore, apply, and move toward mastery of the elements of art and principles of design in specific areas of art, such as ceramics, jewelry, mosaics, fiber arts, sculptures, mixed media, altered books, or other 3-D media. Demonstrate evidence of complex problem-solving skills, higher order thinking, risk taking, imagination, and innovation. Exhibit art and assemble portfolios that reflect personal growth in the media, techniques, process, and tools used to create complex 3-D compositions.



Pre-AP Visual Arts (450100: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Develop skills associated with ideation, experimentation, creation, revision, reflection, and analysis-processes and activities that artists use while producing their work. Including analysis and interpretation, peer-to-peer dialogue, experimentation, and reflective writing.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Drawing I (450200: 1 credit)

Prerequisite Course Codes: 450000

Grade Range: 10 - 12

Apply the elements of art and the principles of design. Use a variety of media, techniques, processes, and tools to create original artwork that demonstrates understanding of aesthetic concerns and complex compositions. Develop, expand, and increase real life application of problem solving through artistic maturation. Create, critique, reflect, and make connections to art while exhibiting original artwork and developing portfolios that reflect personal growth.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Drawing II (450210: 1 credit)

Prerequisite Course Codes: 450000, 450200

Grade Range: 10 - 12

Apply the elements of art and the principles of design. Use a variety of media, techniques, processes, and tools to create original artwork that demonstrates understanding of aesthetic concerns and complex compositions. Develop, expand, and increase real life application of problem solving through artistic maturation. Create, critique, reflect, and make connections to art while exhibiting original artwork and developing portfolios that reflect personal growth.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Drawing III (450220: 1 credit)

Prerequisite Course Codes: 450000, 450200, 450210

Grade Range: 10 - 12

Apply the elements of art and the principles of design. Use a variety of media, techniques, processes, and tools to create original artwork that demonstrates understanding of aesthetic concerns and complex compositions. Develop, expand, and increase real life application of problem solving through artistic maturation. Create, critique, reflect, and make connections to art while exhibiting original artwork and developing portfolios that reflect personal growth.



Printmaking (450300: 1 credit) **Prerequisite Course Codes:** 450000

Grade Range: 10 - 12

Apply the elements of art and the principles of design. Students will use a variety of media, techniques, processes, and tools to create original prints that demonstrate understanding of aesthetic concerns and complex compositions. Develop, expand, and increase real life application of problem solving through maturation. Create, critique, reflect, and make connections to printmaking while exhibiting original prints and developing portfolios that reflect personal growth.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Painting I (450400: 1 credit)

Prerequisite Course Codes: 450000

Grade Range: 10 - 12

Apply the elements of art and the principles of design. Students will use a variety of media, techniques, processes, and tools to create original paintings that demonstrate understanding of aesthetic concerns and complex compositions. Develop, expand, and increase their real life application of problem solving through maturation. Create, critique, reflect, and make connections to painting while exhibiting original paintings and developing portfolios that reflect personal growth.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Painting II (450410: 1 credit)

Prerequisite Course Codes: 450000, 450400

Grade Range: 10 - 12

Apply the elements of art and the principles of design. Students will use a variety of media, techniques, processes, and tools to create original paintings that demonstrate understanding of aesthetic concerns and complex compositions. Develop, expand, and increase their real life application of problem solving through maturation. Create, critique, reflect, and make connections to painting while exhibiting original paintings and developing portfolios that reflect personal growth.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Ceramics I (450500: 1 credit) **Prerequisite Course Codes:** 450000

Grade Range: 10 - 12

Apply the elements of art and the principles of design. Use a variety of media, techniques, processes, and tools to create original ceramic artwork that demonstrates understanding of aesthetic concerns and complex compositions. Develop, expand, and increase real life application of problem solving through maturation. Create, critique, reflect, and make connections to ceramic art while exhibiting original ceramic artwork and developing portfolios that reflect personal growth.



Ceramics II (450510: 1 credit)

Prerequisite Course Codes: 450000, 450510

Grade Range: 10 - 12

Apply the elements of art and the principles of design. Use a variety of media, techniques, processes, and tools to create original ceramic artwork that demonstrates understanding of aesthetic concerns and complex compositions. Develop, expand, and increase real life application of problem solving through maturation. Create, critique, reflect, and make connections to ceramic art while exhibiting original ceramic artwork and developing portfolios that reflect personal growth.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Sculpture (450600: 1 credit)

Prerequisite Course Codes: 450000

Grade Range: 10 - 12

Apply the elements of art and the principles of design. Students will use a variety of media, techniques, processes, and tools to create original sculpture that demonstrates understanding of aesthetic concerns and complex compositions. Develop, expand, and increase real life application of problem solving through maturation. Create, critique, reflect, and make connections to sculpture while exhibiting original sculpture and developing portfolios that reflect personal growth.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Band I (451000: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and instrumental techniques in the production, performance, analysis, and critique of instrumental music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique music performances and deeply reflect upon the impact of instrumental music on society as well as societal influences on instrumental music. Perform in a variety of settings and will demonstrate successful completion of student learning expectations.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Band II (451040: 1 credit)

Prerequisite Course Codes: 451000

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and instrumental techniques in the production, performance, analysis, and critique of instrumental music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique music performances and deeply reflect upon the impact of instrumental music on society as well as societal influences on instrumental music. Perform in a variety of settings and will demonstrate successful completion of student learning expectations.



Band III (451050: 1 credit)

Prerequisite Course Codes: 451000, 451040

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and instrumental techniques in the production, performance, analysis, and critique of instrumental music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique music performances and deeply reflect upon the impact of instrumental music on society as well as societal influences on instrumental music. Perform in a variety of settings and will demonstrate successful completion of student learning expectations.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Band IV (451060: 1 credit)

Prerequisite Course Codes: 451000, 451040, 451050

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and instrumental techniques in the production, performance, analysis, and critique of instrumental music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique music performances and deeply reflect upon the impact of instrumental music on society as well as societal influences on instrumental music. Perform in a variety of settings and will demonstrate successful completion of student learning expectations.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Pre-AP Music (451070: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Study musical works to identify and understand the elements of music and the ways music is shaped by composers and performers through a variety of ensemble types. Course is entirely performance-based and rubric-scored.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Orchestra I (451100: 1 credit)
Prerequisite Course Codes: None

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and instrumental techniques in the production, performance, analysis, and critique of instrumental music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique music performances and deeply reflect upon the impact of instrumental music on society as well as societal influences on instrumental music.



Orchestra II (451110: 1 credit) **Prerequisite Course Codes:** 451100

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and instrumental techniques in the production, performance, analysis, and critique of instrumental music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique music performances and deeply reflect upon the impact of instrumental music on society as well as societal influences on instrumental music.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Music Lab I (451500: 1 credit)
Prerequisite Course Codes: None

Grade Range: 9 - 12

Explore skills needed for the harmonizing instrument, including but not limited to piano, guitar, banjo, general keyboards, synthesizers, iPads, or various technological media. Apply basic through advanced concepts that are germane to these musical media. Develop the knowledge, skills, and attitudes for lifelong playing and listening to music and create opportunities for personal musical expression through choosing, discussing, and sculpting the musical experiences.

Credit Fulfills: Graduation Requirement for Fine Arts

Music Lab II (451510: 1 credit)
Prerequisite Course Codes: 451500

Grade Range: 9 - 12

Explore skills needed for the harmonizing instrument, including but not limited to piano, guitar, banjo, general keyboards, synthesizers, iPads, or various technological media. Apply basic through advanced concepts that are germane to these musical media. Develop the knowledge, skills, and attitudes for lifelong playing and listening to music and create opportunities for personal musical expression through choosing, discussing, and sculpting the musical experiences.

Credit Fulfills: Graduation Requirement for Fine Arts

Orchestra III (451120: 1 credit)

Prerequisite Course Codes: 451100, 451110

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and instrumental techniques in the production, performance, analysis, and critique of instrumental music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique music performances and deeply reflect upon the impact of instrumental music on society as well as societal influences on instrumental music.



Orchestra IV (451130: 1 credit)

Prerequisite Course Codes: 451100, 451110, 451120

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and instrumental techniques in the production, performance, analysis, and critique of instrumental music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique music performances and deeply reflect upon the impact of instrumental music on society as well as societal influences on instrumental music.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Jazz Band I (451200: 1 credit)
Prerequisite Course Codes: None

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and instrumental techniques in the production, performance, analysis, and critique of jazz music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique music performances and deeply reflect upon the impact of jazz music on society as well as societal influences on jazz music. Perform in a variety of settings and will demonstrate successful completion of student learning expectations.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Jazz Band II (451210: 1 credit) **Prerequisite Course Codes:** 451200

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and instrumental techniques in the production, performance, analysis, and critique of jazz music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique music performances and deeply reflect upon the impact of jazz music on society as well as societal influences on jazz music. Perform in a variety of settings and will demonstrate successful completion of student learning expectations.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Jazz Band III (451220: 1 credit)

Prerequisite Course Codes: 451200, 451210

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and instrumental techniques in the production, performance, analysis, and critique of jazz music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique music performances and deeply reflect upon the impact of jazz music on society as well as societal influences on jazz music. Perform in a variety of settings and will demonstrate successful completion of student learning expectations.



Jazz Band IV (451230: 1 credit)

Prerequisite Course Codes: 451200, 451210, 451220

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and instrumental techniques in the production, performance, analysis, and critique of jazz music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique music performances and deeply reflect upon the impact of jazz music on society as well as societal influences on jazz music. Perform in a variety of settings and will demonstrate successful completion of student learning expectations.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Music Lab III (451520: 1 credit)

Prerequisite Course Codes: 451500, 451510

Grade Range: 9 - 12

Explore skills needed for the harmonizing instrument, including but not limited to piano, guitar, banjo, general keyboards, synthesizers, iPads, or various technological media. Apply basic through advanced concepts that are germane to these musical media. Develop the knowledge, skills, and attitudes for lifelong playing and listening to music and create opportunities for personal musical expression through choosing, discussing, and sculpting the musical experiences.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Music Lab IV (451530: 1 credit)

Prerequisite Course Codes: 451500, 451510, 451520

Grade Range: 9 - 12

Explore skills needed for the harmonizing instrument, including but not limited to piano, guitar, banjo, general keyboards, synthesizers, iPads, or various technological media. Apply basic through advanced concepts that are germane to these musical media. Develop the knowledge, skills, and attitudes for lifelong playing and listening to music and create opportunities for personal musical expression through choosing, discussing, and sculpting the musical experiences.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Vocal Ensemble I (452000: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and vocal techniques in the production, performance, analysis, and critique of vocal music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique vocal music performances and deeply reflect upon the impact of vocal music on society as well as societal influences on vocal music.



Vocal Ensemble II (452040: 1 credit) **Prerequisite Course Codes:** 452000

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and vocal techniques in the production, performance, analysis, and critique of vocal music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique vocal music performances and deeply reflect upon the impact of vocal music on society as well as societal influences on vocal music.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Vocal Ensemble III (452050: 1 credit) **Prerequisite Course Codes:** 452000, 452040

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and vocal techniques in the production, performance, analysis, and critique of vocal music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique vocal music performances and deeply reflect upon the impact of vocal music on society as well as societal influences on vocal music.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Vocal Ensemble IV (452060: 1 credit)

Prerequisite Course Codes: 452000, 452040, 452050

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and vocal techniques in the production, performance, analysis, and critique of vocal music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique vocal music performances and deeply reflect upon the impact of vocal music on society as well as societal influences on vocal music.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Specialized Vocal Ensemble I (452070: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and vocal techniques in the production, performance, analysis, and critique of vocal music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique vocal music performances and deeply reflect upon the impact of vocal music on society as well as societal influences on vocal music.



Specialized Vocal Ensemble II (452080: 1 credit)

Prerequisite Course Codes: 452080

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and vocal techniques in the production, performance, analysis, and critique of vocal music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique vocal music performances and deeply reflect upon the impact of vocal music on society as well as societal influences on vocal music.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Specialized Vocal Ensemble III (452090: 1 credit)

Prerequisite Course Codes: 452080, 452090

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and vocal techniques in the production, performance, analysis, and critique of vocal music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique vocal music performances and deeply reflect upon the impact of vocal music on society as well as societal influences on vocal music.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Specialized Vocal Ensemble IV (452100: 1 credit) **Prerequisite Course Codes:** 452080, 452090, 452090

Grade Range: 9 - 12

Demonstrate an ability to apply music fundamentals and vocal techniques in the production, performance, analysis, and critique of vocal music performance. Apply sight-reading skills, improvisational skills, and performance techniques in solo, small group, and large group settings. Critique vocal music performances and deeply reflect upon the impact of vocal music on society as well as societal influences on vocal music.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Music Appreciation (0.5 credit) (453030: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Apply the basic elements, principles, processes, materials, and inherent qualities of music. Examine a broad range of methods and will conduct critical analyses of the creative processes involved in music. Reflect on the connections between society and music while developing perceptual awareness and aesthetic sensitivity as well as a foundation for a lifelong relationship with music.



Visual Art Appreciation (0.5 credit) (453100: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Develop perceptual awareness and aesthetic sensitivity, as well as a foundation for a lifelong relationship with the arts. 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.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Theatre Appreciation (0.5 credit) (453130: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Develop an understanding of basic theatre skills and the history of the theatre, analyze and evaluate artistic work, and discover connections between theatrical works and societal, cultural, and historical contexts.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Dance Appreciation (0.5 credit) (453300: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Apply the basic elements, principles, processes, and inherent qualities of dance. Examine a broad range of methods and conduct critical analyses of the creative processes involved in dance. Reflect on the connections between society and dance while developing perceptual awareness and aesthetic sensitivity, as well as a foundation for a lifelong relationship with dance.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Music Theory (459010: 1 credit)

Prerequisite Course Codes: One year of formal training in music at the high school level is a

prerequisite for this course. **Grade Range:** 10 - 12

Expand and enhance the skills of the serious high school musicians by examining components of music composition, melodic practices, theories of harmony, and other musical concepts. Analyze music from different stylistic periods and develop notation, aural, and sight-reading skills. Emphasis is placed on the application of rhythm, melody, harmony, form, and other compositional devices into original compositions.



Music Technology (459020: 1 credit)
Prerequisite Course Codes: None

Grade Range: 9 - 12

Study the technologies used to create, manipulate, perform, record, and share music. Introduce the constantly changing resources and possibilities available for personal musical expression. Course activities may involve smartphones, tablets, computers, and cloud-based resources, along with the voice and available acoustic, analog, electronic, and digital instruments.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Theatre I (459100: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Master both academic and performance skills in the art of drama and theatrical production through improvisation, expressive movement, analysis of scripts and characters, acting, and stagecraft. Evaluate and critique both written and performed works and make connections between theatre, other art forms, and other cultures.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Theatre II (459110: 1 credit) **Prerequisite Course Codes:** 459100

Grade Range: 9 - 12

Expand the knowledge and performance base of Theatre I. Master both academic and performance skills in the art of drama and theatrical production through improvisation, expressive movement, analysis of scripts and characters, acting, and stagecraft. Evaluate and critique both written and performed works and make connections between theatre, other art forms, and other cultures.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Theatre III (459120: 1 credit)

Prerequisite Course Codes: 459100, 459110

Grade Range: 9 - 12

Expand the knowledge and performance base of Theatre II. Master both academic and performance skills in the art of drama and theatrical production through improvisation, expressive movement, analysis of scripts and characters, acting, and stagecraft. Evaluate and critique both written and performed works and make connections between theatre, other art forms, and other cultures.



Theatre IV (459130: 1 credit)

Prerequisite Course Codes: 459100, 459110, 459120

Grade Range: 9 - 12

Master the skills required to direct drama/theatre experiences. Expand the knowledge and performance base of Theatre III. Master both academic and performance skills in the art of drama and theatrical production through improvisation, expressive movement, analysis of scripts and characters, acting, and stagecraft. Evaluate and critique both written and performed works and make connections between theatre, other art forms, and other cultures

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Theatrical Makeup (0.5 credit) (459140: 0.5 credit)

Prerequisite Course Codes: 459100 or 459240

Grade Range: 10 - 12

Master the technical theatre specialty of theatrical makeup. Mastery in theatrical makeup means discovering the expressive elements of design and application, knowing the terminology and historical background that is used to comprehend technical theatre, having a clear sense of what theatrical makeup embodies, and being able to reflect, critique, and connect personal experience to the theatre.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Pre-AP Theatre (459150: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Focus on observation, investigation, and discussion of anchor works of art central to themes and content. Engage in structured conversations, critique work, discuss next steps of reflective writing throughout the process, and creative experimentation of developing work.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Dance I (459200: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Demonstrate an ability to apply dance fundamentals and dance techniques in the production, performance, analysis, and critique of dance performance. Perform in solo, small group, and large group settings. Critique performances and deeply reflect upon the impact of dance on culture, as well as cultural influences on dance.



Dance II (459210: 1 credit)

Prerequisite Course Codes: 459200

Grade Range: 9 - 12

Demonstrate an ability to apply dance fundamentals and dance techniques in the production, performance, analysis, and critique of dance performance. Perform in solo, small group, and large group settings. Critique performances and deeply reflect upon the impact of dance on culture, as well as cultural influences on dance.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Dance III (459220: 1 credit)

Prerequisite Course Codes: 459200, 459210

Grade Range: 9 - 12

Demonstrate an ability to apply dance fundamentals and dance techniques in the production, performance, analysis, and critique of dance performance. Perform in solo, small group, and large group settings. Critique performances and deeply reflect upon the impact of dance on culture, as well as cultural influences on dance.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Dance IV (459230: 1 credit)

Prerequisite Course Codes: 459200, 459210, 459220

Grade Range: 9 - 12

Demonstrate an ability to apply dance fundamentals and dance techniques in the production, performance, analysis, and critique of dance performance. Perform in solo, small group, and large group settings. Critique performances and deeply reflect upon the impact of dance on culture, as well as cultural influences on dance.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Technical Theatre I (459240: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Experience all elements of technical theatre, including scenery, props, lighting, sound, costume, and makeup. All levels of Technical Theatre focus on the artistic processes of creating, performing, responding, and connecting.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Technical Theatre II (459250: 1 credit)

Prerequisite Course Codes: 459240

Grade Range: 9 - 12

Advance skills in all elements of technical theatre through practical experience, with new instruction in design. All levels of Technical Theatre focus on the artistic processes of creating, performing, responding, and connecting.



Technical Theatre III (459260: 1 credit) **Prerequisite Course Codes:** 459240, 459250

Grade Range: 9 - 12

Deepen understanding and advance skills in one specialized area of technical theatre, which could include scenery, props, lighting, sound, costume, and/or makeup. All levels of Technical Theatre focus on the artistic processes of creating, performing, responding, and connecting.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Technical Theatre IV (459270: 1 credit)

Prerequisite Course Codes: 459240, 459250, 459260

Grade Range: 9 - 12

Focus on leadership skills required to provide technical direction to a collaborative production staff. All levels of Technical Theatre focus on the artistic processes of creating, performing, responding, and connecting.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Costume Design I (459280: 1 credit)

Prerequisite Course Codes: 459240 or 459100 or portfolio selection process

Grade Range: 9 - 12

Mastery in costume design means discovering the creative elements of design and construction, knowing the terminology and historical background that is used to comprehend technical theatre, having a clear sense of what costuming embodies, and being able to reflect, critique, and connect personal experience to the theatre.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Costume Design II (459290: 1 credit) **Prerequisite Course Codes:** 459280

Grade Range: 9 - 12

Mastery in costume design means discovering the creative elements of design and construction, knowing the terminology and historical background that is used to comprehend technical theatre, having a clear sense of what costuming embodies, and being able to reflect, critique, and connect personal experience to the theatre.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Performance Dance I (459300: 1 credit)

Prerequisite Course Codes: Audition

Grade Range: 9 - 12

Explore the dance experience and the elements needed for concert dance performance. Nurture and stimulate a quest for artistic achievement, technical mastery, and scholarly excellence.



Performance Dance II (459310: 1 credit)

Prerequisite Course Codes: 459300

Grade Range: 9 - 12

Explore the dance experience and the elements needed for concert dance performance. Nurture and stimulate a quest for artistic achievement, technical mastery, and scholarly excellence.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Performance Dance III (459320: 1 credit) Prerequisite Course Codes: 459300, 459310

Grade Range: 9 - 12

Explore the dance experience and the elements needed for concert dance performance. Nurture and stimulate a quest for artistic achievement, technical mastery, and scholarly excellence.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Performance Dance IV (459330: 1 credit)

Prerequisite Course Codes: 459300, 459310, 459320

Grade Range: 9 - 12

Explore the dance experience and the elements needed for concert dance performance. Nurture and

stimulate a quest for artistic achievement, technical mastery, and scholarly excellence.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Theatre Production & Management (459400: 1 credit)

Prerequisite Course Codes: 459110, 459290, 459250 or portfolio submission process

Grade Range: 10 - 12

Develop leadership skills within the collaborative areas of theatre production. Serve as a production team in performance, directing, technical theatre, promotions, and/or business management, emphasizing collaboration, management, and organization.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Playwriting I (459500: 1 credit) **Prerequisite Course Codes:** 459100

Grade Range: 10 - 12

Explore the creative process, script analysis, dramatic structures historical and cultural influences on style and practice, the anatomy of a play, and the mechanics of writing. Participate in workshops and draft and complete plays of various styles and lengths. Public readings or performances may serve as the culmination of specific instructional goals.



Playwriting II (459510: 1 credit)

Prerequisite Course Codes: 459100, 459500

Grade Range: 10 - 12

Explore the creative process, script analysis, dramatic structures historical and cultural influences on style and practice, the anatomy of a play, and the mechanics of writing. Participate in workshops and draft and complete plays of various styles and lengths. Public readings or performances may serve as the culmination of specific instructional goals.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Musical Theatre I (459600: 1 credit) **Prerequisite Course Codes:** 459100

Grade Range: 9 - 12

Articulate the most fundamental elements of theatre by acting, vocal performance, dance, non-dance movement, and staging. Survey the evolution of music in theatre from ancient Greece to modern Broadway through a humanities approach and representative literature. Explore the unique staging and technical demands of musicals in contrast to non-musical plays.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

Musical Theatre II (459610: 1 credit)
Prerequisite Course Codes: 459100, 459600

Grade Range: 9 - 12

Articulate the most fundamental elements of theatre by acting, vocal performance, dance, non-dance movement, and staging. Survey the evolution of music in theatre from ancient Greece to modern Broadway through a humanities approach and representative literature. Explore the unique staging and technical demands of musicals in contrast to non-musical plays.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

International Baccalaureate (IB) Film (553020: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Study and analyze film concepts, theories, practices and ideas from multiple perspectives. Develop students' critical abilities and appreciation of artistic, cultural, historical and global perspectives in film.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

AP Music Theory (559010: 1 credit)
Prerequisite Course Codes: None

Grade Range: 9 - 12

Introductory college-level music theory course. Cultivate understanding of music theory through analyzing performed and notated music. Explore concepts of pitch, rhythm, form, and musical design. This is a College Board Advanced Placement course.



AP Art History (559030: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Introductory college-level art history course. Cultivate understanding of art history through analyzing works of art and placing them in historical context. Explore concepts including theories and interpretations of art, the impact of materials, processes, and techniques on art and art making, and understanding purpose and audience in art historical analysis. This is a College Board Advanced Placement course.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

AP Drawing (559040: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Introductory college-level drawing course. Refine and apply drawing skills to ideas developed throughout the course. This is a College Board Advanced Placement course.

the course. This is a college board Advanced Flacement course.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

AP 2-D Art and Design (559050: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Introductory college-level two-dimensional design course. Refine and apply 2-D skills to ideas developed throughout the course. This is a College Board Advanced Placement course.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

AP 3-D Art and Design (559060: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Introductory college-level three-dimensional design course. Refine and apply 3-D skills to ideas developed

throughout the course. This is a College Board Advanced Placement course. **Credit Fulfills:** Graduation Requirement for Fine Arts, Career-Focused Elective

International Baccalaureate (IB) Theatre (559120: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Engage actively in the creative process of inquiring, developing, presenting and evaluating. Transform ideas into action and communicate these to an audience. Apply research and theory to inform and contextualize work physically through both action and practice. Strengthen awareness of one's own personal and cultural perspectives, developing an appreciation of the diversity of theatre practices, processes and modes of presentation.



International Baccalaureate (IB) Fine Arts (559810: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Actively explore the visual arts within and across a variety of local, regional, national, international and intercultural contexts. Through inquiry, investigation, reflection and creative application, visual arts students develop an appreciation for the expressive and aesthetic diversity in the world around them, becoming critically informed makers and consumers of visual culture.

Credit Fulfills: Graduation Requirement for Fine Arts, Career-Focused Elective

International Baccalaureate (IB) Visual Arts (559820: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Challenge one's own creative and cultural expectations and boundaries. Develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence as art-makers. Explore and Compare visual arts from different perspectives and in different contexts. Engage in, experiment with and critically reflect upon a wide range of contemporary practices and media.

Health & Physical Education





Health and Wellness (480000: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Explore various health education topics that impact self and others. Engage in health lessons that lead to

implementation of healthy behaviors.

Credit Fulfills: Graduation Requirement for Health and Safety

Personal Fitness for Life (485010: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Exhibit the knowledge and skills necessary to develop and maintain a health-enhancing level of fitness and to increase physical competence, self-esteem, and the motivation to pursue lifelong physical activity. Participation in activities that will increase physical fitness levels and develop healthy practices. Recognize the value of physical activity and its contribution to lifelong fitness.

Credit Fulfills: Graduation Requirement for Physical Education

Recreational Sports (485020: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Execute basic motor skills and movement concepts as they apply to physical activity, lifetime sports, and recreational activities. Participation in activities will increase physical fitness levels and develop health practices that value physical activity and its contribution to lifelong fitness.

Credit Fulfills: Graduation Requirement for Physical Education

Outdoor Pursuits (485030: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Execute basic motor skills and movement concepts as they apply to outdoor physical activity. Participation in outdoor activities will increase physical fitness levels and develop health practices that value physical activity and its contribution to lifelong fitness.

Credit Fulfills: Graduation Requirement for Physical Education

Athletics (485040: 0.5 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Identify and apply knowledge about various aspects of training and competition. Demonstrate skills as they apply to sports, functioning in team environments, and most importantly to the other areas of their lives.

Credit Fulfills: Graduation Requirement for Physical Education

Mathematics





Algebra I (430000: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 7 - 12

Extend middle school linear understanding by exploring linear and exponential relationships by drawing comparisons between the two in this course. Apply models to data with linear trends. Develop an understanding of analyzing, solving, and using quadratic functions.

Credit Fulfills: Graduation Requirement for Mathematics (Algebra I), Career-Focused Elective

Pre-AP Algebra 1 (430300: 1 credit)

Prerequisite Course Codes:

Grade Range: 7 - 12

Develop a deep understanding of linear relationships emphasizing patterns of change, multiple representations of functions and equations, modeling real world scenarios with functions, and methods for finding and representing solutions of equations and inequalities.

Credit Fulfills: Graduation Requirement for Mathematics (Algebra I), Career-Focused Elective

Geometry (431000: 1 credit)

Prerequisite Course Codes: 430000

Grade Range: 8 - 12

Examine geometric relationships, explore various geometric situations, and construct mathematical arguments in this course. Students will develop a strong understanding of geometric principles by applying critical thinking and express mathematical reasoning with precision and clarity.

Credit Fulfills: Graduation Requirement for Mathematics (Geometry), Career-Focused Elective

Pre-AP Geometry with Statistics (431300: 1 credit)

Prerequisite Course Codes:

Grade Range: 8 - 12

Develop a deeper understanding of mathematics with a conceptual bridge between algebra and geometry through a unit of statistics and probability to support students' understanding of concepts essential to quantitative literacy. Solve problems across the domains of algebra, geometry, and statistics.

Credit Fulfills: Graduation Requirement for Mathematics (Geometry), Career-Focused Elective

Algebra II (432000: 1 credit)
Prerequisite Course Codes: 430000

Grade Range: 9 - 12

Analyze linear, quadratic, and exponential functions with a depth beyond Algebra I expectations. The course will expand comprehension of functions, including polynomial, rational, and radical functions. The emphasis is on problem-solving through developing models for various situations and solving equations, including incorporating complex numbers and applying logarithmic properties.

Credit Fulfills: Graduation Requirement for Mathematics (Algebra II or Quantitative Reasoning), Career-Focused Elective



Pre-AP Algebra 2 (432300: 1 credit)

Prerequisite Course Codes:

Grade Range: 9 - 12

Solidify and extend the understanding of functions and data analysis. Build upon linear, quadratic, and exponential functions as they work to define logarithmic, polynomial, rational, square root, cube root, and trigonometric functions. Develop quantitative literacy by weaving data sets, contextual scenarios, and mathematical modeling throughout the course.

Credit Fulfills: Graduation Requirement for Mathematics (Algebra II or Quantitative Reasoning), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science)

Pre Calculus (433000: 1 credit)

Prerequisite Course Codes: 430000,431000, 4320000

Grade Range: 9 - 12

Apply the study of trigonometric functions, identities, and practical applications of right triangle trigonometry and circular functions. Use symbolic reasoning and analytical methods to represent mathematical situations and express generalizations. Investigate the relationships among various mathematical concepts, employing functions and equations as tools for expressing generalizations.

Credit Fulfills: Graduation Requirement for Mathematics or Computer Science (4th Mathematics or

Computer Science), Career-Focused Elective

Calculus (434010: 1 credit)

Prerequisite Course Codes: 430000,431000, 432000, recommend 433000

Grade Range: 9 - 12

Explore the methods and applications of calculus in this two-semester course, designed to provide practical experience and a solid grasp of its concepts. The course emphasizes a multi-representational approach, expressing concepts graphically, numerically, symbolically, analytically, and verbally, focusing on derivatives, integrals, limits, application and modeling, and approximation.

Credit Fulfills: Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Career-Focused Elective

Algebra III (Transitional) (439070: 1 credit)
Prerequisite Course Codes: 430000,431000, 432000

Grade Range: 9 - 12

Deepen understanding of Algebra II concepts and explore pre-calculus concepts. Students will enhance skills in analyzing and solving various functions, including polynomials, rational, exponentials, and logarithmic, with a real-world focus. Apply mathematical techniques to model and analyze situations using sequences, series, matrices, and conics.

Credit Fulfills: Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Career-Focused Elective



Statistics (439090: 1 credit)

Prerequisite Course Codes: 430000432000

Grade Range: 9 - 12

Embark on Statistics, a journey tailored for students completing Algebra II and interested in business, social sciences, or education. Develop an understanding of experimental design, estimation, hypothesis testing, and effective communication through probability, randomness, and variability. Engage in practical applications, exploring data collection and analysis methods throughout this two-semester course.

Credit Fulfills: Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Career-Focused Elective

Quantitative Reasoning (Transitional) (439120: 1 credit)

Prerequisite Course Codes: 430000

Grade Range: 9 - 12

Discover math topics, building on Algebra I basics. Focus on using modeling to analyze real-world situations and enhance mathematical understanding. Express and process reasoning in numbers, graphs, symbols, and words, connecting concepts to new contexts. Use technology including graphing calculators, computers, or data tools.

Credit Fulfills: Graduation Requirement for Mathematics (Algebra II or Quantitative Reasoning), Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Career-Focused Elective

Technical Math for College and Career (439130: 1 credit)

Prerequisite Course Codes: 430000, 431000

Grade Range: 9 - 12

Explore real-world applications and modeling by collecting, organizing, and interpreting data for practical insights. Build abilities in strategic thinking and flexible reasoning using numbers, graphs, symbols, and words. Use technology tools like graphing calculators and computers to enhance understanding.

Credit Fulfills: Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Career-Focused Elective

AP Precalculus (533030: 1 credit)

Prerequisite Course Codes:

Grade Range: 9 - 12

Develop and hone symbolic manipulation skills, including solving equations and manipulating expressions, for many function types. Explore functions and their compositions, inverses, and transformations through graphical, numerical, analytical, and verbal representations and reveal different attributes of functions for solving problems in mathematical and applied contexts. This is a College Board Advanced Placement course.

Credit Fulfills: Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Career-Focused Elective



AP Calculus AB (534040: 1 credit)

Prerequisite Course Codes:

Grade Range: 9 - 12

Introductory college-level calculus course. Cultivate understanding of differential and integral calculus through engaging with real-world problems represented graphically, numerically, analytically, and verbally and using definitions and theorems to build arguments and justify conclusions as they explore concepts like change, limits, and the analysis of functions. This is a College Board Advanced Placement course. This is a College Board Advanced Placement course.

Credit Fulfills: Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Career-Focused Elective

AP Calculus BC (534050: 1 credit)

Prerequisite Course Codes:

Grade Range: 9 - 12

Introductory college-level calculus course. Cultivate understanding of differential and integral calculus through engaging with real-world problems represented graphically, numerically, analytically, and verbally and using definitions and theorems to build arguments and justify conclusions as they explore concepts like change, limits, and the analysis of functions. Includes content beyond AP Calculus AB. This is a College Board Advanced Placement course.

Credit Fulfills: Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Career-Focused Elective

AP Statistics (539030: 1 credit)
Prerequisite Course Codes:

Grade Range: 9 - 12

Introductory college-level statistics course. Recognize major concepts and tools for collecting, analyzing, and drawing conclusions from data. Cultivate understanding of statistics using technology, investigations, problem solving, and writing while exploring concepts like variation and distribution; patterns and uncertainty; and data-based predictions, decisions, and conclusions. This is a College Board Advanced Placement course.

Credit Fulfills: Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Career-Focused Elective

Applied Data Science (539090: 1 credit)

Prerequisite Course Codes: 430000, 43100, 432000, 439090

Grade Range: 9 - 12

Explore the fundamentals of data analysis and visualization in this dynamic Applied Data Science course. Gain practical experience using state-of-the-art tools to analyze real-world data while honing programming and statistical modeling skills. Enhance problem-solving skills by tackling industry-relevant challenges, mastering the art of translating data into actionable solutions.

Credit Fulfills: Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Career-Focused Elective



International Baccalaureate (IB) Math: Applications and Interpretation SL

Year 1 (539160: 1 credit) **Prerequisite Course Codes:**

Grade Range: 9 - 12

Practical applications of mathematical concepts by leveraging mathematics to better comprehend the world we live in. Utilization of technology and data in elucidating mathematical procedures.

Credit Fulfills: Graduation Requirement for Mathematics or Computer Science (4th Mathematics or

Computer Science), Career-Focused Elective

International Baccalaureate (IB) Math: Applications and Interpretation SL

Year 2 (539170: 1 credit) **Prerequisite Course Codes:**

Grade Range: 9 - 12

Building on practical applications of mathematical concepts by leveraging mathematics to better comprehend the world we live in. Utilization of technology and data in elucidating mathematical procedures.

Credit Fulfills: Graduation Requirement for Mathematics or Computer Science (4th Mathematics or Computer Science), Career-Focused Elective

Critical Algebra I (596000: 1 credit)

Prerequisite Course Codes: Co-Requisite 430000

Grade Range: 9 - 12

Prepare for Algebra I success with Critical Algebra I, a two-semester course covering essential skills, understandings, and mathematical connections. Aligned with Algebra I learning targets, it refreshes students' memories and engages them with prerequisite topics, providing "just in time" for a high-quality Algebra I curriculum. Students should enroll in both an Algebra I class and a Critical Algebra I class either consecutively or at different times of the day.

Credit Fulfills: Career-Focused Elective

Other

EAST IB Career Programme Core





EAST Initiative I (560010: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Students in EAST I will spend much of their time exploring their own interests and becoming familiar with the technology available in the EAST classroom (Programming, Geographic Information System, Computer-Aided Modeling and Design, Animation, Graphic Design, Digital Filmmaking, Network Design and Maintenance, etc.). There will be a heavy focus on self-directed project-based learning, problem-solving, teamwork, collaboration with peers, and building community partnerships.

Credit Fulfills: Career-Focused Elective

EAST Initiative II (560020: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

EAST II is a continuation of the EAST methodology with an added emphasis on project sophistication and self-directed learning skills, mentoring fellow students in acquired knowledge of advanced applications and other skills gained through EAST I.

Credit Fulfills: Career-Focused Elective

EAST Initiative III (560030: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

EAST III is a continuation of the EAST methodology with an emphasis on project outreach through collaborative teamwork with fellow students and community clients using acquired knowledge and a continued emphasis on mentoring fellow students in acquired knowledge of advanced applications and other skills gained through EAST I and II.

Credit Fulfills: Career-Focused Elective

EAST Initiative IV (560040: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

EAST IV is a continuation of the EAST methodology with an emphasis on mentoring fellow students in acquired knowledge of advanced applications and other skills gained through EAST I, II, and III. There is an added emphasis on the archiving of projects for sustained success of the local program and student self-assessment of their personal educational and vocational goals.

Credit Fulfills: Career-Focused Elective



EAST Initiative V (560110: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

EAST V is a continuation of the EAST methodology with an emphasis on mentoring fellow students in acquired knowledge of advanced applications and other skills gained through EAST I, II, III, and IV. There is an ongoing emphasis on the archiving of projects for sustained success of the local program and student self-assessment of their personal educational and vocational goals.

Credit Fulfills: Career-Focused Elective

International Baccalaureate (IB) Career Programme Core I (596210: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

The International Baccalaureate (IB) Career-related Programme (CP) enhances student's personal and interpersonal development, with an emphasis on experiential learning. The CP core bridges the IB acaddemic courses and the careerrelated study and provides students with a combination of personal and professional skills, service learning, reflective project and language development.

Credit Fulfills: Career-Focused Elective

International Baccalaureate (IB) Career Programme Core II (596220: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

The International Baccalaureate (IB) Career-related Programme (CP) enhances student's personal and interpersonal development, with an emphasis on experiential learning. The CP core bridges the IB acaddemic courses and the careerrelated study and provides students with a combination of personal and professional skills, service learning, reflective project and language development.

Credit Fulfills: Career-Focused Elective

Science





Biology - Integrated (420000: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Examine the cycling of carbon-based molecules through photosynthesis and cellular respiration, using mathematical models to illustrate carbon flow in ecosystems. Investigate cell structure and function, hierarchical organism systems, and the role of biodiversity and animal behavior in ecosystems. Explore genetic concepts, including genetic modification, and the role of DNA in the unity of life, culminating in the exploration of Earth's dynamic systems, climate change, and the complex interactions among human activity and the environment.

Credit Fulfills: Graduation Requirement for Natural Science (Biology), Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective

Pre-AP Biology (420100: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Engage in real-world data analysis and problem solving that sparks critical thinking about our living world. Utilize the kind of scientific reasoning skills needed to analyze the natural world—and to succeed in future science and social science courses in high school and college.

Credit Fulfills: Graduation Requirement for Natural Science (Biology), Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective

Chemistry - Integrated (421000: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Investigate the substructure of atoms, utilizing the periodic table to explain and predict element properties. Explore chemical reactions, including rates and energy changes, providing mechanistic explanations for biological and geophysical phenomena. Demonstrate knowledge of energy concepts at both macroscopic and atomic scales, involving fusion and fission, motions of particles, configurations, and properties of waves, while also applying engineering principles to design devices minimizing forces during collisions.

Credit Fulfills: Graduation Requirement for Natural Science (Physical Sciences), Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective

Chemistry II (421010: 1 credit) Prerequisite Course Codes: None

Grade Range: 9 - 12

Use models to predict the substructure of atoms and develop more mechanistic explanations of substance properties, utilizing patterns in the periodic table. Explore quantum mechanics using models of electromagnetic radiation and delve into nuclear processes. Demonstrate knowledge of multi-tiered bond formation, substance identification, electrostatic forces using Coulomb's Law, mole concept application, and stoichiometry. Use graphical models to explain energy changes including enthalpy and Chatelier's Principle, examine chemical reaction rates, and identify organic compounds through functional groups and nomenclature of simple structures.

Credit Fulfills: Graduation Requirement for Natural Science (Physical Sciences), Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective



Pre-AP Chemistry (421300: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Develop a deep conceptual understanding of matter and energy at the molecular level while learning to explain macroscopic observations using particulate-level reasoning. Utilize scientific reasoning skills needed to analyze the natural world—and to succeed in future science and social science courses in high school and college.

Credit Fulfills: Graduation Requirement for Natural Science (Physical Sciences), Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective

Physics (422010: 1 credit)
Prerequisite Course Codes: None

Grade Range: 9 - 12

Investigates concepts of motion and create algebraic and conceptual models. Conduct investigations and use mathematical models to evaluate kinetic and potential energy of systems. Use computational models to investigate the conservation of energy and the total change of energy in a system. Use data to analyze wave properties and create visual and mathematical representations for the propagation of light and sound. Use principles of simple harmonic motion to relate periodic properties of waves to vibrations. Evaluate differences and similarities of mechanical and electromagnetic waves investigated through experiments involving light and sound.

Credit Fulfills: Graduation Requirement for Natural Science (Physical Sciences), Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective

Physical Science - Integrated (423000: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Develop an understanding of atomic substructure and substance properties, utilizing the periodic table to predict element properties. Explain the formation and abundance of elements, and comprehend chemical reactions, including rates and energy changes, in terms of molecule collisions and atom rearrangements. Investigate energy transfer in terms of wave properties and the interactions of electromagnetic radiation. Construct explanations for energy's role in matter cycling in organisms and ecosystems, applying mathematical concepts and developing models, while understanding the interdependencies between humans and Earth's systems through the impacts of natural hazards, dependencies on resources, and environmental impacts.

Credit Fulfills: Graduation Requirement for Natural Science (Physical Sciences), Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective



Environmental Science (424020: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Analyze data and explain changes in Earth systems over time. Investigate water properties and its role in Earth systems, using quantitative models for carbon cycling. Engage in the engineering process including designing investigations, creating models, and building devices for energy transfer exploration. Use technology for data collection and analysis in evaluating factors affecting ecosystems. Construct explanations for the influence of human activity on natural resources, hazards, and climate change using simulations to address environmental impacts and promote sustainability.

Credit Fulfills: Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective

Anatomy/Physiology (424030: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Develop understanding of key concepts that help students make sense of the interactions among the eleven human body systems, including the Integumentary, Skeletal, Muscular, Respiratory, Circulatory, Digestive, Nervous, Endocrine, Lymphatic, Urinary, and Reproductive Systems.

Credit Fulfills: Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-

Focused Elective

Earth Science (425020: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Construct explanations for the temporal scales of Earth's processes. Interpret data records and use radiometric dating to determine absolute ages in the geologic record. Investigate the coevolution of the biosphere with other Earth systems and analyze the impact of natural hazards, resources, and human activities, with an emphasis on understanding and addressing climate change.

Credit Fulfills: Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective

Astronomy (425050: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Recognize and classify celestial objects through observational evidence and the use of star maps with various coordinate systems. Investigate historical astronomical models, progressing from geocentric to heliocentric, and apply scientific principles to explain planetary structures. Demonstrate understanding of lunar phases, eclipses, planetary conditions, electromagnetic radiation from stars, the dual nature of light, and the life cycle of stars, culminating in an investigation of galactic motion, universal expansion, and dark matter halos around galaxies.

Credit Fulfills: Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective



AP Biology (520030: 1 credit)
Prerequisite Course Codes: None

Grade Range: 9 - 12

Introductory college-level biology course. Cultivate understanding of biology through inquiry-based investigations of topics like evolution, energetics, information storage and transfer, and system interactions. This is a College Board Advanced Placement course.

Credit Fulfills: Graduation Requirement for Natural Science (Biology), Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective

AP Chemistry (521030: 1 credit) Prerequisite Course Codes: None

Grade Range: 9 - 12

Introductory college-level chemistry course. Cultivate understanding of chemistry through inquiry-based lab investigations while exploring four Big Ideas: scale, proportion, and quantity; structure and properties of substances; transformations; and energy. This is a College Board Advanced Placement course.

Credit Fulfills: Graduation Requirement for Natural Science (Physical Sciences), Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective

International Baccalaureate (IB) Chemistry (521040: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Identify patterns that help to explain matter at the microscopic level. Develop representative models and explanatory theories, both of which rely heavily on creative but rational thinking. Constructively engage with topical scientific issues. Examine scientific knowledge claims in a real-world context, fostering interest and curiosity. Develop understandings, skills and techniques which can be applied across studies.

Credit Fulfills: Graduation Requirement for Natural Science (Physical Sciences), Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective

International Baccalaureate (IB) Chemistry II (521050: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Identify patterns that help to explain matter at the microscopic level. Develop representative models and explanatory theories, both of which rely heavily on creative but rational thinking. Constructively engage with topical scientific issues. Examine scientific knowledge claims in a real-world context, fostering interest and curiosity. Develop understandings, skills and techniques which can be applied across studies.

Credit Fulfills: Graduation Requirement for Natural Science (Physical Sciences), Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective



AP Physics C: Electricity and Magnetism (522040: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Calculus-based introductory college-level physics course. Cultivate understanding of physics through classroom study and activities as well as hands-on laboratory work as they explore concepts like change, force interactions, fields, and conservation. Develop the ability to reason about physical phenomena using important science practices, such as explaining relationships, applying and justifying the use of mathematical routines, designing experiments, analyzing data, and making connections across content related topics.

Credit Fulfills: Graduation Requirement for Natural Science (Physical Sciences), Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective

AP Physics C: Mechanics (522050: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Calculus-based introductory college-level physics course. Cultivate understanding of physics through classroom study and activities as well as hands-on laboratory work as they explore concepts like change, force interactions, fields, and conservation. Develop the ability to reason about physical phenomena using important science practices, such as creating and analyzing representations of physical scenarios, designing experiments, analyzing data, and using mathematics to model and to solve problems across content related topics.

Credit Fulfills: Graduation Requirement for Natural Science (Physical Sciences), Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective

International Baccalaureate (IB) Physics (522060: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Understand the natural world; from determining the nature of the atom to finding patterns in the structure of the universe. Constructively engage with topical scientific issues. Examine scientific knowledge claims in a real-world context, fostering interest and curiosity. Develop understandings, skills and techniques which can be applied across their studies and beyond.

Credit Fulfills: Graduation Requirement for Natural Science (Physical Sciences), Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective

International Baccalaureate (IB) Physics II (522070: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Understand the natural world; from determining the nature of the atom to finding patterns in the structure of the universe. Constructively engage with topical scientific issues. Examine scientific knowledge claims in a real-world context, fostering interest and curiosity. Develop understandings, skills and techniques which can be applied across their studies and beyond.

Credit Fulfills: Graduation Requirement for Natural Science (Physical Sciences), Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective



AP Physics 1 (522080: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Algebra-based, introductory college-level physics course. Cultivate understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they explore concepts like systems, fields, force interactions, change, and conservation. Develop the ability to reason about physical phenomena using important science practices, such as explaining relationships, applying and justifying the use of mathematical routines, designing experiments, analyzing data, and making connections across content related topics.

Credit Fulfills: Graduation Requirement for Natural Science (Physical Sciences), Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective

AP Physics 2 (522090: 1 credit)
Prerequisite Course Codes: None

Grade Range: 9 - 12

Algebra-based, introductory college-level physics course. Cultivate understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they explore concepts like systems, fields, force interactions, change, conservation, waves, and probability. Develop the ability to reason about physical phenomena using important science practices, such as explaining relationships, applying and justifying the use of mathematical routines, designing experiments, analyzing data, and making connections across content related topics.

Credit Fulfills: Graduation Requirement for Natural Science (Physical Sciences), Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective

AP Environmental Science (523030: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Cultivate understanding of the interrelationships of the natural world through inquiry-based lab investigations and field work. Explore concepts these four Big Ideas; energy transfer, interactions between earth systems, interactions between different species and the environment, and sustainability. This is a College Board Advanced Placement course.

Credit Fulfills: Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective

International Baccalaureate (IB) Biology (529030: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Investigate, acquire knowledge of cells' form and function; interaction and interdependence; continuity and change. Investigate, analyse, evaluate and synthesize scientific information of interactions and fostering critical thinking with scientific investigation to extend and develop collaborative sciences project.

Credit Fulfills: Graduation Requirement for Natural Science (Biology), Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective



International Baccalaureate (IB) Sports, Exercise, and Health Science (529040:

1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Explore the science underpinning physical performance and apply these principles in a variety of disciplines including anatomy and physiology, biomechanics, psychology and nutrition. Execute practical (experimental) investigations in both laboratory and field settings. Develop a deeper understanding of the issues related to sports, exercise and health in the 21st century.

Credit Fulfills: Career-Focused Elective

International Baccalaureate (IB) Biology II (529060: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Use models to predict the substructure of atoms and develop more mechanistic explanations of substance properties, utilizing patterns in the periodic table. Explore quantum mechanics using models of electromagnetic radiation and delve into nuclear processes. Demonstrate knowledge of multi-tiered bond formation, substance identification, electrostatic forces using Coulomb's Law, mole concept application, and stoichiometry. Use graphical models to explain energy changes including enthalpy and Chatelier's Principal, examine chemical reaction rates, and identify organic compounds through functional groups and nomenclature of simple structures.

Credit Fulfills: Graduation Requirement for Natural Science (Biology), Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-Focused Elective

Social Studies





United States History Since 1929 (470000: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Relates 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. Formulates an understanding of the cause-and-effect relationship between past and present events, recognizes patterns of interactions, and considers the impact of events in the United States within an interconnected world. Explores the Great Depression to the present by investigating the political, economic, geographic, social, and cultural development of the United States of America from the late nineteenth century into the twenty-first century.

Credit Fulfills: Graduation Requirement for Social Studies (United States History), Career-Focused Elective

LICCUVE

World History Since 1450 (471000: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Supports an in-depth study of the history of human society from Era 6: Emergence of First Global Age 1450-1770 to Era 9: Twentieth Century since 1945. Constructs an understanding of 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. Investigates historical roots of current world issues, especially as they pertain to international/global relations, requires an understanding of world cultures and civilizations, including an analysis of important ideas, social and cultural values, beliefs, and traditions.

Credit Fulfills: Graduation Requirement for Social Studies (Civics), Career-Focused Elective

Pre-AP World History and Geography (471100: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Develop concepts and skills for high school and beyond. Explore structures and forces that reflect and shape regions, communities, governments, economies, and cultures of humanity. Develop an organized, meaningful understanding of time and space; examine sources and data; establish inferences to build and critique arguments; and learn tools of historians and geographers.

Credit Fulfills: Graduation Requirement for Social Studies (World History), Career-Focused Elective

Civics (0.5 credit) (472000: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Formulates a strong foundation in civics and government. Supports the application of civic virtues and democratic principles, including an investigation of problem-solving in society. Integrates a study of the structure and functions of federal, state, and local government, 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.

Credit Fulfills: Graduation Requirement for Social Studies (Civics), Career-Focused Elective



Arkansas History (0.5 credit) (473000: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Develops an understanding of the history of Arkansas. Addresses the geographic features and economics of the state, focusing on the political, social, religious, military, scientific, and cultural developments that have occurred over time. Organizes course content historically and chronologically by referencing the Encyclopedia of Arkansas eras and time periods to address strands and content standards for more rigorous coursework in Arkansas History Grades 9-12.

Credit Fulfills: Career-Focused Elective

United States Government (0.5 credit) (474100: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Constructs an understanding of the social systems that are the foundation of society, enhances students' understanding of the social world, and examines how the social world influences the way they think, feel, and act. Focuses on culture, social status, social institutions, social problems, the resulting behaviors as well as in using the tools and techniques of sociologists. Addresses the causes, consequences, and possible solutions for various social issues as they read major sociological theorists and consider how sociologists approach issues.

Credit Fulfills: Career-Focused Elective

Economics with Personal Finance (0.5 credit) (474300: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Appraises economic and personal finance decision-making. Considers the interrelationships among consumers, producers, and resources as well as the interrelationships between national and global economies. Distinguishes the relationship between individual choices and the direct influence of these choices on career and future earning potential.

Credit Fulfills: Graduation Requirement for Economics, Career-Focused Elective

Psychology (0.5 credit) (474400: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Provides an introduction to the science of behavior and mental processes. Integrates an overview of the history of psychology as well as an opportunity to study personality and individuality as well as explores how the knowledge and methods of psychologists are applied to the solution of human problems. Examines human development, biological bases of behavior, sensation and perception, learning, memory and cognition, behavior patterns, personality, and individuality.

Credit Fulfills: Career-Focused Elective



Sociology (0.5 credit) (474500: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Investigates the science of behavior and mental processes, including an overview of the history of psychology. Provides the opportunity to study personality and individuality, as well as considers how the knowledge and methods of psychologists are applied to the solution of human problems. Considers human development; biological bases of behavior; sensation and perception; learning, memory, and cognition; behavior patterns; personality and individuality.

Credit Fulfills: Career-Focused Elective

World Geography (0.5 credit) (474600: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Differentiates deep geographic reasoning, knowledge, and skills as students focus on spatial relationships, places, regions, and human systems including the application of geographic thinking skills to students' immediate world around them, as well as in their local communities and cities. Assembles spatial and environmental perspectives and explores available geospatial technologies to analyze and interpret a variety of geographic representations, pictorial and graphic evidence, and data.

Credit Fulfills: Career-Focused Elective

African American History (0.5 credit) (474700: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Examines the contributions African Americans have made to the history of the United States. Supports students understanding of issues and events from multiple perspectives, develops an understanding of the historical roots of African American culture, especially as it pertains to social, economic, and political interactions within the broader context of United States history.

Credit Fulfills: Career-Focused Elective

International Baccalaureate (IB) Environmental Systems and Societies

(529050: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Study environmental systems and societies with coherent perspective of interrelationships between environmental systems and societies. Evaluate the scientific, ethical and socio-political aspects of issues.

Credit Fulfills: Graduation Requirement for Natural Science (3rd Science or Computer Science), Career-

Focused Elective



International Baccalaureate (IB) Philosophy (569210: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Cultivate highly transferable skills such as the ability to formulate arguments clearly, to make reasoned judgments and to evaluate highly complex and multifaceted issues. Examine both one's own perspectives and those of others while developing one's own philosophical voice and growing into an independent thinker. Apply philosophical knowledge and skills to real-life situations and explore how non-philosophical material can be treated in a philosophical way.

Credit Fulfills: Career-Focused Elective

AP United States History (570020: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Introductory college-level U.S. history course. Cultivate understanding of U.S. history from c. 1491 CE to the present through analyzing historical sources and learning to make connections and craft historical arguments while exploring concepts like American and national identity; work, exchange, and technology; geography and the environment; migration and settlement; politics and power; America in the world; American and regional culture; and social structures. This is a College Board Advanced Placement course.

Credit Fulfills: Graduation Requirement for Social Studies (United States History), Career-Focused Flective

International Baccalaureate (IB) Contemporary American History (570040: 1

credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Follows the International Baccalaureate topics in contemporary American history.

Credit Fulfills: Career-Focused Elective

International Baccalaureate (IB) History of the Americas (570050: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Comparative and multi-perspective approach to the history of the Americas involving the study of a variety of types of history, including political, economic, social, and cultural. The course emphasizes the importance of thinking historically and developing historical skills, as well as gain factual knowledge. It puts a premium on developing the skills of critical thinking, and on developing an understanding of multiple interpretations of history encouraging a critical exploration of the

Credit Fulfills: Graduation Requirement for Social Studies (United States History), Career-Focused Elective



AP World History (571020: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Introductory college-level modern world history course. Cultivate understanding of world history from c. 1200 CE to the present through analyzing historical sources and learning to make connections and craft historical arguments while exploring concepts like humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation. This is a College Board Advanced Placement course.

Credit Fulfills: Graduation Requirement for Social Studies (World History), Career-Focused Elective

AP United States Government and Politics (572010: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Introductory college-level course in U.S. government and politics. Cultivate understanding of U.S. government and politics through analysis of data and text-based sources while exploring topics like constitutionalism, liberty and order, civic participation in a representative democracy, competing policy-making interests, and methods of political analysis. This is a College Board Advanced Placement course.

Credit Fulfills: Career-Focused Elective

International Baccalaureate (IB) American Government (572030: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Follows the International Baccalaureate topics in contemporary American Government.

Credit Fulfills: Graduation Requirement for Social Studies (Civics), Career-Focused Elective

AP United States Government and Politics (for Civics credit) (572040: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Introductory college-level course in U.S. government and politics that includes Arkansas academic standards to meet the Civics requirement. Cultivate understanding of U.S. government and politics through analysis of data and text-based sources while exploring topics like constitutionalism, liberty and order, civic participation in a representative democracy, competing policy-making interests, and methods of political analysis. This is a College Board Advanced Placement course.

Credit Fulfills: Graduation Requirement for Social Studies (Civics), Career-Focused Elective

AP African American Studies (574700: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Examines the diversity of African American experiences through direct encounters with rich and varied sources. Explore key topics that extend from early African kingdoms to the ongoing challenges and achievements of the contemporary moment.



International Baccalaureate (IB) World Religions (579020: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Systematically, analytically, and empathetically examine the variety of beliefs and practices encountered in nine main religions of the world. Develop awareness of religious issues in the contemporary world by exploring a diverse range of religions. Develop an informed understanding of the diversity of world religions.

Credit Fulfills: Career-Focused Elective

International Baccalaureate (IB) Psychology I (579030: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Explore three different approaches to understanding behaviour: the biological, cognitive and sociocultural approaches. Critically evaluate the knowledge, concepts, theories and research that have developed the understanding in these fields. Cultivate understanding of mental processes and behaviour as a complex, dynamic phenomenon. Consider the various approaches to research and how they are used to critically reflect on the evidence as well as assist in the design, implementation, analysis and evaluation of the one's own investigations.

Credit Fulfills: Career-Focused Elective

International Baccalaureate (IB) Psychology II (579050: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Explore three different approaches to understanding behaviour: the biological, cognitive and sociocultural approaches. Critically evaluate the knowledge, concepts, theories and research that have developed the understanding in these fields. Cultivate understanding of mental processes and behaviour as a complex, dynamic phenomenon. Consider the various approaches to research and how they are used to critically reflect on the evidence as well as assist in the design, implementation, analysis and evaluation of the one's own investigations.

Credit Fulfills: Career-Focused Elective

ESOL Social Studies (579100: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Designed to meet the academic and transitional needs of newly arrived immigrants (newcomers) and Recently Arrived English Learners (RAEL) with limited English Proficiency in a separate, relatively self-contained Social Studies course with a certified Social Studies teacher. Supports Newcomer ELs in attaining meaningful access to Social Studies subject-matter by focusing on making the content comprehensible to ELs by providing opportunities to engage in discipline-specific practices, construct conceptual understanding of academic language, and build language competence in tandem.



AP Psychology (579120: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Cultivate understanding of the systematic and scientific study of human behavior and mental processes through inquiry-based investigations while exploring concepts like the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Introductory college-level psychology course. This is a College Board Advanced Placement course.

Credit Fulfills: Career-Focused Elective

AP Macroeconomics (579150: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Cultivate understanding of the principles that apply to an economic system as a whole by using principles and models to describe economic situations and predict and explain outcomes with graphs, charts, and data to explore economic measurements, markets, macroeconomic models, and macroeconomic policies. Introductory college-level macroeconomics course. This is a College Board Advanced Placement course.

Credit Fulfills: Career-Focused Elective

AP Microeconomics (579160: 0.5 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Cultivate understanding of the principles that apply to an economic system as a whole by using principles and models to describe economic situations and predict and explain outcomes with graphs, charts, and data to explore concepts like economic measurements, markets, macroeconomic models, and macroeconomic policies. Introductory college-level macroeconomics course. This is a College Board Advanced Placement course.

Credit Fulfills: Career-Focused Elective

AP European History (579170: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Cultivate understanding through analyzing historical sources and learning to make connections, craft historical arguments, and explore concepts of interaction of Europe and the world; economic and commercial developments; cultural and intellectual developments; states and other institutions of power; social organization and development; national and European identity; and technological and scientific innovation. Introductory college-level European history course. This is a College Board Advanced Placement course.

Credit Fulfills: Graduation Requirement for Career Focus



AP Comparative Government & Politics (579180: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Examines political structures; policies; and political, economic, and social challenges of six selected countries: China, Iran, Mexico, Nigeria, Russia, and the United Kingdom. Cultivate understanding of comparative government and politics through analysis of data and text-based sources while exploring topics like power and authority, legitimacy and stability, democratization, internal and external forces, and methods of political analysis. Introductory college-level course in comparative government and politics. This is a College Board Advanced Placement course.

Credit Fulfills: Career-Focused Elective

International Baccalaureate (IB) Geography (579190: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Designed to meet the academic and transitional needs of newly arrived immigrants (newcomers) and Recently Arrived English Learners (RAEL) with limited English Proficiency in a separate, relatively self-contained Social Studies course where a certified Social Studies teacher uses Arkansas Social Studies Standards-aligned instruction that is rigorous, grade-level appropriate, and provides deliberate and appropriate scaffolds by integrating the English Language Proficiency (ELP) standards with in speaking, listening, reading and writing. Supports Newcomer ELs in attaining meaningful access to Social Studies subject-matter.

Credit Fulfills: Career-Focused Elective

International Baccalaureate (IB) Business Management (592200: 1 credit)

Prerequisite Course Codes: None

Grade Range: 10 - 12

Develop students' knowledge and understanding of business management theories. Apply a range of tools and techniques. Analyse, discuss, and evaluate business activities at local, national, and international levels.

Credit Fulfills: Career-Focused Elective

International Baccalaureate (IB) Theory of Knowledge (596200: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Explore the interpretative nature of knowledge by reflecting critically on diverse ways of knowing and on areas of knowledge. Consider the role and nature of knowledge in one's own culture, in the cultures of others and in the wider world. Develop awareness of oneself as a thinker recognizing the need to act responsibly in an increasingly interconnected but uncertain world.

World Languages





Spanish I (440000: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

Spanish II (440020: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

Spanish III (440030: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

Spanish IV (440040: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.



French I (441000: 1 credit)
Prerequisite Course Codes: None

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

French II (441010: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

French III (441030: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

French IV (441040: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.



German I (442000: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

German II (442010: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

German III (442030: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

German IV (442040: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.



Italian I (443000: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

Italian II (443010: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

Italian III (443020: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

Italian IV (443030: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.



Russian I (444000: 1 credit)
Prerequisite Course Codes: None

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

Russian II (444010: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

Russian III (444030: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

Russian IV (444040: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.



Latin I (445000: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Explore the language, history, and culture of ancient civilizations. Basic instruction in grammar, vocabulary, and syntax prepares the student for reading and discussing selected works by ancient

authors

Credit Fulfills: Career-Focused Elective

Latin II (445010: 1 credit)

Prerequisite Course Codes: 445000

Grade Range: 9 - 12

Investigate classical languages with additional instruction in vocabulary, grammar, and more complex syntax. Reading and translating selections from ancient works builds comprehension ability. Explore advanced discussions of ancient life and culture.

Credit Fulfills: Career-Focused Elective

Japanese I (446000: 1 credit) **Prerequisite Course Codes:** None

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

Japanese II (446010: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.



Japanese III (446030: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

Japanese IV (446040: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

Mandarin I (447000: 1 credit)
Prerequisite Course Codes: None

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

Mandarin II (447010: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.



Mandarin III (447030: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

Mandarin IV (447040: 1 credit)

Prerequisite Course Codes: Language Proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

American Sign Language I (449010: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

American Sign Language II (449020: 1 credit)

Prerequisite Course Codes: proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.



American Sign Language III (449030: 1 credit)

Prerequisite Course Codes: proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

American Sign Language IV (449040: 1 credit)

Prerequisite Course Codes: proficiency

Grade Range: 9 - 12

Communicate ideas (that is, to understand, speak, read, and write the language), and increase communicative and cultural proficiency in the target language(s). Introduce cultures, traditions, and current events on the appropriate level through selected readings, audio/visual recordings, and other authentic materials to give students an appreciation of the similarities and differences in the life, customs, and cultures of other peoples and civilizations.

Credit Fulfills: Career-Focused Elective

International Baccalaureate (IB) Spanish (540020: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Build on previous experience with Spanish and improve language acquisition and skills through authentic materials such as magazine articles, films and podcasts.

Credit Fulfills: Career-Focused Elective

AP Spanish Language and Culture (540070: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Intermediate level college course. Cultivate understanding of Spanish language and culture by applying interpersonal, interpretive, and presentational modes of communication in real-life situations while exploring concepts related to family and communities, personal and public identities, beauty and aesthetics, science and technology, contemporary life, and global challenges. This is a College Board Advanced Placement course.



AP Spanish Literature and Culture (540080: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

College level introductory survey course of literature written in Spanish. Develop interpretive, interpersonal, and presentational skills in Spanish language as well as critical reading and analytical writing while exploring short stories, novels, plays, essays, and poetry from Spain, Latin America, and U.S. Hispanic authors along with other non-required texts. This is a College Board Advanced Placement course.

Credit Fulfills: Career-Focused Elective

Spanish for Heritage and Native Speakers I (540100: 1 credit)

Prerequisite Course Codes: language proficiency

Grade Range: 9 - 12

Integrate literacy through extensive, varied writing activities and exposure to a variety of literature, newspapers, magazines, films, music, and current issues. Demonstrate language skills through oral presentations, debates, and class discussions in both formal and informal settings. Intended for native speakers (students who were raised in an area where the target language is spoken), and heritage speakers (students raised in an English-speaking area, but in a family in which the target language was regularly spoken).

Credit Fulfills: Career-Focused Elective

Spanish for Heritage and Native Speakers II (540110: 1 credit)

Prerequisite Course Codes: language proficiency

Grade Range: 9 - 12

Integrate literacy through extensive, varied writing activities and exposure to a variety of literature, newspapers, magazines, films, music, and current issues. Demonstrate language skills through oral presentations, debates, and class discussions in both formal and informal settings. Intended for native speakers (students who were raised in an area where the target language is spoken), and heritage speakers (students raised in an English-speaking area, but in a family in which the target language was regularly spoken).

Credit Fulfills: Career-Focused Elective

Spanish for Heritage and Native Speakers III (540120: 1 credit)

Prerequisite Course Codes: language proficiency

Grade Range: 9 - 12

Integrate literacy through extensive, varied writing activities and exposure to a variety of literature, newspapers, magazines, films, music, and current issues. Demonstrate language skills through oral presentations, debates, and class discussions in both formal and informal settings. Intended for native speakers (students who were raised in an area where the target language is spoken), and heritage speakers (students raised in an English-speaking area, but in a family in which the target language was regularly spoken).



International Baccalaureate (IB) Spanish III (540130: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Build on previous experience with Spanish and improve language acquisition and skills through authentic

materials such as magazine articles, films and podcasts.

Credit Fulfills: Career-Focused Elective

International Baccalaureate (IB) Spanish IV (540140: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Build on previous experience with Spanish and improve language acquisition and skills through authentic

materials such as magazine articles, films and podcasts.

Credit Fulfills: Career-Focused Elective

International Baccalaureate (IB) Spanish Ab Initio (540150: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Develop receptive, productive and interactive skills while learning to communicate in Spanish in familiar and unfamiliar contexts. Strengthen the ability to communicate through the study of language, texts and the following themes: identities, experiences, human ingenuity, social organization and sharing the planet.

Credit Fulfills: Career-Focused Elective

AP French Language and Culture (541060: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Equivalent to an intermediate level college course in French. Cultivate understanding of French language and culture by applying interpersonal, interpretive, and presentational modes of communication in real-life situations. Explore concepts related to family and community, personal and public identity, beauty and aesthetics, science and technology, contemporary life, and global challenges. This is a College Board Advanced Placement course.

Credit Fulfills: Career-Focused Elective

International Baccalaureate (IB) French III (541070: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Build on previous experience with French and improve language acquisition and skills through authentic

materials such as magazine articles, films and podcasts.



International Baccalaureate (IB) French ab initio SL (541080: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Develop receptive, productive and interactive skills while learning to communicate in French in familiar and unfamiliar contexts. Strengthen the ability to communicate through the study of language, texts and the following themes: identities, experiences, human ingenuity, social organization and sharing the planet.

Credit Fulfills: Career-Focused Elective

International Baccalaureate (IB) French IV (541090: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Build on previous experience with French and improve language acquisition and skills through authentic materials such as magazine articles, films and podcasts.

Credit Fulfills: Career-Focused Elective

AP German Language and Culture (542060: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Equivalent to an intermediate level college course in German. Cultivate understanding of German language and culture by applying interpersonal, interpretive, and presentational modes of communication in real-life situations . Explore concepts related to family and communities, personal and public identities, beauty and aesthetics, science and technology, contemporary life, and global challenges. This is a College Board Advanced Placement course.

Credit Fulfills: Career-Focused Elective

AP Italian Language and Culture (543060: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Equivalent to an intermediate level college course in Italian. Cultivate understanding of Italian language and culture by applying interpersonal, interpretive, and presentational modes of communication in real-life situations . Explore concepts related to family and community, personal and public identity, beauty and aesthetics, science and technology, contemporary life, and global challenges. This is a College Board Advanced Placement course.



AP Latin (545070: 1 credit) Prerequisite Course Codes: None

Grade Range: 9 - 12

Equivalent to an upper-intermediate level college course in Latin with focus on in-depth study of selections from works in Latin literature: Vergil's Aeneid and Caesar's Gallic War. Cultivate understanding of classics through preparing and translating readings and considering themes in the context of ancient

literature. This is a College Board Advanced Placement course.

Credit Fulfills: Career-Focused Elective

AP Japanese Language and Culture (546060: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Equivalent to an intermediate-level college course in Japanese. Cultivate understanding of Japanese language and culture by applying interpersonal, interpretive, and presentational modes of communication in real-life situations. Explore concepts related to family and community, personal and public identity, beauty and aesthetics, science and technology, contemporary life, and global challenges. This is a College Board Advanced Placement course.

Credit Fulfills: Career-Focused Elective

AP Chinese Language and Culture (547060: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Equivalent to an intermediate-level college course in Chinese. Cultivate understanding of Chinese language and perspectives by applying the interpersonal, interpretive, and presentational modes of communication in real-life situations while exploring concepts related to family and community, personal and public identity, beauty and aesthetics, science and technology, contemporary life, and global challenges. This is a College Board Advanced Placement course.

Credit Fulfills: Career-Focused Elective

International Baccalaureate (IB) Mandarin III (547070: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Build on previous experience with Mandarin skills and improve language acquisition and skills through authentic materials such as magazine articles, films and podcasts.

Credit Fulfills: Career-Focused Elective

International Baccalaureate (IB) Mandarin IV (547080: 1 credit)

Prerequisite Course Codes: None

Grade Range: 9 - 12

Build on previous experience with Mandarin and improve language acquisition and skills through authentic materials such as magazine articles, films and podcasts.

Credit Fulfills:



All world language courses can be offered based on content, specific purposes, and special interest areas. Corresponding course numbers can be found in the Course Code Management System (CCMS).

Appendix

AR Graduation Requirements
AR Required High School Courses
Arkansas Graduation Course Code List
Career & Technical Courses
Alternate Pathways to Graduation
AP Policy for Course Credit
AP/IB/CC Glossary



ARKANSAS

Graduation Requirements





Course Kequirements	Credit
English Language Arts	4
ADE-Approved English 9 ADE-Approved English 10 ADE-Approved English 11 ADE-Approved English 12	1 1 1
Mathematics	4
Algebra I Geometry Algebra II or Quantitative Reasoning ADE-Approved Mathematics or Computer Science Flex Credit	1 1 1 1
Science	3
ADE-Approved Biology ADE-Approved Physical Science (Physical Science, Chemistry, or Physics)	1 1
ADE-Approved third Science or Computer Science Flex Credit	1
Social Studies	3
ADE-Approved World History ADE-Approved U.S. History ADE-Approved Civics ADE-Approved Economics with Personal Finance	1 1 0.5 0.5
	0.5
Physical Education	
Fine Arts	0.5
Oral Communication	0.5
Health & Safety	0.5
Career Focus or Content Electives	6
Total	22

For more information, visit https://dese.ade.arkansas.gov/

Last Update: 3.15.24

Other Requirements

- An AR graduate shall complete a minimum of 75 clock hours of documented community service in grades 9-12; requirement begins for 2027 graduates. A.C.A. § 6-16-1901
- An AR graduate must earn credit in a course that includes Personal and Family Finance Standards in grades 9-12. - A.C.A. § 6-16-135
- An AR graduate must pass with a 60% the Arkansas Civics Exam. A.C.A. § 6-16-149
- An AR graduate must complete CPR training A.C.A. § 6-16-143
- An AR graduate must earn one credit of ADE-Approved Computer Science; requirement begins for 2026 graduates A.C.A. § 6-16-152

Arkansas Required High School Courses*

This set of unique courses must be offered even if they fall into two categories.

(DESE Rules Governing Standards for Accreditation of Arkansas Public Schools and School Districts, Appendix A, Standard 1-A.1.3)

Schools must offer the following:

- (1) One math and one literacy transitional course [A.C.A. § 6-15-2012(b)]
- (2) At least one Advanced Placement (AP) course in each of the core areas of English Language Arts, Mathematics, Science, and Social Studies (A.C.A. § 6-16-1204)
- (3) Arkansas History if not taught in the 7th or 8th grade (A.C.A. § 6-16-124)

Please Note:

Approved Pre-AP courses may be implemented in lieu of the corresponding courses in the required list. The Pre-AP crosswalk is located on the DESE course approval webpage.

English Language Arts (ELA)	
Must offer 2 credits from below	
410000 English 9	1 credit
411000 English 10	1 credit
Must offer 2 credits from below	
412000 English 11	1 credit
413000 English 12	1 credit
418010 English 11/12 U.S. History Seminal	
Documents	0.5 credit
418020 English 11/12 Cross-Cultural Literature	0.5 credit
418030 English 11/12 Comparative Literature	0.5 credit
418040 English 11/12 Film as Literature	0.5 credit
418100 English 11/12 Public Relations	0.5 credit
418110 English 11/12 Reading and Writing for	
Business	0.5 credit
418120 English 11/12 Mass Communications	0.5 credit
418200 English 11/12 Reading and Writing for	
STEM	0.5 credit
418210 English 11/12 Entrepreneurship and	
Innovation	0.5 credit
418220 English 11/12 Technical Reading and	
Writing for Trade and Industry	0.5 credit
Must offer 0.5 credit from below	
414200 Oral Communication: Personal	
Communication	0.5 credit
414210 Oral Communication: Professional	
Communication	0.5 credit
Must offer 2 credits from below	
419110 Strategic Reading Grade 9	1 credit
(as well as courses for Grades 10-12)	
417010 Creative Writing	0.5 credit
414050 Debate I	1 credit
416000 ELA Drama	0.5 credit
414020 Forensics I	1 credit
415000 Journalism I	1 credit
496030 Transitional Literacy Ready	1 credit
Additional English 11/12 courses	0.5 credit
AP English Offerings**	1 credit
Official International Baccaulaureate	
(IB) Offerings	1 credit
** Must offer at least one AP course in ELA	
Total required English Language Arts:	6.5 credits

World Languages	
Must offer 2 credits from the same language	
Total required World Languages:	2 credits

Health and Wellness	
480000 Health and Wellness	0.5 credit
Total required Health and Wellness:	0.5 credit

Computer Science	
Must offer 1 credit from below	
Any ADE Approved Computer Science Course	1 credit
Beginning with 465 or 565	
Total required Computer Science:	1 credit
Mathematics	
Must offer 4 credits from below	
430000 Algebra I	1 credit
431000 Geometry	1 credit
432000 Algebra II	1 credit
433000 Pre Calculus	1 credit
Must offer 2 credits from below	
439070 Algebra III (Transitional)	1 credit
434010 Calculus	1 credit
439120 Quantitative Reasoning (Transitional) +	1 credit
439090 Statistics	1 credit
439130 Technical Math for College and Career	1 credit
AP Math Offerings**	1 credit
Official International Baccaulaureate	
(IB) Offerings	1 credit
** Must offer at least one AP course in Mathematics	
◆ Required Course Offering by SY26-27	
Total required Mathematics:	6 credits

Science	
Must offer 3 credits from below	
423000 Physical Science - Integrated	1 credit
420000 Biology Integrated	1 credit
421000 Chemistry - Integrated	1 credit
Must offer 2 credits from below	
425050 Astronomy	1 credit
421010 Chemistry II	1 credit
425020 Earth Science	1 credit
424020 Environmental Science	1 credit
424030 Anatomy/Physiology	1 credit
422010 Physics	1 credit
AP Science Offerings**	1 credit
Official International Baccaulaureate	
(IB) Offerings	1 credit
** Must offer at least one AP course in Science	
Total required Science:	5 credits

Career	Education

Must offer three (3) program of study representing three (3) different pathways. One of which must meet the high wage and high growth designation as indicated by the department.

Total required Career Education:	9 credits
1 Credit = 1 Full-Year Course; 0.5 Credit = 1 Semester	r Course

*Formerly known as the Arkansas Required 38 High School Courses

	Social Studies	
Must o	ffer 3 credits from below	
	United States History Since 1929	1 credit
	World History Since 1450	1 credit
472000	Civics	0.5 credit
474300	Economics with Personal Finance	0.5 credit
Must o	ffer 1 credit from below	
473000	Arkansas History	0.5 credit
474700	African American History	0.5 credit
474400	Psychology	0.5 credit
474500	Sociology	0.5 credit
474100	United States Government	0.5 credit
474600	World Geography	0.5 credit
	AP Social Studies Offerings**	1 credit
	Official International Baccaulaureate	
	(IB) Offerings	1 credit
** Must	offer at least one AP course in Social Stud	ies
Total r	equired Social Studies:	4 credits
	Fine Arts	

	Fine Arts	
Must offe	r 2 credits from below	
450000 Vi	sual Art Foundations I	1 credit
452000 Vo	ocal Ensemble I	1 credit
Must offe	r 1 credit from below	
451000 Ba	and I	1 credit
451200 Ja	zz Band I	1 credit
451100 Oı	rchestra I	1 credit
Must offe	r 0.5 credit from below	
Any Fine A	rts course within the approv	ed discipline areas:
-	Music	
-	Visual Art	
-	Theater	
-	Dance	
-	Official AP and IB offerings	
Total requ	uired Fine Arts:	3.5 credits
	Physical Educati	on
Must offe	r 1 credit from below	
485010 Pe	ersonal Fitness for Life	0.5 credit



0.5 credit

0.5 credit

485020 Recreational Sports

485030 Outdoor Pursuits 485040 Athletics



Note: Please review the CTE Crosswalk for SY 2024-2025 for DCTE courses that can count for specific content credits.

English Language Arts

English 9 - :	1 Credit
517030	AP English Language and Composition
517040	AP English Literature and Composition
517060	AP Seminar
519910	Concurrent Credit English 9
410000	English 9
510040	ESL English 9
411100	Pre-AP English 1

English 10	- 1 Credit
517030	AP English Language and Composition
517040	AP English Literature and Composition
517070	AP Research
517060	AP Seminar
519920	Concurrent Credit English 10
411000	English 10
511030	ESL English 10
411100	Pre-AP English 2

English 11 - 1 Credit			
517030	AP English Language and Composition		
517040	AP English Literature and Composition		
517070	AP Research		
517060	AP Seminar		
519930	Concurrent Credit English 11		
412000	English 11		
512010	English 11 (Weighted - requires ADE approval)		
512030	ESL English 11		
517100	International Baccalaureate (IB) English 11		
Or 1 full cre	Or 1 full credit from the 11/12 English Section.		

English 12 -	- 1 Credit
517030	AP English Language and Composition
517040	AP English Literature and Composition
517070	AP Research
517060	AP Seminar
519940	Concurrent Credit English 12
413000	English 12
513010	English 12 (Weighted - requires ADE approval)
513030	ESL English 12
517200	International Baccalaureate (IB) English 12
519900	Other Concurrent Credit Language Arts
413010	Transitional English 12
Or 1 full cre	edit from the 11/12 English Section.

<u>English 11/12 Section</u> - The 0.5 credit courses from the list below may be combined to fulfill 11th and/or 12th Grade English.			
418030	Comparative Literature		
418020	Cross-Cultural Literature		
418210	Entrepreneurship and Innovation		
418040	Film as Literature		
418120	Mass Communications		
418100	Public Relations		
418110	Reading and Writing for Business Professions		
418200	Reading and Writing for STEM Professions		
418220	Technical Reading/Writing for Trade & Industry		
418010	U.S. History Seminal Documents		

Social Studies

<u>Civics - 0.5 Credit</u>			
572040	AP United States Government & Politics (for Civics credit)		
472000	Civics (0.5 credit)		
572000	Civics (0.5 credit) (requires ADE approval)		
579930	Concurrent Credit Civics		

World History - 1 Credit			
571020	AP World History		
579910	Concurrent Credit World History		
471100	Pre-AP World History		
571000	World History (requires ADE approval)		
571010	World History (Weighted - requires ADE approval)		
471000	World History Since 1450		

Personal Finance			
see https://bit.ly/383OLjE			

$\ $	United States History - 1 Credit				
	570020	AP United States History			
Ш	579920 Concurrent Credit United States History				
	570050 International Baccalaureate (IB) History of the Americas				
	570030 United States History (requires ADE approval)				
	570010	United States History (Weighted - requires ADE approval)			
Ш	470000	United States History Since 1929			

Economics - 0.5 Credit			
579130 ADE Approved AP Macroeconomics & Personal Finance (0.5 credit)			
579140	ADE Approved AP Microeconomics & Personal Finance (0.5 credit)		
574000 Concurrent Credit Economics with Personal Finance (1 credit)			
474300	Economics with Personal Finance (0.5 credit)		
492290	Financial Planning (0.5 Econ/PF credit, 1.0 Career Focus credit)		

Math

Algebra I - 1 Credit		
430000	Algebra I	
530020	Algebra I (requires ADE approval)	
430300	Pre-AP Algebra I	

Geometry - 1 Credit		
431000	Geometry	
531020	Geometry (requires ADE approval)	
431300	Pre-AP Geometry w/Statistics	

Algebra II - 1 Credit		
432000	Algebra II	
432300	Pre-AP Algebra 2	
539160	International Baccalaureate (IB) Math: Applications and	
	Interpretation SL Year 1	

5					
Fourth Math or Computer Science Flex* - 1 Credit - A CS Flex credit or one of the following:					
492110	Accounting II	539950	Concurrent Credit Statistics		
439070	Algebra III	465280	Cybersecurity Year 2		
534040	AP Calculus AB	465290	Cybersecurity Year 3 Advanced		
534050	AP Calculus BC	465720	Data Science Year 2		
533030	AP Precalculus	465730	Data Science Year 3 Advanced		
539030	AP Statistics	495460	Digital Electronics		
539090	Applied Data Science	495460	Digital Electronics (PLTW) Weighted Credit		
494730	Architecture/CADD/II	495470	Engineering Design and Development (PLTW)		
465420	Artificial Intelligence & Machine Learning Year 2	465680	Game Development & Design Year 2		
465430	Artificial Intelligence & Machine Learning Year 3 Adv	465690	Game Development & Design Year 3 Advanced		
434010	Calculus	565330	International Baccalaureate (IB) Computer Science HL		
534020	Calculus (Weighted - requires ADE approval)	565230	International Baccalaureate (IB) Computer Science SL		
491630	CASE: Ag Power and Technical System Weighted Credit	539170	International Baccalaureate (IB) Math: Applications and Interpretation SL Year 2		
491630	CASE: Agriculture Power and Technical Systems	465380	Mobile Application Development Year 2		
495440	Civil Engineering & Architecture (PLTW) Weighted Credit	465390	Mobile Application Development Year 3 Advanced		

495440	Civil Engineering and Architecture	465180	Networking Year 2
565130	College Board AP Computer Science A	465190	Networking Year 3 Advanced
565030	College Board AP Computer Science Principles	433000	Pre Calculus
465480	Computer Engineering Year 2	533020	Pre Calculus (requires ADE approval)
465490	Computer Engineering Year 3 Advanced	465080	Programming Year 2
465930	Computer Science Independent Study	465090	Programming Year 3 Advanced
465940	Computer Science Internship	439120	Quantitative Reasoning
539900	Concurrent Credit College Algebra	465580	Robotics Year 2
539970	Concurrent Credit College-Site Technical Math	465590	Robotics Year 3 Advanced
539980	Concurrent Credit Math Beyond Algebra II	439090	Statistics
539940	Concurrent Credit Pre Calculus/Trigonometry	439130	Technical Math for College and Career
539150	Concurrent Credit Quantitative Reasoning		

Science

Biology - 1	Biology - 1 Credit		
520030	AP Biology		
420000	Biology - Integrated		
520010	Biology - Integrated (Weighted - requires ADE approval)		
529910	Concurrent Credit Biology		
529030	International Baccalaureate (IB) Biology I		
529060	International Baccalaureate (IB) Biology II		
420100	Pre-AP Biology		

Physical Scie	ence Credit - 1 Credit
494980	Aerospace Engineering Weighted Credit
521030	AP Chemistry
522080	AP Physics 1
522090	AP Physics 2
522040	AP Physics C: Electricity and Magnetism
522050	AP Physics C: Mechanics
421000	Chemistry - Integrated
521020	Chemistry - Integrated (requires ADE approval)
421010	Chemistry II
529930	Concurrent Credit Chemistry
529920	Concurrent Credit Physical Science
529940	Concurrent Credit Physics
493960	Engineering II
521040	International Baccalaureate (IB) Chemistry I
521050	International Baccalaureate (IB) Chemistry II
522060	International Baccalaureate (IB) Physics I
522070	International Baccalaureate (IB) Physics II
423000	Physical Science - Integrated
523010	Physical Science (Weighted - requires ADE approval)
422010	Physics
522010	Physics (Weighted - requires ADE approval)
421300	Pre-AP Chemistry

nce		
Third Science or Computer Science Flex* - 1 Credit		
An additional Biology, Physical Science, CS Flex, or 1 of the following:		
424030	Anatomy/Physiology	
523030	AP Environmental Science	
465420	Artificial Intelligence & Machine Learning Year 2	
465430	Artificial Intelligence & Machine Learning Year 3 Adv	
425050	Astronomy	
491470	CASE: Natural Resources & Ecology	
491160	CASE: Principles of Agriculture: Animal	
491170	CASE: Principles of Agriculture: Plant	
493130	Chemistry of Foods	
493130	Chemistry of Foods	
565130	College Board AP Computer Science A	
565030	College Board AP Computer Science Principles	
465480	Computer Engineering Year 2	
465490	Computer Engineering Year 3 Advanced	
465930	Computer Science Independent Study	
465940	Computer Science Internship	
524030	Concurrent Credit Anatomy and Physiology	
525050	Concurrent Credit Astronomy	
525030	Concurrent Credit Earth Science	
524040	Concurrent Credit Environmental Science	
465280	Cybersecurity Year 2	
465290	Cybersecurity Year 3 Advanced	
465720	Data Science Year 2	
465730	Data Science Year 3 Advanced	
425020	Earth Science	
424020	Environmental Science	
495430	Environmental Sustainability	
465680	Game Development & Design Year 2	
465690	Game Development & Design Year 3 Advanced	
495010	Human Body Systems	
495010	Human Body Systems	
493980	Innovations in Science and Technology III	
565330	International Baccalaureate (IB) Computer Science HL	
565230	International Baccalaureate (IB) Computer Science SL	
529050	International Baccalaureate (IB) Environmental Systems and Societies	
465380	Mobile Application Development Year 2	
465390	Mobile Application Development Year 3 Advanced	
491470	Natural Resources & Ecology (CASE) Weighted Credit	
465180	Networking Year 2	
465190	Networking Year 3 Advanced	
491160	Principles of Agriculture Science-Animal (CASE) Weighted Credit	
491170	Principles of Agriculture Science-Plant (CASE) Weighted Credit	
465080	Programming Year 2	
465090	Programming Year 3 Advanced	
465580	Robotics Year 2	
465590	Robotics Year 3 Advanced	

Other Content Areas

*Computer Science - Optional Flex Credit

(optional credits for 4th math or 3rd science requirements)

any course starting with 465 or 565

see https://goo.gl/y95ZTc

Oral Comm	Oral Communication - 0.5 Credit		
514000	Concurrent Credit Oral Communication		
414050	Debate I		
414020	Forensics I		
414100	Integrated Oral Communication NT		
514010	Oral Comm. (Weighted - requires ADE approval)		
514020	Oral Communication (requires ADE approval)		
414200	Oral Communication: Personal Communication		
414210	Oral Communication: Professional Communication		

Career Focus - 6 Credits

Unused credits chosen from courses beginning with a 4 or 5.

Physical Education - 0.5 Credit	
485040	Athletics
585900	Concurrent Credit Physical Ed.
485950	JROTC Physical Education
485030	Outdoor Pursuits
485010	Personal Fitness for Life
585010	Physical Education (requires ADE approval)
485020	Recreational Sports

Fine Arts - 0.5 Credit Credit chosen from courses coded 450000 - 459999 or 550010 - 559999

l	Health and	<u>Health and Safety - 0.5 Credit</u>		
	580010	Health and Safety (requires ADE approval)		
_	480000	Health and Wellness		
	480950	JROTC Health		
	580900	Other Concurrent Credit Health Ed.		



CTE Courses

CTE Concentrators: Level 1 & Level 2 CTE Completers: Level 1 & Level 2 & Level 3 CTSO Intercurricular Involvement

Level 1 Level 2 Level 3

CTE Courses

CTE Pathway

Pathways should increase in specificity and provide opportunities for Industry-Recognized Credentials and Work-Based Learning. These three components together create a clear Career Pathway for CTE Students.

PATHWAY

Internships Career Practicum **Pre-Apprenticeship**

Work-Based Learning

Work-Based Learning

Industry Recognized **Credentials**

Industry Recognized Credentials

Industry Recognized Stackable Credentials Offered

Career and Technical Education (CTE) Pathways

Cluster: Agriculture, Food & Natural Resources

Career Pathways: Agribusiness Systems

Agriculture Power, Structural & Technical Systems

Animal Systems

Food Products & Processing Systems

Natural Resources/Environmental Services Systems

Cluster: Architecture & Construction

Career Pathways:

Architectural CAD

Construction

Cluster: Arts, A/V Technology & Communications

Career Pathways:

A/V Technology & Film

Advertising & Graphic Design Technology

Commercial Photography - Visual Arts

<u>Digital Cinema Productions - Journalism & Broadcasting</u>

Fashion & Design - Visual Arts

Radio Broadcasting Technology - Journalism & Broadcasting

Cluster: Business Management & Administration

Career Pathways:

Management

Medical Office Administration

Office Administration

Cluster: Education & Training

Career Pathways:

Teaching & Training

Cluster: Finance

Career Pathways:

Accounting Banking

Business Finance

Cluster: Government & Public Administration

Career Pathways:

Air Force JROTC - National Security

Army JROTC - National Security

Marine JROTC - National Security

Navy JROTC - National Security

Cluster: Health Science

Career Pathways:

Biomedical Sciences

Medical Skills & Services - Therapeutic Services

Nursing Services - Therapeutic Services

Pharmacy Technician - Therapeutic Services

Sports Medicine - Therapeutic Services

Cluster: Hospitality & Tourism

Career Pathways:

Food Production - Restaurant, Food & Beverage Services

Hospitality & Tourism

<u>Culinary Arts - Restaurant, Food & Beverage Services</u>

Cluster: Human Services

Career Pathways:

Consumer Services

Family & Community Services

Nutrition Science

Cluster: Information Technology

Career Pathways:

Computer Science

Cluster: Law, Public Safety, Corrections & Security

Career Pathways:

Emergency Services - Emergency & Fire Management Services

Firefighting - Emergency & Fire Management Services

Criminal Justice - Law Enforcement Services

Cluster: Manufacturing

Career Pathways:

<u>Advanced Manufacturing - Maintenance, Installation, & Repair or Production</u>

Welding - Manufacturing Production

Cluster: Marketing

Career Pathways:

<u>Digital Marketing - Marketing Research</u>

Marketing Business Enterprise - Marketing Management

Retail Management - Merchandising

Cluster: Science, Technology, Engineering & Mathematics

Career Pathways:

Engineering CAD

<u>Automation & Robotics Technology</u>

Pre-Engineering

Cluster: Transportation, Distribution, & Logistics

Career Pathways:

Automotive Collision Repair Automotive Service Technology

<u>Aviation Technology</u>

Medium/Heavy Truck Technology Power Equipment Technology

Supply Chain & Logistics

Unmanned Aerial Systems (UAS)

JAG: Jobs for Arkansas Graduates

IAG Manual

Arkansas Alternate Pathway to Graduation

	T
Minimum Graduation Requirements: <u>General Pathway</u>	Minimum Graduation Requirements: Alternate Pathway to Graduation
English Language Arts 4 credits	English Language Arts 4 credits • English Exploration 9 (910000) • English Exploration 10 (911000) • English Exploration 11 (912000) • English Exploration 12 (912300)
Oral Communication 0.5 credit	Oral Communication 0.5 credit Oral Communication Exploration (914000) [0.5 Credit]
Mathematics 4 credits • Algebra I (430000) • Geometry (431000) • DESE approved Math 2 credits	Mathematics 4 credits Math Exploration I (939000) Math Exploration II (939010) Math Exploration III (939020) Math Exploration IV (939030)
 Social Studies 3 credits United States History Since 1929 (470000) World History Since 1450 (471000) Civics (472000) [0.5 Credit] Economics and Personal Finance credit (474300) [0.5 Credit] 	Social Studies 3 credits US History Exploration (970000) World History Exploration (971000) Civics Exploration (972000) [0.5 Credit] Economics, Personal Finance, and Financial Literacy Exploration (974000) [0.5 Credit]
Science 3 credits Physical Science Integrated (423000) Biology Integrated (420000) DESE approved Science	Science 3 credits Science Exploration I (929000) Science Exploration II (929010) Science Exploration III (929020)
Physical Education and Health 1 credit Physical Education [0.5 Credit] Health & Safety (Health & Wellness) [0.5 Credit]	Health and Safety 1 credit Health and Safety Exploration (980000)
Fine Arts 0.5 credit • DESE approved Fine Arts credit	Fine Arts 0.5 credit DESE Virtual Arkansas Visual Art Exploration course (950000) Or DESE approved Fine Arts credit
Career Focus 6 credits	6 additional credits Career Focus • One transition-focused course each year (Community service may be embedded.)



Arkansas Alternate Pathway to Graduation

Additional Requirements

- A course that includes personal and family finance
- Pass the Arkansas Civics Exam. See
 A.C.A. § 6-16-149 regarding students with IEPs.
- Hands-on CPR training.
- Dating Violence Awareness
- Stop the Bleed
- Computer Science

Alt Additional Requirements

- Credit in an approved course that has financial literacy standards
- Regarding the Arkansas Civics Exam, IEP teams may determine that a student with an IEP "is exempted in accordance with the student's individualized education program" (A.C.A. § 6-16-149).
- Computer Science (See Math Standards)
- Community Service Learning (new)
- Health and Safety Alternate Achievement Standards have standards aligned to the core pathway requirements of
 - Hands-on CPR Training
 - Dating Violence Awareness
 - Stop the Bleed

If a student on the alternate pathway has had Health and Safety Exploration, the above requirements have been met.

Students on the Alternate Pathway to Graduation may earn credits in general education classes or resource classes. Students on the general pathway to graduation may not earn credits toward graduation from alternate pathway courses.

By default, special education course codes are not credit-bearing. The district may award credit if the instruction is aligned to grade-level standards.

DESE Alternate Pathway to Graduation Webpage: <u>Tinyurl.com/ArkansasAltPath</u>





ADVANCED PLACEMENT (AP) POLICY FOR COLLEGE CREDIT



The Arkansas Department of Higher Education Coordinating Board established guidelines by which institutions (colleges and universities) must award course credit for advanced placement exams. Under this policy, institutions should award course credit to students who score a three (3) or higher on any Advanced Placement (AP) exam. Credit awarded for any AP exam must be applied to the student transcript and, where appropriate, reduce the total number of required degree hours accordingly. To increase transferability, <u>Arkansas Course Transfer System</u> (ACTS) courses have been assigned to relevant exams.

AP Exam	<u>ACTS Course</u>
AP Art History	ARTA 1003 Art Appreciation
AP Biology	BIOL 1004 Biology for Non-Majors
AP Calculus AB	MATH 2405 Calculus I
AP Calculus BC	MATH 2505 Calculus II
AP Chemistry	CHEM 1004 Chemistry for General Education
AP Computer Science A	CPSI 1003 Introduction to Computers or CS 1001 Computer Science I/Principles of Computer Science
AP Computer Science Principles	CPSI 1003 Introduction to Computers or CS 1001 Computer Science I/Principles of Computer Science
AP English Language and Composition	ENGL 1013 Composition I
AP Environmental Science	GEOL 1124 Environmental Geology
AP European History	HIST 1213 Western Civilization I or HIST 1223 Western Civilization II
AP French Language and Culture	FREN 2013 French III
AP German Language and Culture	GERM 2013 German III
AP Human Geography	GEOG 1113 Human Geography
AP Macroeconomics	ECON 2103 Principles of Macroeconomics
AP Microeconomics	ECON 2203 Principles of Microeconomics
AP Music Theory	MUSC 1003 Music Appreciation
AP Physics 1	PHYS 2014 Algebra/Trigonometry-Based Physics I
AP Physics 2	PHYS 2024 Algebra/Trigonometry-Based Physics II
AP Psychology	PSYC 1103 General Psychology
AP Spanish Language and Culture	SPAN 2013 Spanish III
AP Statistics	MATH 2103 Introduction to Statistics
AP United States Government and Politics	PLSC 2003 American National Government
AP United States History	HIST 2113 United States History or HIST 2123 United States History II
AP World History	HIST 1113 World Civilizations or HIST 1123 World Civilizations II

Per ADHE policy the following AP exams without a corresponding ACTS course should be awarded credit at the institution's discretion.

AP 2-D Art and Design, AP 3-D Art and Design, AP African American Studies, AP Chinese Language and Culture,
AP Comparative Government and Politics, AP Drawing, AP English Literature and Composition, AP Italian Language and Culture,
AP Japanese Language and Culture, AP Latin, AP Physics C: Electricity and Magnetism, AP Physics C: Mechanics, AP Precalculus,
AP Research, AP Seminar, AP Spanish Literature and Culture

Glossary

Advanced Placement (AP) courses are taught following guidelines as provided for Advanced Placement courses by The College Board. AP courses incorporate all topics specified by The College Board and the Educational Testing Service on the syllabus for a given subject area, are approved by The College Board, and provide the opportunity for students to take a standardized exam through which they may qualify for college or university level credit. Additional information about Advanced Placement courses may be found below and on the College Board's AP Central website.

International Baccalaureate (IB) Diploma Programme courses are taught following guidelines as provided for IB courses by the IB Organization. IB courses provide the opportunity for students to take a standardized exam through which they may qualify for college or university level credit. Additional information about International Baccalaureate Diploma Programme courses may be found on the International Baccalaureate Organization's website.

Concurrent Credit courses are courses offered and taught under the direction of an accredited institution of higher education that may result in high school and college credit.

Cambridge Advanced courses aim to prepare learners for success in higher education by providing advanced level studies in a wide range of subjects, flexible assessment structures, and the opportunity to earn internationally recognized qualifications. Cambridge Advanced supports teachers through a secure support website, teacher guides, training and resources. Additional information about Cambridge Advanced courses and the Cambridge Advanced International Certificate of Education (AICE) diploma may be found on the Cambridge website.

Pre-AP courses are College Board developed and trademarked courses designed to deliver grade-level-appropriate instruction and prepare students for success in more advanced coursework. Pre-AP provides a focused framework, instructional support including online professional learning, model lessons, and classroom assessments. Additional information about Pre-AP courses may be found on the College Board's Pre-AP website.





Additional information about graduation requirements and course offerings can be found on DESE's website: https://dese.ade.arkansas.gov.

Please note: The printed version is a replica of the Adobe PDF version available.

Copies of previous catalogs (Archived Versions) will be available in the catalog archive within the DESE website and hard copies of every year are kept in the Office of Learning Services.

