

Course Catalog



Carthage High School 2021-2022

Carthage High School Course Catalog 2021 - 2022

Table of Contents

Carthage Philosophy, Mission, and Vision	3
Carthage R-9 and CHS Contact Information.....	4
Graduation Requirements.....	5-6
NCAA Eligibility Standards.....	7-8
NCAA-Approved Courses.....	9
Missouri Options.....	10
Online Courses	10
A+ Program.....	10
Curriculum for College Bound	11
Dual Credit Program.....	11
Advanced Placement Program	12
Registration and Enrollment	12
Career Paths and Clusters	13-16
Career Pathway Framework	17-19
Course Descriptions.....	20-54
Carthage Technical Center Program Pathways.....	55-60
Index	61-66

CARTHAGE SCHOOL DISTRICT

MISSION STATEMENT AND PHILOSOPHY

Mission Statement

The mission of the Carthage R-9 School District is to provide comprehensive educational experiences that will empower all students to become lifelong learners and productive, informed, responsible citizens who are able to meet the challenges of a rapidly changing society.

Philosophy

We Believe the district should provide an excellent, professional faculty, administration, and support staff, which will utilize the resources of the community to fulfill its mission; and that the district should provide facilities that are modern, well-maintained, and designed to enhance the educational process.

We Believe that our curriculum and instruction should give students the opportunity to reach their full potential and personal goals, provide for their individual differences and interests, and guide them in selecting meaningful educational and career choices.

We Believe the focus of the educational process should be on student learning and the continual striving to raise the expectations and standards of academic achievement.

We Believe that students, parents, and the community share with the district the privileges and responsibilities of a comprehensive education, which represents a vital contribution to the success and development of both the students and the community.

We Believe the district should be proactive in the planning and pursuit of educational excellence.

CARTHAGE HIGH SCHOOL VISION AND MISSION

Vision

Carthage High School, in cooperation with students, parents, staff, and community, will work to meet the diverse needs of all students and to promote persistence to graduation.

Mission

The mission of the Carthage Senior High School is to promote lifelong learning through academics, community involvement, and extra-curricular activities.

Carthage R-9 Administration & High School Counseling Staff

Dr. Mark Baker, Superintendent of Schools	359-7000
Mrs. Kandy Frazier, Assistant Superintendent for Instruction	359-7000
Mr. Bryan Shallenburger, Director of Special Services	359-7000
Mr. Matt Huntley, High School Principal.....	359-7020
Mr. Dustin Perkins, High School Assistant Principal.....	359-7020
Mrs. Angela Holman, High School Assistant Principal	359-7020
Dr. Sam Rogers, High School Assistant Principal.....	359-7020
Mr. Jared Patrick, High School Assistant Principal.....	359-7020
Dr. Holley Goodnight, Carthage Technical Center Director	359-7026
Mr. Gage Tiller, Carthage Technical Center Assistant Director	359-7026

Counselors:

Mrs. Lee Ann Fent, Carthage Technical Center	359-7026
Mrs. Beth Gandy, (A-F) High School.....	359-7023
Mrs. Shelley Wilson, (G-L) High School	359-7023
Mrs. Annie Yost, (M-R) High School	359-7023
Ms. Heather Hughes, (S-Z) High School.....	359-7023

The following requirements are necessary to graduate from Carthage High School. Credits are counted beginning with the ninth grade.

Credit Requirements

	Minimum for Graduation	<i>Cum Laude</i>	<i>Magna Cum Laude</i>	<i>Summa Cum Laude</i>
English Language Arts	4 ^a	4	4	4
Social Studies	3 ^b	3	3	3
Mathematics	3 ^c	3 ¹	4 ^{1,2}	4 ^{1,2}
Science	3 ^d	3 ³	4 ^{3,4}	4 ^{3,4}
Foreign Language	-	2 ⁵	2 ⁶	2 ⁶
Fine Arts	1	1	1	1
Personal Finance	.5	.5	.5	.5
Physical Education	1	1	1	1
Health	.5	.5	.5	.5
Personal Communications (Speech)	.5	.5	.5	.5
General Electives	10.5	8.5	8.5	8.5
TOTAL CREDITS	27	27	29	29
Minimum Grade Point Average		3.5	3.75	4.0

- a. Students must take the English 2 End of Course Exam.
 - b. Students must earn 1 credit in U.S. Government and 1 credit of U.S. History. Students must also take the U.S. Government End of Course Exam as well as pass the Missouri and U.S. Constitution/Civics tests.
 - c. Students taking 8th grade Algebra 1 must take an additional 3 math credits in high school (9-12). Algebra 1 taken during the eighth grade will be computed into a student's high school cumulative grade point average. Pre-Algebra and Elements of Geometry do not count toward honors or NCAA eligibility. Students must take the Algebra 1 End of Course Exam.
 - d. Students must take the Biology End of Course Exam.
1. Algebra I, Geometry and Algebra II. Algebra 1 taken during eighth grade also counts toward honor requirements and will be computed into a student's cumulative grade point average. Students taking 8th grade Algebra 1 must take an **additional** 3 math credits in **high school**.
 2. One full credit of higher-level math: College Algebra (.5), Math Analysis & Trigonometry (1), AP Calculus (1), College Prep Math (1), or ACT Math (.5).
 3. Physical Science, Biology, Chemistry, or any higher-level science class. Environmental Science does not count towards honors.
 4. One credit of higher-level science: AP Biology, AP Chemistry, AP/DC Physics 1, AP Physics 2, Survey of Physical Science (DC), or Anatomy and Physiology.
 5. Both credits must be in same foreign language.
 6. Both credits must be in same foreign language, with no choice for substituting an additional math and science for the second year. A third year in the same foreign language may replace the one additional credit in math or science.

Class standings are determined from the fourth quarter progress report grades or first semester grades for December graduates

Variations from Normal

1. A student must earn 27 credits to receive a Carthage High School diploma. All diplomas earned will be distributed after the spring graduation ceremony. Seventh semester senior graduates may participate in prom and all graduation functions.
2. A provision for part-time attendance has been provided to eleventh and twelfth grade students who are at least sixteen (16) years of age.
3. Students who are enrolled in the Basic Skills program will be required to meet the required units for graduation. An Individualized Education Plan (IEP) will be developed for each student. Changes in the required units of credit may be deemed necessary. If so, such changes will be made by the multidisciplinary team and entered in the student's IEP.
4. In addition to the program of study for graduation, a student must also fulfill the requirements for graduation set forth by the State of Missouri.
5. No student shall graduate without successfully completing a course of instruction on the institutions, branches and functions of the government of the State of Missouri, including local governments; the United States government; and the electoral process.
6. Students who complete a three-unit career and technical education program of studies may apply for a waiver of one unit of academic credit. The three-unit career and technical program must constitute a planned program leading to specific career-related competencies, not simply any three units of credit. The academic subject in which the waiver is granted must be one in which the student exhibits significant learning in the career and technical education program. For example, students completing a three-unit pre-engineering or bio-medical program might be permitted to waive one unit of an elective science.
7. The District will accept courses offered through Missouri's K-12 Virtual Instructional Program (MoVIP) as units of credit meeting state and local graduation requirements beginning with the 2007-08 school year provided, however, the quantity and quality of completed student works meet standards applicable to the District's traditional program. (See Policy 6190, Virtual Instruction Program).
8. Eligible students as defined in Regulation 2525 may pursue a timely graduation from high school through the School Flex Program. Eligible students participating in the School Flex Program will be considered full-time students.

INITIAL-ELIGIBILITY BASICS – KNOW THE REQUIREMENTS

College-bound student-athletes who want to compete at a NCAA Division I or II school need to meet certain division-wide academic and amateurism standards. Students who plan to attend a Division III school need to meet the admission standards of the school they plan to attend.

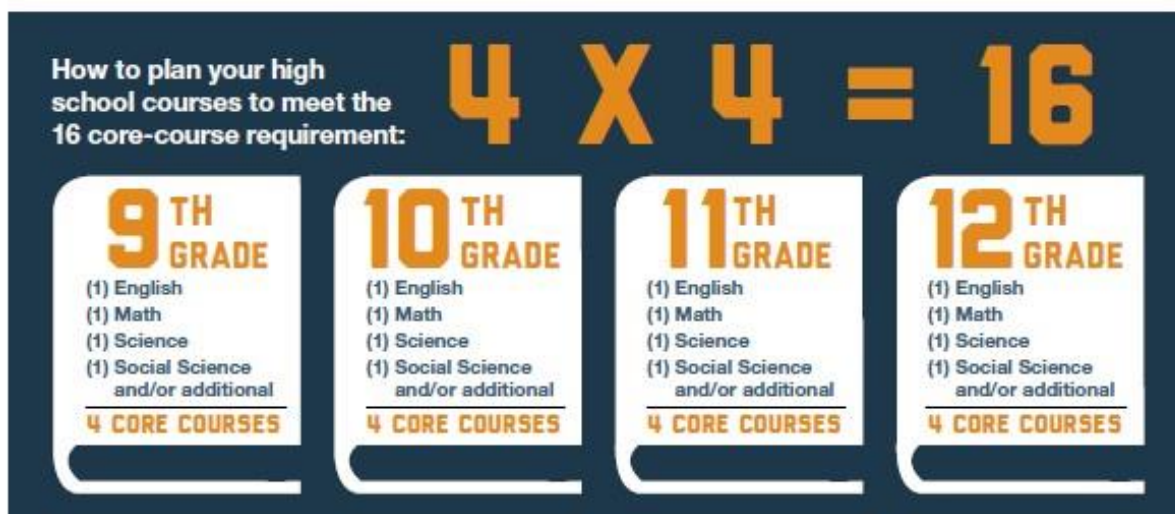
Division I Initial Eligibility

Division I schools require students to meet academic standards for NCAA-approved core courses, core-course GPA and test scores. To be eligible to practice, compete and receive athletics scholarships in their first full-time year at a Division I school, students must graduate from high school and meet *all* of the following requirements:

1. Complete a total of 16 core courses in the following areas:



2. Complete 10 out of their 16 core courses, including seven in English, math or natural/physical science, **before the start of the seventh semester**. Once a student begins their seventh semester, they must have more than 10 core courses completed to be able to repeat or replace any of the 10 courses used to meet the 10/7 requirement. Students whose academic credentials are solely international (including Canada) are not required to meet the 10/7 requirement.
3. Complete the 16 NCAA-approved core courses in eight academic semesters or four consecutive academic years from the start of ninth grade. If students graduate from high school early, they still must meet core-course requirements.
4. Earn an SAT combined score or ACT sum score that matches their core-course GPA (minimum 2.300) on the Division I qualifier sliding scale.



DIVISION II INITIAL ELIGIBILITY

Division II schools require college-bound student-athletes to meet academic standards for NCAA core courses, core-course GPA and test scores.

To be eligible to practice, compete and receive an athletics scholarship in their first full-time year at a Division II school, students must graduate from high school and meet all the following requirements:

1. Complete 16 core courses in the following areas:



2. Earn an SAT combined score or ACT sum score that matches the student's core-course GPA (minimum 2.200) on the Division II final qualifier sliding scale.

Academic Certification Decisions

To receive an academic certification decision, students must have on file with the Eligibility Center:

- A final official transcript with proof of graduation.
- Official transcripts from *all* other high schools attended.
- Test scores.
- No open academic tasks.
- Be on a Division II school's institutional request list.

Being placed on a school's institutional request list notifies the NCAA Eligibility Center to complete an academic evaluation for students once all their appropriate documents have been submitted.

Once an academic certification has been completed, students will receive one of the following decisions if they are being recruited by a Division II school:

Early Academic Qualifier

If students meet specific criteria listed below after six semesters, they may be deemed an early academic qualifier for Division II and may practice, compete and receive an athletics scholarship. Students will need:

Minimum SAT combined score (math and critical reading) of 820 on the old SAT or 900 on the redesigned SAT OR minimum sum score of 68 on the ACT; and a core-course GPA of 2.5 or higher in a minimum of 14 core courses in the following areas:

- Three years of English.
- Three years of math.
- Two years of natural or physical science.
- Six additional core courses in any area.

A final high school transcript is required to be submitted to the NCAA Eligibility Center after high school graduation for all early academic qualifiers.

Carthage High School NCAA-Approved Courses

The courses listed here are Carthage High School courses that have been determined to meet the NCAA's criteria for a core course. This information is subject to change and will be updated as frequently as necessary. Only the courses listed here currently meet NCAA standards and can be used to determine initial eligibility. (Last updated 1/2021)

English Language Arts

ADV. ENGLISH LANGUAGE ARTS

1/RISE (*Not applicable for Class of 2023 and beyond*)

ENGLISH LANGUAGE ARTS 1/Honors

ENGLISH LANGUAGE ARTS 2/Honors

ENGLISH LANGUAGE AND
COMPOSITION/AP

ENGLISH LITERATURE AND
COMPOSITION/AP

ADV. ENGLISH LANGUAGE ARTS 2

RISE (*Not applicable for Class of 2022 and beyond*)

ENGLISH LANGUAGE ARTS 1

ENGLISH LANGUAGE ARTS 2

ENGLISH LANGUAGE ARTS 3

ENGLISH LANGUAGE ARTS 4

ENGLISH LANGUAGE ARTS 4/DC

Math

ALGEBRA 1

GEOMETRY

ALGEBRA 2

AP CALCULUS

COLLEGE ALGEBRA

COLLEGE PREP MATH

MATH ANALYSIS & TRIG.

Foreign Language

FRENCH 1, 2, 3

SPANISH 1, 2, 3, 4

Science

PHYSICAL SCIENCE

HONORS PHYSICAL SCIENCE*

ENVIRONMENTAL SCIENCE

BIOLOGY

AP BIOLOGY

CHEMISTRY

AP CHEMISTRY

HONORS CHEMISTRY*

ANATOMY & PHYSIOLOGY/DC

AP PHYSICS 1

AP PHYSICS 2

SURVEY OF PHYSICAL SCIENCE/DC

HUMAN BODY SYSTEMS PLTW

PRINCIPLES OF BIOMEDICAL
SCIENCES PLTW

MEDICAL INTERVENTIONS PLTW*

Social Studies

WORLD HISTORY

UNITED STATES HISTORY

US GOVERNMENT

US GOVERNMENT/AP

US HISTORY/DC/AP

PSYCHOLOGY 1

PSYCHOLOGY 2

SOCIOLOGY

**Pending NCAA approval*

MISSOURI OPTIONS PROGRAM

The Missouri Options (Mo-Op) program is a short-term intense program for those students who cannot possibly graduate with their cohort class. To be eligible for this class, a student must be at least a year behind cohorts and have the basic knowledge necessary to be successful. For more information, contact the counselors' office or your child's Assistant Principal.

ONLINE COURSES

Only those online courses offered through state-accredited high schools or colleges will be accepted for a grade or passing credit and added to the transcript. Students with a desire to take an online course must make arrangements for approval with the counselors' office prior to enrolling in the class. The course must meet the following conditions:

- a. The course must meet all curriculum requirements required by the state of Missouri and Carthage High School.
- b. The instructor and the student have access to one another during the duration of the course for the purposes of teaching, evaluating and providing assistance to the student.

Note: Students taking MOVIP Courses will be assigned a letter-grade through the MOVIP program.

A+ PROGRAM

The A+ program, part of the Missouri Outstanding Schools legislation, provides the opportunity for schools and businesses to guide students in acquiring academic and technological skills plus workplace experience to lead them on the path to success.

In addition, students who have met specified requirements will be eligible to have two years of tuition and fees paid to attend any public community college, vocational, or technical school in Missouri as the state budget allows. In order for district students to participate in the program, Carthage R-9 must maintain A+ status, and the legislature must continue to appropriate funds for the incentives.

To qualify for the financial incentives, a student must meet the following criteria:

- Attend Carthage High School or another A+ Designated School for three consecutive years with a 95% attendance record.
- Graduate with a cumulative 2.5 or better grade point average.
- Tutor students, through school-provided programs, for 50 hours.
- Maintain a record of good citizenship and avoid the use of unlawful drugs or alcohol.
- Make a good faith effort to secure post-secondary financial assistance that does not require repayment. (FAFSA Form)
- Students and their parents or guardians must sign the agreement form and return it to the A+ office before the last semester of their senior year.
- Score Proficient or Advanced on the Algebra 1 End Of Course Examination, or other qualifying exam.
- Meet all other requirements as set by the state legislature. See the A+ coordinator for more details.

RECOMMENDED CURRICULUM FOR COLLEGE-BOUND STUDENTS*

Freshman	English 1 or Honors English 1	Junior	English 3 or AP English Language & Composition
	World History		US Government or AP US Government
	Algebra 1 or Geometry		Algebra 2, Math Analysis & Trig, College Prep, ACT Math, or College Algebra
	Physical Science or Honors Physical Science		Chemistry, AP Biology/AP Chemistry/AP Physics 1 or 2/Survey of Physical Science
	Health		AP/DC US History
	Personal Communication		Foreign Language (Spanish or French)
	Foreign Language (Spanish or French)		
Sophomore	English 2 or Honors English 2		
	Biology	Senior	English 4, AP English Literature & Composition (DC), or English 4 (DC)
	Geometry or Algebra 2		Math Analysis & Trig, College Prep, ACT Math, or College Algebra
	US History		AP Biology/AP Chemistry/AP Physics 1 or 2/Survey of Physical Science
	Physical Education		Foreign Language (Spanish or French)
	Personal Finance		Personal Communication (DC)
	Foreign Language (Spanish or French)		

*Suggestions are in addition to other graduation requirements and electives. Classes to complete the schedule are to be selected from other curricular offerings with careful consideration of all classes. Each student should seek assistance from their counselor to determine appropriated courses that would best suit their career path. *Not all college bound students will follow this exact course timeline.*

COLLEGE-HIGH SCHOOL DUAL CREDIT PROGRAM

Carthage High School offers a program which will allow sophomores, juniors and seniors (with a recommended 3.0 GPA or higher) to earn college credit while taking a course in high school for high school credit. This is coordinated with Crowder College, Missouri Southern State University, and Missouri State University. Under this program a student will enroll, pay tuition, take a course taught by an approved instructor at Carthage High School, and receive high school credit and college credit upon successful completion of the course. Some Dual Credit courses require a qualifying test.

Credit in Escrow and Articulation Agreements with various state colleges and universities are available. High school credit and possible college credit may be granted for a variety of courses. Students should see their counselor for details of the opportunities and limitations of the offerings.

Carthage High School and Crowder College offer an opportunity for students to earn credit towards an Associate of Arts in General Studies while completing requirements for their Carthage High School diploma. Interested students should contact their school counselor or the Crowder College Dual Credit Coordinator at 417-680-3202.

ADVANCED PLACEMENT PROGRAM

The Advanced Placement Program of CHS offers students the opportunity to earn college credit or advanced standing at most of the nation's colleges and universities. Classes offered are AP English Language and Composition, AP English Literature and Composition, AP Biology, AP Chemistry, AP Physics 1, AP Physics 2, AP Calculus, AP U.S. Government, AP U.S. History, and AP Studio Art. Special permission must be secured before a student enrolls in an advanced placement class. The outlined procedure should be followed.

1. Secure teacher recommendation.
2. Advanced Placement Examinations are optional. These tests are given in May at a cost of approximately \$100 each. Students can receive college credit at most colleges for successful test scores. Individual parents and students are responsible for checking with their desired college/university for score requirements and credit.
3. Weighted grades are given for AP classes. One grade point is added to the regular points throughout the scale. Example: A equals 5 points.

CONSTITUTION REQUIREMENT

Each student must pass examinations on the Civics and Constitution of the United States and the Constitution of the State of Missouri. Students enrolled in the U.S. Government class are provided the curriculum to pass the exams that are given during the semester class.

REGISTRATION AND ENROLLMENT

During the second semester of each school year, each student will be enrolled for the following year. This enrollment will be handled through the counseling department. After a student is enrolled, the student should take home a copy of the proposed course selection and have it checked by his/her parents. Parents may contact the counselor to discuss changes in course selections.

CHANGING SCHEDULES - After course selections are chosen by the student and parents, the actual scheduling or placing in class is done by the counselors. When this procedure is completed, the student's enrollment becomes final and will not be changed except for the following:

1. Changes in student schedules may be initiated by the administration, faculty, or counselors.
2. Final approval or rejection of any or all change requests is the responsibility of the school principal.
3. Students who wish to withdraw from a course after the second week will receive an "F" on their transcript

Career Paths and Clusters

Find more information at www.missouriconnections.org

Career Paths

Missouri has identified six Career Paths as a way to help students become aware of and explore careers in a logical and meaningful way.

Career Clusters

Within the six Career Paths are 16 Career Clusters to further help with career exploration and career planning. It is recommended that you select a Career Cluster of interest before or during high school to shape your plans for coursework. As a high school student, choosing a Career Cluster is about selecting an area for deeper exploration, not locking in a life-long career plan.

Career Pathways

When you are ready to narrow things even further, there are two to seven Career Pathways within each Career Cluster. The Career Pathways can help you in two ways. First, if you're sure about your Career Cluster of interest, you could select a Career Pathway of interest and hone your plans that much more. Second, exploring the skills and occupations in each pathway can give you a better understanding of the cluster and whether it is a good match for you.

CAREER PATH: BUSINESS, MANAGEMENT & TECHNOLOGY

Career Clusters:

Business Management and Administration

Business Management and Administration careers encompass planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations. Business Management and Administration career opportunities are available in every sector of the economy.

Information Technology

Building linkages in IT Occupations Framework: For entry level, technical, and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services.

Marketing

Planning, managing, and performing marketing activities to reach organizational objectives.

Finance

Planning and services for financial and investment planning, banking, insurance, and business financial management.

CAREER PATH: ARTS & COMMUNICATION

Career Clusters:

Arts, Audio-Video Technology, and Communications

Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

Education and Training

Planning, managing and providing education and training services, and related learning support services.

CAREER PATH: HEALTH SERVICES

Career Clusters:

Health Science

Planning, managing, and providing therapeutic services, diagnostic services, health information science, support services, and biotechnology research and development.

CAREER PATH: INDUSTRIAL & ENGINEERING TECHNOLOGY

Career Clusters:

Architecture and Construction

Careers in designing, planning, managing, building, and maintaining the built environment.

Manufacturing

Planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering.

Science, Technology, Engineering, and Mathematics

Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering), including laboratory and testing services, and research and development services.

Transportation, Distribution, and Logistics

Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water, and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment, and facility maintenance.

CAREER PATH: HUMAN SERVICES

Career Clusters:

Education and Training

Planning, managing, and providing education and training services, and related learning support services.

Government and Public Administration

Executing governmental functions to include Governance; National Security; Foreign Service; Planning; Revenue and Taxation; Regulation; and Management and Administration at the local, state, and federal levels.

Hospitality and Tourism

Hospitality and Tourism encompasses the management, marketing, and operations of restaurants and other food services, lodging, attractions, recreation events, and travel related services

Law, Public Safety, Corrections, and Security

Planning, managing, and providing legal, public safety, protective services, and homeland security, including professional and technical support services.

Human Services

Preparing individuals for employment in career pathways that relate to families and human needs.

CAREER PATH: NATURAL RESOURCES AGRICULTURE

Career Clusters:

Agriculture, Food, and Natural Resources

The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

Paths, Clusters & Pathways

Career Paths

Missouri has identified six Career Paths as a way to help students become aware of and explore careers in a logical and meaningful way.

Career Clusters

Missouri uses 16 Career Clusters as a way of organizing occupations and careers to assist educators in tailoring rigorous coursework and related activities for all students. The Career Clusters include all occupations, even those not usually found in career and technical education. Career Clusters may be used beginning in grades 7, 8 or 9, and can continue as a framework for educational planning through postsecondary education.

Career Pathways

Occupations within a Career Cluster are further grouped according to shared commonalities such as skill sets or common roles. This grouping is called a Career Pathway. Each cluster contains two to seven Career Pathways. Career Pathways assist educators in the development of a coordinated and non-duplicative sequence of courses that identifies both secondary and postsecondary education elements; includes challenging academic and career and technical education content; and culminates in one or more of the following: technical skill proficiency, a credential, a certificate, or a degree at the secondary or postsecondary level.

Knowledge & Skill Statements

Knowledge and skill statements represent the skills and knowledge, both academic and technical, that all students should achieve for a given career area.

Health Science

Biotechnology Research and Development
Therapeutic Services
Diagnostics Services
Health Informatics
Support Services

Arts, A/V Technology and Communications

Audio and Video Technology and Film
Printing Technology
Visual Arts
Performing Arts
Journalism and Broadcasting
Telecommunications

Health Services

Health Path

Arts & Communication

Creative Path

Foundation & Skills

Academic & Technical Skills
Teamwork • Career Development
Information Technology Application
Problem Solving • Critical Thinking
Employability • Ethics • Systems
Safety, Health & Environment
Legal Responsibilities
Communication

Business & Management & Technology

Business Path

Information Technology

Network Systems
Information Support and Services
Web and Digital Communications
Programming and Software Development

Business Management and Administration

General Management
Human Resources Management
Business Information Management
Operations Management
Administrative Support

Marketing

Marketing Management
Marketing Communications
Marketing Research
Professional Sales
Merchandising

Finance

Securities and Investments
Business Finance
Banking Services
Insurance
Accounting

Manufacturing

Production
Manufacturing Production
Process Development
Maintenance, Installation and Repair
Quality Assurance
Logistics and Inventory Control
Health, Safety and Environmental Assurance

Industrial & Engineering Technology

Building & Fixing Path

Human Services

Helping Path

Natural Resources Agriculture

Nature Path

Agriculture, Food and Natural Resources
Agriculture Systems
Animal Systems
Food Products and Processing Systems
Natural Resources and Environmental Service Systems
Power, Structural and Technical Systems
Plant Systems

Transportation, Distribution and Logistics

Transportation Operations
Logistics, Planning and Management Services
Warehousing and Distribution Center Operations
Facility and Mobile Equipment Maintenance
Transportation Systems and Infrastructure Planning,
Management and Regulation
Health, Safety and Environmental Management
Sales and Services

Science, Technology, Engineering and Mathematics

Engineering and Technology
Science and Math

Architecture and Construction

Design and Pre-Construction
Construction
Maintenance and Operations

Human Services

Early Childhood Development and Services
Counseling and Mental Health Services
Family and Community Services
Personal Care Services
Consumer Services

Hospitality and Tourism

Restaurants and Food and Beverage Services
Recreation, Amusement and Attractions
Travel and Tourism
Lodging

Government and Public Administration

Public Management and Administration
Governance
National Security
Foreign Service
Planning
Revenue and Taxation
Regulation

Law, Public Safety, Corrections and Security

Correction Services
Emergency and Fire Management Services
Security and Protective Services
Law Enforcement Services
Legal Services

Education and Training

Administration and Professional Support
Professional Support
Teaching and Training

Career Pathway Framework

Path of Arts and Communication

Arts, A/V Technology and Communications Cluster

- Audio and Video Technology and Film
- Printing Technology
- Visual Arts
- Performing Arts
- Journalism and Broadcasting
- Telecommunications

Path of Business, Management, and Technology

Business Management and Administrative Cluster

- General Management
- Human Resources Management
- Business Information Management
- Operations Management
- Administrative Support

Finance Cluster

- Securities and Investments
- Business Finance
- Banking Services
- Insurance
- Accounting

Information Technology Cluster

- Network Systems
- Information Support and Services
- Web and Digital Communications
- Programming and Software Development

Marketing Sales and Service Cluster

- Marketing Management
- Marketing Communications
- Marketing Research
- Professional Sales
- Merchandising

Path of Industrial & Engineering Technologies

Architecture and Construction Cluster

- Design and Pre-Construction
- Construction
- Maintenance and Operations

Manufacturing Cluster

- Production
- Manufacturing Production Process Development
- Maintenance, Installation and Repair
- Quality Assurance

- Logistics and Inventory Control
- Health, Safety and Environmental Assurance

Science, Technology, Engineering and Mathematics Cluster

- Engineering and Engineering Technology
- Science and Math

Transportation, Distribution and Logistics Cluster

- Transportation Operations
- Logistics, Planning and Management Services
- Warehousing and Distribution Center Operations
- Facility and Mobile Equipment Maintenance
- Transportation Systems and Infrastructure Planning, Management and Regulation
- Health, Safety and Environmental Management
- Sales and Service

Path of Health Services

Health Science Cluster

- Biotechnology Research and Development
- Therapeutic Services
- Diagnostic Services
- Health Informatics
- Support Services

Path of Human Services

Hospitality and Tourism Cluster

- Restaurants and Food/Beverage Services
- Recreation, Amusement and Attractions
- Travel and Tourism
- Lodging

Human Services Cluster

- Early Childhood Development and Services
- Counseling and Mental Health Services
- Family and Community Services
- Personal Care Services
- Consumer Services

Government and Public Administration Cluster

- Public Management and Administration
- Governance
- National Security
- Foreign Service
- Planning
- Revenue and Taxation
- Regulation

Education and Training Cluster

- Administration and Administrative Support
- Professional Support Services
- Teaching/Training

Law, Public Safety and Security Cluster

- Correction Services
- Emergency and Fire Management Services
- Security and protective Services
- Law Enforcement Services
- Legal Services

Path of Natural Resources Agriculture

Agriculture, Food and Natural Resources Cluster

- Food Products and Processing Systems
- Plant Systems
- Animal Systems
- Power, Structural and Technical Systems
- Natural Resources and Environmental Service Systems
- AgriBusiness Systems

PATH OF ARTS & COMMUNICATIONS

ARTS, AV TECHNOLOGY & COMMUNICATIONS CLUSTER

English Language Arts 1

9th Grade – 1 English Language Art credit

The ninth grade English Language Arts course is designed to increase the student's ability to communicate clearly and correctly both the spoken and written word. To attain this goal, students will review rules of grammar, capitalization, and punctuation. In addition, students will do a variety of writing assignments throughout the year. Critical thinking skills, research skills, vocabulary skills, and speaking skills are also covered. Students will study the short story and the novel. As time permits, they will also explore dramatic literature, poetry, and/or mythology.

English Language Arts 1 Honors

9th Grade – 1 English Language Art credit

Prerequisite: Application Process which includes teacher recommendation, A/B in 8th grade ELA, iReady scores (reading at or above grade level), and written assessment. Student attendance and past work ethic will also be considered.

English Language Arts 1 Honors fulfills the freshman English Language Arts requirement but also prepares students for the challenges of Advanced Placement English Language and Composition and Advanced Placement English Literature and Composition. The course is designed to help students develop reading, writing, and critical thinking skills in literary analysis of classic and contemporary short stories, poetry, drama, and novels. Summer reading is required.

English Language Arts 1 (Reading Intensive) or English Language Arts 2 (Reading Intensive)

9th, 10th Grade – 1 English Language Art credit

Prerequisite: Teacher Recommendation

This class fulfills the grade level requirement for an English Language Arts credit. The purpose of English Language Arts (Reading Intensive) is to develop stronger communication skills through written, oral, research, and reading assignments, as well as provide direct instruction in reading strategies so that students will significantly improve reading comprehension.

English Language Arts 2

10th Grade – 1 English Language Art credit

Prerequisite: English Language Arts 1

EOC required for graduation.

This class fulfills the requirement for a sophomore English Language Arts credit. The purpose of English Language Arts 2 is to develop stronger communication skills through written, oral, research, and reading assignments.

English Language Arts 2 Honors

10th Grade – 1 English Language Art credit

Prerequisite: Completed English I Honors with a grade of B or higher or completed English I with a grade of A. Also, students must be evaluated by and recommended by his or her English I teacher. Student attendance and past work ethic will also be considered.

EOC required for graduation.

English Language Arts 2 Honors fulfills the sophomore English Language Arts requirement but also prepares students for the challenges of Advanced Placement English Language and Composition and Advanced Placement English Literature and Composition. The course is designed to help students develop reading, writing, and critical thinking skills in various types of fiction and nonfiction texts. Summer reading is required.

English Language Arts 3

11th Grade – 1 English Language Art credit

Prerequisite: English Language Arts 2

This is a comprehensive class that includes study of literary concepts and use of the writing process.

Writing formats include personal/responsive, creative and academic/analytic. Students also have regular practice in reading, vocabulary, grammar, research, communication and ACT test-taking skills.

Advanced Placement English Language and Composition

11th Grade – 1 English Language Art credit

Prerequisite: Completed English II Honors with a grade of B or higher or completed English II with a grade of A. Also, students must be evaluated by and recommended by his or her English II teacher. Student attendance and past work ethic will also be considered.

The course is reading- and writing-intensive with nonfiction reading of American and advanced writing instruction in preparation for the AP National Exam offered in May, which may earn college credit. The syllabus has been approved by the National College Board and conforms to Missouri Learning Standards. Mastery level for the class and final exemption is 80%.

English Language Arts 4

12th Grade – 1 English Language Art credit

Prerequisite: English Language Arts 3

This writing-intensive course reviews and practices the fundamentals of writing, including vocabulary development and grammar/mechanics usage for students who want to be ready for college-level writing and college placement exams. Students will read and write various kinds of compositions from a variety of cultures and eras, make oral presentations, take and maintain course notes and materials, and practice discussion appropriate to academics. Mastery for this class is 70%.

English Language Arts 4 – (Crowder College Dual Credit Option)

11th, 12th Grade – 1 English Language Art credit

Prerequisite: English Language Arts 3 and/or teacher recommendation

This option requires an 18 on the English AND Reading subtests of the ACT or the appropriate placement score on the Crowder College placement test. Students who elect to take the class for dual credit will earn 6 credit hours - 3 credit hours per semester. The Crowder College course titles are *ENGL 101 - English Composition 1* and *ENGL 102 - English Composition 2*. The optional college course fee is currently \$60 per credit hour (subject to change yearly). This course adheres to the approved Crowder College syllabus.

Advanced Placement English Literature and Composition (Crowder College Dual Credit Option)

12th Grade – 1 English Language Art credit

Prerequisite: GPA of 3.0 and teacher recommendation.

This option requires an 18 on the English subtest of the ACT or the appropriate placement score on the Crowder College placement test. Students who elect to take the class for dual credit will earn 6 credit hours - 3 credit hours per semester. The Crowder College course titles are *ENGL 222 - Masterpieces of World Literature 1* and *ENGL 225 - Masterpieces of World Literature 2*. The optional college course fee is currently \$60 per credit hour (subject to change yearly). This course's AP syllabus has been approved by the National College Board.

Publications (Yearbook)

9th, 10th, 11th, 12th Grade – 1 Elective credit

Prerequisite: An overall "B" average and application with instructor approval is required

This course is an elective course in which students produce the school yearbook, the "Carthaginian". Tasks include writing about every phase of school activities, designing pages, taking, developing, and printing pictures, and selling and designing advertising. Students who have a B average and good English Language Arts skill may apply for admission. Elective credit is given.

Graphic Design

9th, 10th, 11th, 12th Grade – ½ Practical Art credit

Prerequisite: Business Computers

This course is designed for the student interested in working with graphics and want to learn photo-enhancing skills. Students are instructed in the fundamental features of Publisher and Adobe Photoshop. They will utilize both programs to edit, design photos, and graphics; learn basic computer operations;

digital scanning; preparing various documents for output; and apply desktop publishing rules and techniques. Students will create a variety of projects that will be used by FBLA.

Intro to Creative Media (formerly Intro to Multimedia)

9th, 10th Grade – ½ Practical Art credit

This course is designed to introduce and practice the fundamentals of video, audio and graphics production using Adobe Suite software programs. Students will gain basic experience in animation, graphic design, and video production. Students will study and apply all aspects of multimedia production including planning, scripting, and storyboarding to generate projects including elements of text, audio, video, animation, photographs, and graphic images.

Digital Media and Broadcasting I

10th, 11th, 12th Grade – 1 Practical Art credit

Prerequisite: Grade of B or higher in Intro to Creative Media or an application with instructor approval is required (application is included in enrollment packet).

Students in this course will examine the basics of producing content for television and broadcast journalism elements. Students will gain an understanding of both pre-production, on-air, and post-production roles and responsibilities of news broadcasting. The students will produce a variety of productions including news stories, short films and documentaries. They may also assist the upper-level classes in the school newscast as needed.

Digital Media and Broadcasting II

11th, 12th Grade – 1 Practical Art credit

Prerequisite: Grade of B or higher in Digital Media and Broadcasting I and an application with instructor approval

In Digital Media and Broadcasting II, students will have the opportunity to create a school newscast that will air online and be distributed through a variety of social media channels. The students will also assist in producing the live streams at all home football and basketball games. New genres of production will be explored including news production and industrial video production. Students will learn and explore the roles of each crew member involved in broadcasting productions. Throughout the course, students may be required to attend a number of after-school sporting events and activities. Students will have the opportunity to travel to away games and events.

Digital Media and Broadcasting Capstone

11th, 12th Grade – 1 Practical Art credit

Prerequisite: Grade of B or higher in Digital Media and Broadcasting I and an application with instructor approval

In Digital Media and Broadcasting Capstone, students will assist in managing the live streams of all home football and basketball games to thousands of viewers. Students will have the opportunity to work as a team to produce a LIVE event with the use of graphics, cameras, remote-controlled cameras, video editing, photo editing, audio, and much more. Students will get out of the classroom, learn by doing and work as a team to produce a professional production seen by thousands of viewers online. Successful completion of this program could qualify students for entry-level employment at local radio and television stations. Throughout the course, students will be required to attend a number of after-school sporting events and activities. Students will have the opportunity to travel to away games and events.

Personal Communication

9th, 10th, 11th, 12th Grade – ½ Elective credit and requirement for graduation.

Students may choose to take the year-long class of Intro to Debate instead of Personal Communications to satisfy the graduation requirement. This class is designed for the student who wishes to improve his/her communications skills. The major focus of the class is on public speaking and communication theories. This course is modeled after the general oral communication class required at most colleges.

Advanced Personal Communication Dual Credit – (Missouri State University Dual Credit Option)

10th, 11th, 12th Grade – ½ Elective credit

Prerequisite: Personal Communication or Instructor Approval

Students who elect to take the class for dual credit will earn 3 college credit hours. The Missouri State University course title is *COM115 - Fundamentals of Public Speaking*. The optional college course fee is currently \$70 per credit hour (subject to change yearly).

Students will learn various communication theories, public speaking strategies, and evaluative techniques. The class requires several formal writing assignments as well as speeches.

Competitive Speech/Oral Interp.

9th, 10th, 11th, and 12th Grade – 1 Fine Art credit – Full Year

This course is READING INTENSIVE.

This is a performance-based class. This course is designed for those students competing in the forensics portion of Speech and Debate. Students will learn about the different forensic events, oral interpretation, and Reader's Theater in the spring. Students will prepare their selections for contest. Participation in tournaments is mandatory. Students must be MSHSAA eligible to compete in tournaments. This course may be repeated. This course will conflict with show choir and winter sports. See Mr. Whyte or Mr. Carr for more information. \$25.00 membership fee to NSDA for new members.

Introduction to Debate

9th, 10th – 1 Elective credit – Full Year

This course is READING INTENSIVE.

Debate will assist the student in developing skills in argumentation, research, analysis and persuasion. Students will learn basic debate techniques and rules. *Students must be MSHSAA eligible to compete in tournaments.* Participation in tournaments is a requirement. One year of Intro to Debate may replace the required semester class of Personal Communications. This course will conflict with show choir and winter sports. See Mr. Whyte or Mr. Carr for more information. \$25.00 membership fee to NSDA for new members.

Debate

10th, 11th, 12th Grade – 1 Elective credit – Full Year

Prerequisite: Introduction to Debate or instructor's approval

This course is READING INTENSIVE.

Want to effectively win arguments? Debate will assist the interested student in developing skills in argumentation, research, analysis and persuasion. Students must be MSHSAA eligible to compete in tournaments. Participation in speech contests is required. This course may be repeated. This course will conflict with show choir and winter sports. See Mr. Whyte or Mr. Carr for more information.

Spanish 1

9th, 10th, 11th, 12th Grade – 1 Foreign Language credit

Spanish 1 introduces students to the basics of the Spanish language as well as expands their knowledge of various Hispanic cultures. Vocabulary and grammar skills taught will enable students to deal with simple situations from everyday life.

Spanish 2

10th, 11th, 12th Grade – 1 Foreign Language credit

Recommended: Instructor recommends a "B" in level 1 to continue in Spanish 2

Spanish 2 continues the basics begun in Spanish 1 and allows students to develop their skills in the areas of speaking and listening. Students will develop more areas that they can use in daily life. Separate sections for native speakers are offered based on teacher recommendation and placement test.

Spanish 3

11th, 12th Grade – 1 Foreign Language credit

Prerequisite: Spanish 2 passed with a "B" or above

Spanish 3 places much emphasis on conversation and writing skills. Grammar study will continue as well as vocabulary to prepare students to use Spanish more frequently in their daily lives. Separate sections for native speakers are offered based on teacher recommendation and placement test.

Spanish 4

12th Grade – 1 Foreign Language Credit

Prerequisite: Spanish 3 passed with a “B” or above

Spanish 4 is designed for the student who wants to become more comfortable expressing him/herself in a second language. Vocabulary expansion will occur as well as a continuation of Spanish grammar.

Students should expect to speak, to hear, to read, and to write in Spanish on a regular basis. A variety of cultural topics will be explored.

French 1

9th, 10th, 11th, 12th Grade– 1 Foreign Language credit

French 1 is an elective course that serves as an introduction to the French language and Francophone culture. Students will learn to speak, read, and write basic French. Through consistent use of classroom speaking and listening activities, students will attain basic ability of speaking and comprehending French.

French 2

10th, 11th, 12th Grade – 1 Foreign Language credit

Prerequisite: French 1 passed with a “C” or above

French 2 is an elective course which will provide further knowledge of the French language and Francophone culture, with an emphasis on the arts. Students will learn to speak, read, and write intermediate French. Through consistent listening, speaking, reading, and writing activities, students will develop higher-level French skills.

French 3

11th, 12th Grade – 1 Foreign Language credit

Prerequisite: French 2 passed with a “B” or above

French 3 is designed to prepare students to use the language well in life as well as expose them to Francophone literature. Grammar study will be concluded with much more emphasis on composition and conversational skills. Students will be able to effectively communicate with native speakers in basic conversations for travel or work.

EL Study Skills

9th, 10th, 11th, 12th Grade – 1 Elective credit

Prerequisite: This course is only for students currently being served in the EL program, carrying at least 3 academic courses per semester. Instructor’s permission only.

EL Study Skills is a class designed to help EL students complete coursework from other classes and develop skills necessary for academic success.

Theatre Tech

10th, 11th, 12th Grade – 1 Fine Art credit

This is an introductory class for the student who wants to learn stagecraft. The class will include the basic theories of production design for the theatre and theatrical construction techniques. Students will be required to work on the construction of sets for the school plays and competition productions. This is a hands-on class that will require physical work most class sessions. **This class requires students to see both CHS productions and write a critique on the play.**

Intro to 2D Art & Design

9th, 10th, 11th, 12th Grade – ½ Fine Art credit

A \$15 fee is required and must be paid in advance or by the second week of the semester to avoid being dropped from this class.

This is an introductory art course. Students will learn the basic techniques in drawing, painting, printmaking, and digital art. Students will create various artworks, keep a sketchbook, and learn about various artists and skills throughout the semester.

This class is a prerequisite for Drawing. This class also fulfills ½ of the requirement for Advanced Art. Students must take Intro to 2D & Intro to 3D to qualify for Advanced Art.

Intro to 3D Art & Design

9th, 10th, 11th, 12th Grade – ½ Fine Art credit

A \$15 fee is required and must be paid in advance or by the second week of the semester to avoid being dropped from this class.

This is an introductory art course. Students will learn the basic techniques working with clay, mixed media sculpture, and fibers & textiles. Students will create various artworks, keep a sketchbook, and learn about various artists and skills throughout the semester.

This class is a prerequisite for Fibers & Textiles, and 3D Design/Advanced 3D Design. This class also fulfills ½ of the requirement for Advanced Art. Students must take Intro to 2D & Intro to 3D to qualify for Advanced Art.

Film Appreciation

9th, 10th Grade given priority (11th and 12th as space allows) – ½ Fine Art Credit

This course will introduce students to the world of cinema and film. The course will define film as an art, explain how film tells stories, discuss the mechanics of making an effective film, summarize the different genres of film, and discuss how films have changed over the years. By viewing, studying, discussing and writing about film, students develop and demonstrate skills in technological, cultural and media literacy, as well as critical thinking and problem solving- skills that will serve them well in the real world.

Theatre Appreciation (EL section is available for students in the EL Program)

9th, 10th, 11th, 12th Grade – ½ Fine Art credit

This course is an overview or survey of theatre history, theatrical criticism and analysis and play production and design. Students in this course will be asked to analyze live and taped performances.

Attendance at one CHS production is mandatory.

Introduction to Acting

9th & 10th Grade – ½ Fine Art credit

This is a performance-based class. This course is designed for those students who enjoy acting and have an interest to learn more about it. Students will learn the basic techniques of improvisation, pantomime, stage acting, scene analysis, script writing, and audition/performance techniques. Students will be required to perform memorized material in class. This class is a prerequisite for Acting 1, Acting 2, and/or Competitive Speech. **Attendance at one CHS production is mandatory.**

Acting 1

10th, 11th, 12th Grade – 1 Fine Art credit

Prerequisite: Intro to Acting AND Instructor's Permission & MSHSAA Eligible

This is a performance-based class. This course is designed for those students who want to be "on stage". Students will learn techniques of stage acting, acting theorists, scene analysis, performance, and audition. Students in this course prepare both the MSHSAA District readers theatre selections. Students must be MSHSAA eligible. Participation at the MSHSAA District tournament is mandatory. **Attendance at both CHS productions is mandatory unless cast.**

Acting 2

10th, 11th, 12th Grade – 1 Fine Art credit

Prerequisite: Acting 1 AND Instructor's Permission & MSHSAA Eligible

This is a performance-based class. This course is designed for those students who want to be "on stage". Students will learn techniques of stage acting, acting theorists, scene analysis, performance, and audition. Students in this course prepare the MSHSAA District One Act Play selections. Students must be MSHSAA eligible. Participation at the MSHSAA District tournament is mandatory. Course may be repeated. **Attendance at both CHS productions is mandatory unless cast.**

Advanced Art

10th, 11th, 12th Grade – 1 Fine Art credit

Prerequisite: Intro to 2D Art & Design + Intro to 3D Art & Design Introduction to Art

There is a \$40.00 required fee for this year-long course and must be paid in advance or by the second week of the first semester. (This fee covers a sketchbook, Prisma color pencils, portfolio, erasers and other miscellaneous supplies.)

This class is a continued educational unit from Art 1. In this class students will learn different mediums and applications of the medium. Students will compete against other schools with their artwork as well as build a portfolio for college assessment in regard to scholarships. A sketchbook is a must; portfolio and color pencils will be provided.

Advanced Placement Art

11th, 12th Grade – 1 Fine Art credit

Prerequisite: Advanced Art and permission of instructor.

There is a minimum \$89.00 AP testing fee (due in April) plus this class has a \$40.00 year fee that must be paid in advance or by the second week of the first semester to avoid being dropped from this class. (The \$40.00 fee covers general art supplies.)

This is an intense course creating 12 Breath, 12 area of concentrations and 4 quality pieces of artwork. A thesis statement is required in the beginning with all work completed by April 15th. Within this class summer course work is required in order to complete the 29 pieces on time. Portfolios will be provided, sketchbook required.

3-D Design

10th, 11th, 12th Grade – 1 Fine Art credit

Prerequisite: Intro to 3D Art & Design

A \$45 year fee is required and must be paid in advance or by the second week of first semester to avoid being dropped from this class. (This fee covers clay, glazes, plaster, paper, paint, etc.)

This course deals with the preparation of clay and other sculptural material while utilizing three-dimensional construction techniques. Projects may include, but are not limited to ceramics, additive and subtractive sculpture, mobiles, fibers, and constructions.

Advanced 3D Design

11th, 12th Grade – 1 Fine Art credit

Prerequisite: C or above in 3D Design.

\$45 fee for the year. Must be paid in advance by the 2nd week of the 1st semester to avoid being dropped from the class. Past due fees from 3D will need to be paid before enrollment into Advanced 3D.

This is an advanced course offered to students who have expressed an interest in sculpture or ceramics post high school. Projects will be geared towards competitive fine art shows and/or required student portfolios for fine art college/university degree programs. This is a selective enrollment and all students wishing to enroll and who have successfully passed 3D Design must be approved prior to enrollment.

Textiles and Design

10th, 11th, 12th Grade – 1 Fine Art credit

Prerequisite: Intro to 3D Art & Design

This class has a \$40.00 year fee that must be paid in advance or by the second week of the first semester to avoid being dropped from this class. (This fee pays for leather, fabric, yarn, sewing notions, reed and beads.)

Students will gain knowledge and understanding of the functional and aesthetic requirements of textiles for a range of applications. The course will cover topics such as, but not limited to, clothing, footwear, paper products, and interior designs.

Photography

10th, 11th, 12th Grade – 1 Fine Art Credit

Prerequisite: Intro to 2D Art & Design

This class has a \$20 year fee that must be paid in advance or by the second week of the first semester to avoid being dropped from this class. (This fee pays for photo paper, printer ink, darkroom supplies, etc.)

This course is designed to enable students to gain an increasing accomplishment and independence in their representation of ideas in the fields of photography and/or video and/or digital imaging and to understand and value how these fields of practice invite different interpretations and explanations. Some manual darkroom development will be incorporated. A digital camera is mandatory. An SD memory card is preferred. (NO PHONE CAMERAS.)

Drawing

10th, 11th, 12th Grade- 1 Fine Art Credit

Prerequisite: Intro to 2D Art & Design

This class has a \$20 year fee that must be paid in advance or by the second week of the first semester to avoid being dropped from this class. (This fee covers sketchbook, portfolio, and other supplies.)

This yearlong course will focus on composition, techniques of drawing, shading and portraiture alignment.

Music Appreciation

9th, 10th, 11th, 12th Grade – ½ Fine Art credit

This course gives students an opportunity to explore musical areas outside vocal and instrumental performance groups. In this course we will study various styles of music and basic fundamentals to increase appreciation for music. No prerequisites or performances.

Music Appreciation Dual Credit (Crowder Dual Credit Option)

11th, 12th Grade – ½ Fine Art credit

Prerequisite: None

Students who elect to take the class for dual credit will earn 3 credit hours. The Crowder course title is *Music Appreciation MUS101*. The current course fee is \$180 (subject to change yearly).

This course is an advanced study in music history and its place in the world. Students will study music from the Medieval period through modern day, focusing on major composers, works, and how music was viewed in the world at that time in history. Juniors and seniors may receive dual credit for this course through Crowder. It will replace a mandatory freshman course at most colleges. This course is an excellent complementary elective for any career cluster or major.

Concert/Marching Band (White 1 fall – all band members), (White 1 spring—pending on auditions)

9th, 10th, 11th, 12th—1 Fine Art credit

The marching band performs for all home football half-time activities, possible play-off games and represents Carthage in area and national parades and festivals. The concert band plays a variety of music from classical to popular. Solos and ensembles are elective by the member(s). Instructor permission is required to enroll for anyone who has not been enrolled in band during the past year or for any student who has never been a part of the band program. The band program is designed to expose students to a wide variety of marching and concert literature. Every effort is made to foster an appreciation for music through the medium of concert performance. At the conclusion of the marching season, all members will audition for placement in one of two concert bands for the spring semester to be offered during White 1 and White 2. During the fall semester, many rehearsals will begin before school starting time. **Twirlers and Color Guard members must finish out the semester playing instruments in the band. All members are required to continue band all year for the full year credit.**

Wind Ensemble (W2 - 2nd Semester – pending on auditions)

At the conclusion of the marching season, all members will audition for placement in one of two concert bands for the spring semester to be offered during White 1 and White 2. Students who audition for placement in Wind Ensemble must be enrolled in a full year of band. Instructor permission is required

after completing an audition for anyone who has not been enrolled in band during the past year or for any student who has never been a part of the band program. The wind ensemble plays a variety of music from classical to popular. Solos and ensembles are elective by the member(s). Every effort is made to foster an appreciation for music through the medium of concert performance.

Jazz Ensemble 2 (Blue 1)—year

9th, 10th, 11th, 12th—1 Fine Art credit

Prerequisite: Band membership (except guitar and piano), audition, or instructor approval.

Jazz Ensemble 2 is a performing group consisting of saxes, trumpets, trombones, piano, bass guitar, drum set, and aux. percussion. It serves as a preparatory group for Jazz Ensemble I. Emphasis is placed on fundamental jazz styles, articulation, and solo improvisation. This course begins where junior high jazz band ended and continues to build upon those skills learned in previous years to bridge the gap between junior high beginning jazz and high school advanced jazz. Jazz 2 performs at contests, basketball games, and community events and concerts. Auditions are mandatory for all members.

Jazz Ensemble 1 (Blue 1)—year

9th, 10th, 11th, 12th—1 Fine Art credit

Prerequisite: Band membership (except guitar and piano), audition, or instructor approval.

Jazz Ensemble 1 is a performing group consisting of the following instrumentation: 2 alto saxes, 2 tenor saxes, 1 bari sax, 4-5 trumpets, 4-5 trombones, 1 bass guitar, 1-2 piano, 1 guitar, 1 drum set, and 1-2 aux. percussion. This advanced performing ensemble requires experience in improvisation as well as advanced skills from all members. Music selections will require exemplary musicianship. Private lessons are highly encouraged for members of this group. Jazz 1 performs at contests, basketball games, and community events and concerts. Auditions are **mandatory** for all members. Members of this group will most likely be chosen from Jazz 2. Standards are set high and the expectations are many.

World Percussion

9th, 10th, 11th, 12th Grade – ½ Fine Art credit

This is a semester long course that will be based on introducing students to percussion instruments. Students will be asked to participate both by discussion and by playing the instruments we are covering. Students will also learn the fundamentals of percussion including reading notes on a staff, learning to count rhythm, learning key signatures, and learning music terms that apply to percussion.

In Tune with Music

9th, 10th, 11th, 12th Grade – ½ Fine Art credit

This Course provides students the opportunity to learn major music facts and historical musical events throughout history. The Course starts with the creation of music and moves chronologically by major time period (Medieval, Renaissance, Baroque, Classical, and Romantic). The goal of this course is students will have the capability to identify major changes in music history and the major composers within that time period.

Guitar Studio

9th, 10th, 11th, 12th Grade - ½ Fine Art Credit

This one-semester course is designed for 9-12 grade students with no previous guitar experience, but students with guitar experience are welcome! In the first half of the semester, students will receive guidance and direction in solving problems related to playing the guitar at a beginner's level. In the second half of the semester, students will pick several songs of their choice to learn and perform in class for analysis and continued learning. The focuses on techniques will include: correct posture, music theory with note and rhythm reading, aural skills, flat-picking, singing/playing songs, rhythmic strumming patterns, chord study, finger-picking styles, musical forms, and improvisation. The ultimate goal of the class is for students to be able to continue playing guitar after the class has ended, either with or without an instructor. Guitars are provided, but students may bring their own.

Advanced Guitar Studio

9th, 10th, 11th, 12th Grade - ½ Fine Art Credit

Prerequisite: Guitar Studio or audition with instructor

This one-semester course is designed for 9-12 grade students that have guitar playing experience by either successfully passing the initial Guitar Studio class, or by audition with the instructor to test out of beginning techniques. Students will begin where Guitar Studio left off, and build upon the basic techniques with more advanced strumming patterns, advanced rhythms, advanced solo melodies, finger-picking patterns, and sound manipulations. Areas of concentration include: correct posture, note reading, aural skills, flat-picking, playing songs with lyrics, rhythmic patterns, chord study, finger-picking styles, musical forms, and improvisation. In the first half of the semester, students will receive guidance and direction in solving problems related to playing the guitar at a more advanced level. In the second half of the semester, students will pick several songs of their choice to learn and perform in class for analysis and continued learning. Guitars are provided, but students may bring their own!

Concert Choir

9th, 10th, 11th, 12th Grade - 1 Fine Art credit

Concert Choir auditions are open to anyone dedicated to hard work and excellence. Auditions are the 2nd week in April or by appointment.

Concert choir is an **audition only choir**. Members will learn how to read music, identify key signatures, vocally match pitch and vowel shapes, have a desire to create beautiful music, and work well with others to create a full choral sound. This choir will perform in all concerts and compete at the state music contest. This course is a full-year commitment.

Suite Sounds

9th, 10th, 11th, 12th Grade (Females only) – 1 Fine Art credit

Suite Sounds auditions are open to anyone dedicated to hard work and excellence. Auditions are the 2nd week in April.

Suite Sounds is our women's-only auditioned show choir. It is comprised of a very select group of musicians who sing and dance to pop tunes. Members will learn to read music, identify key signatures, vocally match pitch and vowel shapes, have a desire to create beautiful music, and work well with others to create a full choral sound. Fees up to \$300 for costuming will be the responsibility of the student. This class also has mandatory outside-of-school rehearsals, competitions, and several community performances throughout the year. This choir will also perform in all concerts and compete at the state music contest. This class is a full-year commitment.

Soundwave

9th, 10th, 11th, 12th Grade (Male and Female) – 1 Fine Art credit

Soundwave auditions are open to anyone dedicated to hard work and excellence. Auditions are the 2nd week in April.

Soundwave is our mixed auditioned show choir. It is comprised of a very select group of musicians who sing and dance to pop tunes. Members will learn to read music, identify key signatures, vocally match pitch and vowel shapes, have a desire to create beautiful music, and work well with others to create a full choral sound. Fees up to \$300 for costuming will be the responsibility of the student. This class also has mandatory outside of school rehearsals, competitions, and several community performances throughout the year. This choir will also perform in all concerts and compete at the state music contest. This class is a full-year commitment.

PATH OF BUSINESS, MANAGEMENT & TECHNOLOGY

BUSINESS MANAGEMENT & ADMINISTRATIVE CLUSTER

Business Computers

9th, 10th Grade – ½ Practical Art credit

This course is required for students going into the Business pathway and is a prerequisite for all upper-level Business classes. Students will learn to enhance their computer software skills and prepare for a

wide variety of careers. Students will learn the basics of Word, Excel, and PowerPoint, which will enable them to work more effectively and productively in their other high school classes as well as in the workforce. This course is an excellent preparatory class for any career cluster or major in college.

Introduction to Business

9th, 10th Grade – ½ Practical Art credit

An interactive exploratory course into a variety of business topics including marketing, management, financial management, human resources, and business ownership. This class will provide a foundation for future business courses and prepare students to be wage earners, consumers, and to make business and economic decisions.

Business Law

11th, 12th Grade – .5 Practical Art credit

Prerequisite: Business Computers

Students will explore the laws that affect businesses, consumers, and young adults. Students study real cases, participate in a mock trial, and apply the law to day-to-day situations. Curriculum includes sources of laws, consumer law, function of civil and criminal courts, criminal and tort law, and contracts.

Business Communication

10th, 11th Grade – ½ Practical Art credit

Prerequisite: Business Computers

This course will enhance students' ability to effectively communicate in both the professional and educational setting. Hands on application using technology to develop oral communication skills such as making presentations, giving instructions, interviewing and making reports in an effective manner is reinforced in this course. Current topics, such as the proper use and management of social media, will be included.

Advanced Computer Applications (Crowder Dual Credit Option)

11th, 12th Grade – ½ Practical Art credit

Prerequisite: Business Computers with an 80% or higher

Students who elect to take the class for dual credit will earn 3 credit hours. The Crowder course title is *BSAD 125 - Computer Applications*. The optional college course fee is currently \$60 per credit hour (subject to change yearly).

This course is an advanced study in word processing, spreadsheet, and database activities. Students will utilize and integrate Microsoft Word, Excel, and Access. Excel will be used to build, format, and enhance worksheets and charts. Students will use Access to create, edit, and query databases. Juniors and seniors may receive dual credit for this course through Crowder. It will replace a mandatory freshman course at most colleges. This course is an excellent complementary elective for any career cluster or major.

Business Leadership

11th, 12th Grade – 1 Practical Art credit

Prerequisite: Business Computers, Successful completion of at least one full credit of Business classes and previous involvement in FBLA or with special permission from the instructor.

This course is project-based. Students will work on several FBLA projects throughout the year. Students will practice various multimedia skills and work to enhance their team leadership skills. Students will develop a portfolio, which will include all projects completed in this course. This course is an excellent complementary elective for any career cluster or major.

Web Page Design

10th, 11th, 12th Grade – ½ Practical Art credit

Prerequisite: Business Computers with a "C" average or above

This course is designed to provide students with the knowledge and skills needed to design, implement, and maintain a website. Students create web pages using Dreamweaver, and HTML. The course curriculum includes creating web pages and maintaining existing pages for our school's website. Web

Page Design provides content for knowledge and skills required in the technology-based workplace and is an excellent complementary elective for any career cluster or major.

FINANCE CLUSTER

Personal Finance (EL section available for students in the EL Program)

10th, 11th, 12th Grade – 1/2 Practical Art credit and required for graduation.

This course allows students to solve real-life problems as related to business, personal and financial matters. Topics include consumerism, wages and benefits, money and banking, budgeting, buying insurance and using credit. The course also focuses on formatting documents for individual needs, setting up accounts, balancing a checkbook and writing checks. Dave Ramsey's curriculum and workbook are included in the course.

Banking and Finance

11th, 12th Grade – 1/2 Practical Art credit

Prerequisite: Business Computers

Students will explore topics such as economic, financial, technological, international, social, and ethical aspects of banking and finance. Interactive learning will provide a framework to understand basic terminology and concepts needed to become competent consumers, employees, and entrepreneurs.

Business Law

11th, 12th Grade – 1/2 Practical Art credit

Students will explore the laws that affect businesses, consumers, and young adults. Students study real cases, participate in a mock trial, and apply the law to day-to-day situations. Curriculum includes sources of laws, consumer law, function of civil and criminal courts, criminal and tort law, and contracts.

Accounting 1

10th, 11th, 12th Grade – 1 Practical Art credit

Prerequisite: Business Computers

This course is designed to help students develop the skills necessary for the highly technical interaction between accounting and business and to develop an understanding of the steps of the accounting cycle. Emphasis will be placed on accounting concepts, principles, and practices utilizing a manual and computerized accounting packets. Accounting 1 is in the Business Management & Administration Cluster and Finance Cluster of courses identified by the U.S. Department of Education.

Accounting 2

11th, 12th Grade – 1 Practical Art credit

Prerequisite: Accounting 1

This course expands the student's understanding of accounting by practicing managerial accounting and cost accounting for a merchandising and manufacturing business. Students develop competence in using subsidiary ledgers, preparing financial statements, and performing end-of-period procedures. Students will be involved in a job internship in an accounting field. Accounting 2 is in the Business Management & Administration Cluster and Finance Cluster of courses identified by the U.S. Department of Education.

Business Co-Op (BOE)

11th, 12th Grade – 1 or 2 Practical Art credits – Minimum of 10 hours work per week

Requirements: Application (See Ms. Bartlett)

This internship option is offered to students who are enrolled in any course within the Business Department. This allows qualified students to be excused from school a portion of the day to work in one of the approved businesses of the Carthage area. Juniors can be excused for one block out of eight, while seniors can be excused each day for one to two blocks. The student intern earns credit toward graduation for both the class and the Co-Op Program. Up to two hours of credit can be earned for the internship, depending on the average number of hours the student works each week.

Office Management

10th, 11th, 12th Grade – 1 Practical Art credit

Prerequisite: Business Computers with a “C” or above

In this course, students will develop the qualities, knowledge, and skills necessary for working in an administrative office setting. We will look at how individuals in the medical office field perform administrative duties. The content includes the use of technology to develop communication skills, the performance of office procedure tasks, and the production of quality work using advanced features of business software application. In addition, this course provides training or skills in the following areas: medical terminology used in the office, communication skills, ethical responsibilities, telephone procedures, appointment scheduling, filing procedures, mail processing procedures, and professional resume development. Students in this course will have the opportunity sit for the Microsoft Office Specialist certification and the Medical Administrative Assistant Certification

INFORMATION TECHNOLOGY CLUSTER

Computer Programming

9th, 10th, 11th, 12th Grades (Priority given to upperclassmen) – 1 Practical Art credit

This course uses C# as the programming language for software development; however, the basic programming concepts presented can be applied to a number of other languages. Instead of focusing on the syntax of the C# language, this course uses the C# language to present general programming concepts. This class introduces you to elementary algorithms and basic programming so that you can design and implement a variety of computer-based solutions.

Advanced Computer Programming

10th, 11th, 12th Grades – 1 Practical Art credit

Prerequisite: Computer Programming

Computer science is not a spectator sport! If you're a motivated student, you'll learn much more from actually solving problems, designing advanced algorithms and coding programs. Projects will include a divergent section of topics such as developing web based applications, and mobile device applications. Heard of Virtual Reality? The Oculus Rift and Microsoft HoloLens are two devices that you'll get to explore and program simple virtual tours with. While the primary teaching language is C#, new languages will also be explored.

3D Modeling, Animation & Game Development

9th, 10th, 11th, 12th Grades – 1 Practical Art credit

First semester, students will develop 3D modeling & animation skills using various software, through storyboarding, 3D modeling, lighting, texture mapping, and post-production editing. These skills are used in advertising, game design, movie effects, aerospace, automotive development and architectural design. Second semester, students will create and develop a game in Unity 3D, applying your modeling and animation skills from the first semester.

Computer Technology

9th, 10th, 11th, 12th Grades – 2 Practical Art credits

Computer Technology is designed to prepare the student for certification as a CompTIA A+ PC Repair Technician. CompTIA A+ certification nearly guarantees the student a well-paying position in the field of computer technology. Carthage Technical Center's Computer Technology program is based on state of the art curriculum. Hands-on labs help to develop student competence. Students completing this course will gain knowledge on the various components used to build and upgrade personal computers, including CPUs, RAM, bus types and peripherals. They will install and configure various windows operating systems.

Computer Networking 11th or 12th Grades – 1 Practical Art credit

Prerequisite: Computer Technology (No exceptions unless taking Comp Tech the same year)

The world runs on networks and you can run the network. First semester your introduction to the fundamentals of networking concepts and technologies will prepare you for exciting hands-on experiences that will add to your tech skills toolbox. Areas of study include: OSI model, TCP/IP model, MAC and IP addressing, cable installation, and basic LAN equipment setup. Second semester the course

is designed to prepare students for the responsibilities of being a network administration technician using the Microsoft Windows Server family of server operating systems. It provides hands-on experience incorporating Microsoft's client/server-based products such as Active Directory (AD), Internet Information Services (ISS), and Distributed File System (DFS).

Tiger Tech Internship

11th, 12th Grades – 1 Practical Art credit

Prerequisites: Computer Technology (at least), and Computer Networking or Instructor approval

Use your technical computer skills to help your school and community. Gain valuable hands on experience while troubleshooting and repairing teacher's personal computers. Set up labs for the IT courses and assist in maintaining the lab and classroom equipment.

District IT Internship

12th Grade – Minimum of 2 blocks/ Interview required – 1 Practical Art credit

Prerequisite: Computer Technology and Computer Networking

Would you like to get paid for going to school? This course offers students an opportunity to gain valuable on the job experience working as a paid intern for the school district's technology department. Students utilize skills obtained in Computer Technology/Networking to assist in the support of the district's 2500 plus personal computers. Students will setup and maintain computer labs, perform customer service call center activities, and troubleshoot computer and network issues across the district.

MARKETING SALES AND SERVICE CLUSTER

Marketing 1

10th, 11th, 12th Grade – ½ Practical Art credit

Prerequisite: Business Computers

This course prepares students for careers in business, marketing, management, and entrepreneurship. Students develop competencies in business fundamentals including human relations, communications, selling, promotion, and financing. This instructional program emphasizes the competencies necessary for an individual to achieve success in advertising, buying, fashion merchandising, banking, tourism, and business ownership. The importance of the free enterprise system in a global economy and the American work ethic is stressed.

Marketing 2

11th or 12th grade - ½ Practical Art Credit

Prerequisite: Marketing 1 or permission of instructor

Marketing 2 is a semester, one-half unit course for seniors interested in a career in the field of marketing. Students will study communication skills, business ethics, branding and packaging, target marketing, consumer behavior and independent marketing research.

Sports and Entertainment Marketing I

10th, 11th, 12th grade - ½ Practical Art Credit

Prerequisite: Business Computers

This course will help students develop a thorough understanding of the marketing concepts and theories that apply to sports and sporting events. The areas this course will cover include basic marketing, target marketing and segmentation, sponsorship, event marketing promotions, sponsorship proposals, and implementation of sports marketing plans. This course will also delve into promotion plans, sponsorship proposals, sports marketing plans, and event evaluation and management techniques.

Sports and Entertainment Marketing II

10th, 11th, 12th grade - ½ Practical Art Credit

Prerequisite: Sports and Entertainment Marketing I or permission of instructor

Sports and Entertainment Marketing II is an advanced course designed to build upon students' prior knowledge of sports and entertainment marketing. Students will develop a thorough understanding of advanced marketing concepts and theories as they relate to the sports and entertainment industries.

Students will investigate the components of branding, sponsorships and endorsements. Students will gain real-life experience by developing, promoting, and selling CHS athletics sponsorship packages for local businesses. The course also supports career development skills and explores career options.

Intro to Creative Media (formerly Intro to Multimedia)

9th, 10th Grade – ½ Practical Art credit

This course is designed to introduce and practice the fundamentals of video, audio and graphics production using Adobe Suite software programs. Students will gain basic experience in animation, graphic design, and video production. Students will study and apply all aspects of multimedia production including planning, scripting, and storyboarding to generate projects including elements of text, audio, video, animation, photographs, and graphic images.

Media and Advertising I (Formerly Multimedia 1)

10th, 11th, 12th Grade – 1 Practical Art credit

Prerequisite: Grade of B or higher in Intro to Creative Media or an application with instructor approval

Media and Advertising I will explore the video production and multimedia marketing fields. Throughout this year-long course, students will work with computer software and electronic equipment vital in the fields of Video Production and Media Delivery. Students will create news stories, commercials, music videos, public service announcements and more. This hands-on class will teach students proper camera techniques, editing skills, lighting, audio, and studio production.

Media and Advertising II (Formerly Multimedia 2)

11th, 12th Grade – 1 Practical Art credit

Prerequisite: Grade of B or higher in Multimedia 1 and an application with instructor approval

Media and Advertising II is designed to expand on skills taught in Media and Advertising I. Students will build upon skills specific to video production including video editing and filming, editing audio, special effects, animation, and graphic design. Advanced skills in Adobe Premiere, After Effects and Photoshop will be explored to create dynamic productions. Students are required to be creative, responsible and professional. Students are highly encouraged to either have previously taken a Marketing class or enroll in a Marketing class while taking M&A II.

Media and Advertising Capstone (Formerly Advertising Multimedia Capstone)

11th, 12th Grade – 1 Practical Art credit

Prerequisite: Grade of B or higher in Multimedia 1 and an application with instructor approval

Students in Media and Advertising Capstone will also work closely with the school district to create professional promotional videos and with local businesses to sell, create and display advertisements to be shown at CHS athletic events. Students will also be responsible for all sports programming during the fall, winter and spring sports seasons and operating the video board. Students are required to be creative, responsible and professional. Students are highly encouraged to either have previously taken a Marketing class or enroll in a Marketing class while taking M&A Capstone. This course will prepare students for a possible career in video content creation, social media, filmmaking, and all digital media platforms.

PATH OF INDUSTRIAL & ENGINEERING TECHNOLOGY

ARCHITECTURE & CONSTRUCTION CLUSTER

Intro to CTE (Career and Technical Education) (EL section available for students in the EL program)

9th grade - .5 Practical Art credit

This course will be an introduction to career and technical education programs. Students will be exposed to computer science, health science, machining and manufacturing, agriculture, engineering, carpentry, criminal justice, and family and consumer sciences. This broad introduction class will help students find a program that perhaps they may choose as a career choice after high school.

Introduction to Industrial Trades

9th, 10th Grade - .5 Practical Art credit

This is an introductory course preparing students who are interested in machining, construction, robotics, and manufacturing. Students will engage in project based learning lessons with hands on activities to reinforce the content. Units of student include industrial shop safety, math specific to measurement, the applications of precision measurement tools, manufacturing processes, materials and their applications, mechanical fasteners, manufacturing mechanics, basic electrical circuits and measurement, basic blueprints/schematic reading and drawing.

Carpentry Core

9th, 10th Grade - .5 Practical Art Credit

Students are responsible for the cost of proper work clothes, \$15 shop fee and project fees (amount TBD).

The course is intended for students who are interested in the many rewarding careers in the construction industry. These students should possess characteristics such as dedication to hard work, pride in a job-well-done, an overall good work ethic and also the ability to be productive alone and also while working with others toward a common goal.

Students will learn about and use basic hand tools and power tools with much emphasis on maintenance and safe operation of these tools. They will learn about standard lumber, engineered lumber, nails, fasteners, sheathing materials and various other building materials that are utilized in the construction industry. Carpentry students will also gain a better understanding of Math practices that are commonly used in the construction industry. The course also utilizes the Carpentry Career Connections curriculum and completes the Industry Recognized Credential (IRC).

Fundamentals of Carpentry

10th Grade - 1 Practical Art Credit

Prerequisite: Must have passed Carpentry Core with a 70%. Students are responsible for the cost of proper work clothes, \$15 shop fee and project fees (amount TBD).

This course will build on the skills learned in Carpentry Core. Students utilize basic hand tools and power tools with much emphasis on maintenance and safe operation of these tools. The curriculum will cover various building materials and concepts that are utilized in the construction industry. Students will gain experience on heavier equipment and complete hands-on projects that will further develop their skills to prepare them for Carpentry 1. Carpentry students will also gain a better understanding of math practices that are commonly used in the construction industry.

Must Pass OSHA Safety within first three weeks of the class, ineligible to be in shop until passed, and must have proof of current insurance and medical form on file.

Carpentry 1

11th, 12th Grade – 2 Practical Art credits

Requirements: Must have passed Fundamentals of Carpentry with a 70%. Students will be bussed to the building site regardless of weather conditions. Students are responsible for the cost of proper work clothes, \$15 shop fee and project fees (amount TBD).

This course is designed to prepare the students for entry level skills for different types of construction work. They will be introduced to reading a tape measure, working with wood and metal framing, installing and finishing sheetrock, concrete work, and other areas of the construction field. The Carpentry 1 course is in partnership with Career Connections.. The course curriculum follows Career Connections guidelines, which are competency-based and includes written and performance evaluations. Career Connections provides a link between the students and industry; therefore, providing students with future employment opportunities. The course also utilizes the Carpentry Career Connections curriculum and Industry Recognized Credential (IRC). Students will have the opportunity to obtain OSHA 10 and Forklift certifications in this class as well. **Must Pass OSHA Safety within first three weeks of the class, ineligible to be in shop until passed, and must have proof of current insurance and medical form on file.**

Carpentry 2

11th, 12th Grade – 2 Practical Art credits

Prerequisite: Carpentry 1 passed with an "80%" average or by teacher recommendation and must be able to read a tape measure within 1/16 of an inch. *Students are responsible for the cost of proper work clothes, \$15 shop fee and project fees (amount TBD).*

This course gives students hands-on experience in framing, exterior and interior finish work, sheetrock installation and finish, leadership roles, and other areas of the construction field. The Carpentry 2 course is in partnership with Career Connections and the Carpenters' Union. These partnerships provide students with a more fulfilling future plus the pride in and demand for their proven craftsmanship. The course curriculum follows the Career Connections guidelines, which are competency-based and includes written and performance evaluations. Students will have the opportunity to obtain OSHA 10 and Forklift certifications in this class as well.

Drafting 2 or 3, Math Analysis and Trigonometry, and Business Courses are strongly recommended with this course. **Must Pass OSHA Safety within first three weeks of the class, ineligible to be in shop until passed, and must have proof of current insurance and medical form on file.**

MANUFACTURING CLUSTER

Intro to CTE (Career and Technical Education)

9th grade - .5 Practical Art credit

This course will be an introduction to career and technical education programs. Students will be exposed to computer science, health science, machining and manufacturing, agriculture, engineering, carpentry, criminal justice, and family and consumer sciences. This broad introduction class will help students find a program that perhaps they may choose as a career choice after high school.

Introduction to Industrial Trades

9th, 10th Grade - .5 Practical Art credit

This is an introductory course preparing students who are interested in machining, construction, robotics, and manufacturing. Students will engage in project based learning lessons with hands on activities to reinforce the content. Units of student include industrial shop safety, math specific to measurement, the applications of precision measurement tools, manufacturing processes, materials and their applications, mechanical fasteners, manufacturing mechanics, basic electrical circuits and measurement, basic blueprints/schematic reading and drawing.

Machine Technology 1

10th, 11th, 12th Grade – 2 Practical Art credits

This course provides classroom instruction and lab experiences related to metalworking. It focuses on the operation of equipment such as the lathe, milling machines, grinders, drilling machines, precision measuring instruments, and hand tools. Blueprint reading and math are important parts of this course. Students who enroll for this course should enjoy working with machines and making metal projects.

Machine Technology 2

11th, 12th Grade – 2 Practical Art credits

This course includes advanced instruction machining metal. The course focuses on milling machines, boring and drilling, the use of surface grinders, vertical and horizontal boring and drilling machines, basic study of CNC equipment, and job seeking. Students in this program can qualify to take the NIMS (National Institute for Metalworking Skills) Measurement, Materials and Safety Exam and become certified.

Machine Technology 3

12th Grade – 2 Practical Art credits

Prerequisite: Machine Technology 2; BY INSTRUCTOR INVITATION ONLY

This course is a continuation of Machine Technology 2. Students will complete self-directed assignments.

Machine Technology Internship (SOE)

11th, 12th Grade – Minimum of 7 ½ hrs work per week / Offered 8 weeks in 4th qtr

This course is offered to students who are enrolled in Machine Technology in their 2nd and 3rd year. This allows qualified students to be excused from school a portion of the school day to work in one of the approved businesses in the Carthage area. The student intern can earn credit toward graduation through this program.

Welding- Introduction or Advanced (placement based on instructor approval)

11th, 12th Grade – .5 Practical Art credit

This course focuses on the physical properties of metals as well as the study and practice of welding. Students learn plasma arc cutting and electrode selection. They also study welding techniques (arc welding, mig welding). In addition, students study safety issues and learn to read blueprints.

Computer-Aided Manufacturing

10th, 11th Grade

Prerequisite: Introduction to Industrial Trades

In this course students will engage in project-based learning lessons with hands-on activities to reinforce the content. Units of study will include 2D and 3D CAD, metrology/3D scanning, reverse engineering, 3d printing, laser engraving/cutting, CNC plasma cutting, basic CNC tube fabrication, robotic welding, and basic CNC machine turning and milling. Students will have the opportunity to earn industry related credentials pertaining to safety, industrial robotics, and CNC machining. **Must Pass OSHA Safety within first three weeks of the class, ineligible to be in shop until passed, and must have proof of current insurance and medical form on file.**

CNC Machining

11th, 12th Grade

Prerequisite: Introduction to Industrial Trades, Machine Technology, Computer-Aided Manufacturing, Industrial Robotics (depending on Program Pathway).

In this course students build upon the knowledge and skills obtained in the Computer-Aided Manufacturing or Machine Technology courses and progress to using computer-aided machining software to program milling and turning operations. Additionally, students will complete hands-on lessons in machine safety, set-up, operation, and maintenance of CNC milling and turning machines. Students will complete project based lessons to machine parts simulating agricultural, automotive, and aerospace components. Students will have the opportunity to earn industry related credentials specific to CNC machine operation. **Must Pass OSHA Safety within first three weeks of the class, ineligible to be in shop until passed, and must have proof of current insurance and medical form on file.**

SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS CLUSTER

Advanced Drafting

11th, 12th Grade – 1 Practical Art credit

Prerequisite: Introduction to Engineering Design with B- or higher

This course involves the use of parametric drafting technology in the study of mechanical drafting, threads and fasteners, detail and assembly drawings, section views, weldment drawings, and basic dimensioning and tolerancing techniques, along with further development of residential architecture drafting techniques required to design and draft floor plans, exterior and interior details, and structural representations.

Physical Science

9th Grade – 1 Science credit

This course is an introductory science course designed to build the science and mathematics (algebra) skills of the students in order to help them better function in the remainder of the high school science sequence. Major concepts in motion, forces, energy, and basic chemistry are developed. Students will also learn to build scientific models to describe the physical world by analyzing the results of laboratory

experiments. The skills of experimental design, data collection, and graphical analysis will be emphasized, allowing students to express these models verbally, diagrammatically, and algebraically.

Honors Physical Science

9th Grade - 1 Science credit

Prerequisite: Student must also be concurrently enrolled in Geometry.

This course is an introductory science course designed to build the science and mathematics (algebra) skills of the students in order to help them better function in the remainder of the high school science sequence. Major concepts in motion (including projectiles), forces, Newton's Laws, and energy are developed, as well as an understanding of basic chemistry. Students will also learn to build scientific models to describe the physical world by analyzing the results of laboratory experiments. The skills of experimental design, data collection, and graphical analysis will be emphasized, allowing students to express these models verbally, diagrammatically, and algebraically.

Chemistry

10th, 11th, 12th Grade – 1 Science credit

Prerequisite: Physical Science, Algebra 1, must be concurrently enrolled in a Math Class

Recommend: Strong math background and teacher recommendation

Chemistry is the science that studies matter, its structure, composition and the changes it goes through. The students will gain a deeper understanding of matter by studying the following topics throughout the year: properties of matter, atomic structure, chemical bonding, chemical formula writing, balancing equations, stoichiometry, the gas laws, the solution process, acids and bases, thermo chemistry, reaction rates, kinetics and organic chemistry. The study of chemistry can give students a better understanding of the physical world, provide a good background for many occupations and give a solid foundation for advanced study of the sciences. This course is highly **math driven**.

Honors Chemistry

10th, 11th, 12th Grade – 1 Science credit

Prerequisite: Honors Physical Science or Physical Science with a B or higher AND a strong background in math and/or students who have completed AP Physics I with a strong math background. Teacher recommendations will also be taken.

Honors Chemistry is a full year course that focuses on the same concepts that are covered in a general chemistry course; however, this course includes more depth and exposure to advanced topics, as well as more quantitative analysis and computational reasoning than general chemistry. The Honors Chemistry course will move at a faster pace especially with basic chemistry and mathematical concepts, and will provide a strong foundation for students who are considering a science, technology, engineering, mathematics, or related career.

Biology

10th, 11th, 12th Grade – 1 Science credit

EOC required before graduation.

Prerequisite: Physical Science

Recommended: A Science background/9th Grade Physical Science or Conceptual Biology and/or Environmental Science.

Biology is a study of the cellular structure and functions of living organisms as well as their relationship to the environment. A comparative study of the animal kingdom includes evolutionary relationships. Microscope lab experience is also included. The purpose of this course is to develop an appreciation for living organisms and the world in which we live and to prepare students for higher-level study in the sciences.

Advanced Placement Biology

11th, 12th Grade – 1 Science credit

Prerequisite: Minimum requirements of a 3.25 GPA and a “B” or above in General Biology and teacher recommendation.

AP Biology is a college level study designed for the highly motivated and self-disciplined student. It includes the following areas of study: molecular and cellular biology, genetics, human anatomy and

physiology, and a comparative study of plants and animals with emphasis on their evolutionary relationship and their role in the environment and society. AP Laboratory experimentations are included. Advanced Placement Biology is very demanding and challenging. College credit may be earned upon the successful completion of the AP Biology Examination. The AP Exam is recommended. (Chemistry, Anatomy and Physiology may be considered as helpful supplements for the AP Exam.)

Advanced Placement Chemistry

11th, 12th Grade – 1 Science credit

AP Chemistry Prerequisite: General Chemistry with a B or higher, B or higher Algebra 2, must be concurrently enrolled in a Math class, 3.25 GPA and teacher recommendation.

This course is designed for the highly motivated and self-disciplined student wanting to prepare for a college career in some field of chemistry or an area related to this field. It builds on and details the chemical concepts learned in the general chemistry course. This accelerated course is very beneficial to the college bound student since it requires the higher order thinking skills needed to survive and be successful in college. Advanced chemistry is very demanding and challenging.

AP Physics 1 (Missouri State University Dual Credit Option)

11th, 12th Grade – 1 Science credit

Prerequisite: Students must have completed Geometry with a B and be enrolled in Algebra 2. Students must have completed Physical Science.

Students who elect to take the class for dual credit will earn 4 credit hours. The Missouri State University course title is *PHY 100 - Survey of Physics w/Lab*. The optional college course fee is currently \$70 per credit hour (subject to change yearly).

AP Physics 1 covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It also introduces electric circuits. This course is equivalent to the first semester of a college course of algebra-based physics. Students can receive college credit for college physics 1 by taking the AP Physics test at the end of the school year.

AP Physics 2 (Class availability dependent on student enrollment)

12th Grade – 1 Science Credit

Prerequisite: Students must have completed Algebra II with a C and be enrolled in an upper math class. Students must have completed AP Physics 1 with a B or better.

AP Physics 2 covers fluid mechanics, thermodynamics, electricity and magnetism, optics, and atomic and nuclear physics. This course is equivalent to the second semester of a college course of algebra based physics. Students can receive college credit for college physics 2 by taking the AP Physics test at the end of the school year.

Survey of Physical Science (Crowder College Dual Credit Option)

11th, 12th Grade – 1 Science credit

Prerequisite: At least a B in Physical Science and interested in a college degree in any area other than Science or Engineering

Students who elect to take the class for dual credit will earn 4 credit hours. The Crowder course title is *PSYS 101- Physical Science*. The optional college course fee is currently \$60 per credit hour (subject to change yearly).

The basic principles and interrelations between physics, chemistry, earth science, and astronomy are examined in this class. The course satisfies part of the general education science requirement for an Associate of Arts degree.

Introduction to Engineering Design (IED) (Project Lead the Way)



9th Grade (10th and 11th Grade with instructor's permission) – 1 Practical Art credit

Prerequisite: Interest in engineering field, Concurrent enrollment in Algebra I, or Algebra I with a "C" or higher

Introduction to Engineering Design (IED) is a Project Lead the Way course that teaches problem-solving skills using a design development process. Models of product solutions are created, analyzed, and communicated using solid modeling computer design software (college credit opportunity).

Principles of Engineering (POE) (Project Lead the Way)

10th, 11th, 12th Grade – 1 Practical Arts credit

Prerequisite: Introduction to Engineering Design with a “C” or higher Algebra 1 with a “C” or higher.

Principles of Engineering is an introductory course in applied physics and engineering technology processes with emphasis on mathematical problem solving. Students develop a solid background in math skills and concepts as they move to each successive Project Lead the Way (PLTW) level. The PLTW engineering pathway utilizes the latest computer software and equipment the industry uses. Projects/Concepts are based on learning units with hands-on and activity-oriented team efforts. Certification tests are required in each PLTW course, with certification accepted in articulation agreements with designated colleges for specified course credits.

Civil Engineering and Architecture (CEA) (Project Lead the Way)

11th Grade 12th Grade – 1 Practical Art credit

Prerequisite: Algebra I with a "C" or higher, Introduction to Engineering Design with a "C" or higher, Principles of Engineering with a "C" or higher

Civil Engineering & Architecture is a Project Lead the Way course which provides an overview of the Civil Engineering and Architectural fields, while emphasizing the interrelationship and dependence of both fields on each other. Students will use the architectural software, Revit, to solve real world problems and communicate solutions to hands-on projects and activities. Certification tests are required in each PLTW course, with certification accepted in articulation agreements with designated colleges for specified course credits.

Engineering Design and Development (EDD) (Project Lead the Way)

12th Grade – 1 Practical Art credit

Prerequisite: Completion of IED, POE, and one of the following: DE, CEA, CIM. Instructor's permission only (Cost of course project is the student's responsibility)

This course allows teams of students to research, design, and construct a project to an open-ended engineering problem. Journals, centered on the engineering problem, are maintained and include notes, sketches, mathematical calculations for plans and problem solutions, computer software modeling, and scientific research. Teams present and defend their projects to a panel of engineers, business leaders and other professionals for review and feedback.

Pre-Algebra (EL Pre-Algebra is available for students in the EL program)

9th Grade -- 1 Math credit

Pre-Algebra reviews all operations for whole numbers, integers and rational numbers. Other topics studied are number theory, percent, probability, geometry, area, and volume. Variables are included whenever appropriate so that students will be prepared for later courses involving algebraic concepts. The Pre-Algebra class is designed for those students who have experienced difficulty mastering fundamental mathematical skills and concepts. Particular attention is given to the Core Competency/Key Skills objectives as recommended by Missouri Department of Elementary and Secondary Education.

Algebra 1 (EL Algebra 1 is available for students in the EL program)

9th, 10th, 11th, 12th Grade – 1 Math credit

Prerequisite: Student should have received a C- or better in math 8th or completed Pre-Algebra EOC required for graduation.

This course presents rational and irrational numbers and expressions, linear and quadratic equations, graphing and their applications.

Elements of Geometry

10th, 11th, 12th Grade – 1 Math credit

Prerequisite: Algebra I with a C-, D+, D, or D- (must have passed both semesters)

This course deals with practical applications of measurements, lines, angles, areas, volumes, and basic trigonometry. These topics lead to geometry in the workplace. This is a good, practical course for non-college-bound students.

Geometry

10th, 11th, 12th Grade – 1 Math credit

Prerequisite: Semester grades of C or higher in Algebra 1

This course investigates the relationships among points, lines, planes, polygons, circles, and solids. Students will investigate the Euclidean system of earth measurement by studying practical applications of geometry and developing logical reasoning skills needed to construct a formal argument.

Algebra 2

10th, 11th, 12th Grade – 1 Math credit

Prerequisite: Semester grades of C or higher in Algebra 1/Geometry

This course presents systems of equations, conics, polynomial, exponential, and logarithmic functions, rational expressions, sequences, and series.

ACT Math (Fall Semester only)

11th, 12th Grade – ½ Math credit

Prerequisite: Successful completion of Algebra 1, Geometry and Algebra 2

This is a class for college-bound students wishing to review math concepts that are tested on the ACT exam. The six units of math content as well as test taking skills helpful for success on the ACT exam are covered in this course. It is expected that students enrolled in this class will plan to take the ACT exam in December.

College Algebra (Crowder College Dual Credit Option) Spring Semester only

11th, 12th Grade – ½ Math credit high school/3 college credit hours

Prerequisite: Algebra 2 and ACT subscore of 22 or higher in the Math section or equivalent score on Crowder College placement test.

Students who elect to take the class for dual credit will earn 3 credit hours. The Crowder course title is *MATH 135 – Algebra for Calculus*. The optional college course fee is currently \$60 per credit hour (subject to change yearly).

This is a class for all college-bound students, especially those who are not planning to study a mathematics specific field. This course covers college level concepts of algebra, equations and inequalities in one variable, graphs and functions, rational functions, conics, exponential and logarithmic functions, and systems of equations and inequalities.

Math Analysis and Trigonometry

11th, 12th Grade – 1 Math credit

Prerequisite: Algebra 2 and Geometry with a “C+” or better in both

This course studies logical thinking and graphing and analyzing functions, including polynomial, rational, exponential, and logarithms. Students will learn to apply trigonometric functions, trigonometric graphs, and triangular relationships to solve a variety of problems.

Advanced Placement Calculus

12th Grade – 1 Math credit

Prerequisite: Math Analysis and Trigonometry with a C+ or higher

This course studies variable quantities. It includes functions, limits, derivatives, integrals, and their applications.

College Prep Math

11th & 12th Grade – 1 Math credit

Prerequisite: Algebra 1, Geometry, Algebra 2

This course integrates the topics of arithmetic and algebra. The course is intended for students who need additional instruction to prepare for college-level math courses.

PATH OF HEALTH SERVICES

HEALTH SCIENCE CLUSTER

Principles of Biomedical Sciences (Project Lead the Way)



9th Grade (10th grade only with permission from instructor) – 1 Practical Art credit

Prerequisite: Interest in Medical Field, High grades in Math/Science. \$10.00 fee for lab coat, safety glasses.

This course provides an introduction to the biomedical sciences through exciting “hands-on” projects and problems. Student work involves the study of human medicine, research processes, and an introduction to bio-informatics. Students investigate the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious disease. A theme through the course is to determine the factors that led to the death of a fictional person. After determining the factors responsible for the death, the students investigate lifestyle choices and medical treatments that might have prolonged the person’s life. Key biological concepts including: homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease are embedded in the curriculum. Engineering principles including: the design process, feedback loops, and the relationship of structure to function are incorporated in the curriculum where appropriate. The course is designed to provide an overview of all the courses in the Biomedical Sciences program and to lay the scientific foundation necessary for student success in the subsequent courses.

Human Body Systems (Project Lead the Way)



10th Grade – 1 Practical Art credit

Prerequisite: Only open to students who have completed Principles of Biomedical Sciences with a 70% or better and a PBS End of Course exam score of 3 or better. \$10.00 fee for lab coat, safety glasses.

Students will 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. The systems will be studied as “parts of a whole,” working together to keep the amazing human machine functioning at an optimal level. Students will design experiments, investigate the structures and functions of body systems, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary actions, and respiratory operation. Students will work through interesting real world cases and often play the role of biomedical professionals to solve medical mysteries.

Medical Intervention (Project Lead The Way)



11th – 12th grade – 1 Practical Art credit

Prerequisites: Completion of prior PLTW Biomedical classes PBS and HBS with a 70% or better and HBS End of Course exam scores of 3 or better. \$20 fee for lab coat, safety glasses and membership dues

Students investigate the variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the lives of a fictitious family. These interventions are showcased across the generations of the family and provide a look at the past, present, and future of biomedical science.

Biomedical Innovation (Project Lead The Way)



12th grade – 1 Practical Art credit

Prerequisites: Prior PLTW Biomedical classes and/or Anatomy and Physiology, as well as a Medical Intervention grade of 70% or better and MI End of Course exam score of 3 or better. \$20.00 fee for lab coat, safety glasses and membership dues

In this capstone course students apply their knowledge and skills to answer questions or to solve problems related to the biomedical sciences. Students will design innovative solutions for the health challenges of the 21st century.

Athletic Training/Therapeutic Services 1

11th, Grade - 1 Practical Art Credit

Prerequisites: Biology, Principles of Biomedical Science and Human Body Systems OR Health Science Core

Students are educated and exposed to subjects such as: first aid, CPR/AED training, on field management of injuries, prevention of injuries, stages of rehabilitation and healing, rehabilitation modality usage, exercise uses in the rehabilitation process, exercise physiology theories, psychology of the injured athlete, administration of an athletic training facility, record keeping and documentation, competency skills of athletic training, sports nutrition, proper hydration practices, and taping and bracing of athletic injuries. Students will be exposed to clinical skills sets when aiding in injury evaluations and/or treatments of injured athletes. They will assist in pre-practice preparation of athletes where they will learn the skills of, but not limited to, taping, bracing, wound care, rehabilitation exercise, cleaning of facility, mentoring underclass students, modality usage etc. **Students must have current Medical Form and Insurance on file.**

Health Science Core

10th, 11th and 12th grade – 2 Practical Arts credits (2 blocks)

This course will provide the opportunity for students to build a solid foundation in every aspect of healthcare. Covered topics include Medical Terminology, Anatomy and Physiology, Health Careers and students will be trained in First Aid and CPR. Students will gain understanding and focus regarding their personal area of interest while developing their postsecondary educational and career goals. The curriculum is designed to prepare juniors for the CNA and CMA courses as well as for any healthcare-related course they may take after high school. **This course is a prerequisite for CNA and Clinical Medical Assisting.**

Clinical Medical Assisting

11th and 12th grade – 2 Practical Arts credits (2 blocks)

Prerequisites: Health Science Core

This course prepares students to receive a National Certification as a Clinical Medical Assistant. Students will be introduced to the knowledge and skill requirements for persons seeking a career in the physician office/urgent care setting. Areas of study will include information regarding management skills, communication skills, legal/ethical requirements and standards, infection control, diagnostic testing and various client care skills. This course will also incorporate Phlebotomy skills and will include hours in the lab practicing these skills. Students will have the opportunity to perform venipunctures on fellow students after several successful venipunctures have been performed on a simulator arm and student has passed a safety exam given by the instructor. Students must be 17 to perform these venipunctures and this portion will begin in January. Therefore, **students must be 17 by February 1st.** Students are eligible to sit for the Clinical Medical Assistant National Certification Exam when they are 17 years of age and can also sit for the Certified Phlebotomy Technician National Certification Exam at the age of 17. Students will be required to have at least a 75% at the end of each semester as well as have no more than 4 absences to sit for the exam. Health Science Core is a prerequisite for Clinical Medical Assisting, however, students can opt out of Health Science Core if they have had Bio-med courses. There is a \$149.00 charge for the CCMA exam and a \$105.00 charge for the CPT (Phlebotomy) exam. However, **the student is not required to sit for the exams.** Student will be expected to purchase scrubs for the class on their own.

Certified Nurse Assisting (Crowder College Dual Credit Option)

12th Grade – 2 Practical Art credits (2 blocks)

Prerequisites/Corequisites: Health Science Core. Students may petition AP Biology, A&P and BioMed 1 and 2 to replace the prerequisite of Health Science Core.

Course Requirements: Students must have an attendance record of at least 95% the previous year as well as participation in the Drug Testing Program as required for school-related extracurricular activities. Students must also submit to a background check through the Family

Care Safety Registry, which requires the individual to have a social security number/card (Social Security Card is also required to sit for the certification test). This background check must be turned in on the first day of school. This course is limited to 15 students per class, making it very competitive. Students who have high attendance and grades will be admitted first.

***December graduates are not eligible to take this class.**

Students who elect to take the class for dual credit will earn 7 credit hours. The Crowder course titles are *CNA 101 - CNA Techniques* and *CNA 102 - CNA Clinical Experience*. The optional college course fee is currently \$60 per credit hour (subject to change yearly).

CNA is a one-year (two semesters) course. This course is designed for students who are interested in a professional health care career. The curriculum places emphasis on defining the roles and responsibilities of the health care team through a variety of classroom and clinical experiences. Students gain understanding and focus regarding their personal area of interest while developing their postsecondary educational and career goals. The Missouri State Board of Nursing requires students to participate in 75 classroom hours and 100 clinical hours to be eligible to sit for the CNA certification. Transportation to clinical sites is required for Carthage students.

Fees: \$60 Course Fee which includes: gait belt, CTC patch, clinical bag, two-step TB test (subject to change if prices increase). Students must have a background check through the Family Care Safety Registry which is an additional \$14.25. Students will also be responsible for obtaining a flu shot and providing documentation to attend clinicals at Mercy. Students must purchase Royal Blue Scrubs, wristwatch with a second hand, tennis shoes, 1" ring binder, 5 notebook dividers, and notebook paper. Certification exam is approximately \$125. SkillsUSA membership is \$30 (optional but encouraged). Students must have current Medical form and insurance on file.

Anatomy & Physiology

11th, 12th Grade – 1 Science high school credit, 4 college credit hrs.

Prerequisite: Minimum requirements are 3.0 GPA, General Biology with a "B" or above.

This is an advanced study of human structure and function emphasizing the body systems and disorders or conditions involved with each. Labs also include major landmark identification of skeleton, muscles and tissue types. Disorders involved with each body system are researched with an attempt to know current studies being conducted and future possibilities for new treatment and or cures. The purpose of this course is to introduce students with an interest in pursuing careers in a health field (i.e. medicine, nursing, physical therapy, radiology technician, etc.) to the structure and functioning of the human body and to provide a foundation for further college study in this area.

Health

9th Grade – ½ Physical Education credit and graduation requirement

The importance of health education has never been greater. Knowledge gained in health education affects attitudes and, consequently, behavior. This class coincides with this philosophy, as well as Missouri's secondary education initiatives. This class focuses on the relationship that exists among physical, mental, and social health. Students will learn that the decisions they make can promote their health and their enjoyment of life now and in the future. In addition, students will be provided the opportunity to apply their understanding of health knowledge in classroom assignments and discussions.

Personal Fitness (Boys or Girls)

9th, 10th, 11th, 12th Grade – ½ Physical Education credit

The primary objective of physical education class is to help students assume control and responsibility for their own lifestyles. This is accomplished through a variety of activities such as running, aerobic, circuit training, and fitness assessments. In addition to the fitness aspect, a variety of lifetime sports are also offered to allow the student the opportunity to develop an interest in activities they may pursue after their education is over. The purpose of the course is to develop and maintain a degree of physical fitness and to make students aware of proper health practices.

Cardio Fitness (Girls)

9th, 10th, 11th, 12th Grade – ½ Physical Education credit

The purpose of this course is to improve cardiovascular fitness, muscular endurance, flexibility and overall health through moderate to high intensity workouts. The workouts will consist of a variety of different

aerobic activities. Some of these activities include: aerobics, circuit training, 5k training, step aerobics, and interval training. Cardio Fitness will introduce students to a fun lifetime activity that increases their heart rates and will improve their overall health. This class will also demonstrate how to develop and commit to a workout routine.

Athletic Weights (Girls)

9th, 10th, 11th, 12th Grade – 1 Physical Education credit

Required: Students must be involved in at least one interscholastic sport.

This class is for athletes and designed to improve aerobic endurance and strength. Half of the class time will be devoted to weight lifting and the remainder is aerobic conditioning with activities such as running agility, plyometric, and jump rope. Each athlete will design a workout specific to his or her sport.

Athletic Weights (Boys)

9th, 10th, 11th, 12th Grade – 1 Physical Education credit

Required: Students must be involved in at least one interscholastic sport.

The purpose of this class is to expose the student to a number of different methods of strength training through strength training experiences, lectures, and assigned reading from handouts. Upon completion of the course, students will be independently capable of organizing, initiating, and continuing a weight-training program. The purpose of this course is to develop strength and fitness through a weight lifting schedule.

Power Walking

9th, 10th, 11th, 12th Grade – ½ Physical Education credit

Students will be walking street routes beginning with 1 ½ miles and working up to a distance of 3 miles. Students should be prepared to walk an hour with speeds to increase as distance gets longer. This is a great class for those wanting to have an aerobic workout and is an alternative to the traditional physical education class.

General Weights (Girls)

9th, 10th, 11th, 12th Grade – ½ Physical Education credit

Students enrolled in this class will be exposed to a number of different methods of weight training experiences, lectures, and assigned reading from handouts. In addition, students will develop or maintain a degree of physical fitness through a variety of activities such as running

General Weights (Boys)

9th, 10th, 11th, 12th Grade – ½ Physical Education credit

Students enrolled in this class will be exposed to a number of different methods of weight training experiences, lectures, and assigned reading from handouts. In addition, students will develop or maintain a degree of physical fitness through a variety of activities such as running.

Unified Physical Education

9th, 10th, 11th, 12th Grade – ½ Physical Education credit

This class combines students of all abilities to participate in developmentally appropriate activities including lifetime activities, physical fitness, and sport. Students will work together to increase competence and confidence in a variety of physical activities. Through ongoing leadership opportunities, members of this course will be empowered to help create a more inclusive and accepting school environment for all students.

PATH OF HUMAN SERVICES

HOSPITALITY & TOURISM CLUSTER

International Foods

9th, 10th, 11th, 12th Grade – ½ Practical Art credit

This introductory course will broaden students' outlook on a variety of topics. Students will engage in project-based learning with hands-on cooking labs and activities to reinforce the concepts. While focusing

on proper food preparation and procedures, this course introduces the student to international and ethnic specific cuisines. It includes instructions on the psychological, cultural, historical, and social influences on food choices in world cuisine. Availability of foods due to food production, food supply, legislation and regulations are discussed.

Intro to Culinary Arts

9th, 10th, 11th, Grade – ½ Practical Art credit

This introductory course will include the general study of cooking/culinary arts that may prepare individuals for a variety of jobs within the food service industry and the upper level culinary courses at CTC. Through project-based learning and hands on labs we will explore topical subjects such as baking and pastry arts as well as current culinary trends. This course will include instruction in food preparation; cooking techniques, equipment operation and maintenance; sanitation and safety. This course is designed specifically for students interested in continuing in the Hospitality/Restaurant Pathway and interested in careers in food service.

Foods and Nutrition

9th, 10th, 11th, 12th Grade – ½ Practical Art credit

This course will teach students the fundamentals of food preparation and nutrition. Emphasis will be placed on principles of nutrition, the relationship of nutrition to health, and the selection, preparation, and safety and sanitation. This course will feature cooking labs throughout the semester. Teaching strategies will include: lecture, cooperative learning, labs, demonstrations, individual projects, and a variety of hands-on activities. Assessments will include: observations, study guides, worksheets, tests, lab activities, and rubrics. This class is a prerequisite for ProStart I, ProStart II, and **Catering and Entrepreneurship**. *This class may not be repeated.*

ProStart Culinary Arts 1

10th, 11th, 12th Grade - 1 Practical Art credit

Prerequisite: Completion of Foods & Nutrition with a final average of 80% or better and FCCLA membership. Students who are interested in ProStart must meet with the instructor and demonstrate a serious interest in pursuing a career in the culinary industry.

This course is the first of a two-year School-to-Career program that introduces high school students to careers in food services and teaches them the basic skills and knowledge needed for success in the industry. Students participating in this course will get a head-start toward restaurant and food-service careers. On-the-job training and experience coupled with a comprehensive curriculum are the foundation of the program. All ProStart students are encouraged to participate in an internship. During this first year, students will receive instruction in customer relations, careers, food preparation, sanitation, workplace safety, and other current industry topics. The classroom provides the venue for job-relevant lessons, and the workplace provides hands-on learning and training. Students must pass a National Exam at the end of the year and continue on to year two of ProStart in order to be awarded a National ProStart Certificate. *This class may not be repeated.*

ProStart Culinary Arts 2

11th, 12th Grade - 1 Practical Art credit

Prerequisite: Successful completion of ProStart 1 with a final average of 80% or better and FCCLA membership.

This course will continue the curriculum in students' junior or senior year of a two-year School-to-Career program that introduces high school students to careers in food services and teaches them the basic skills and knowledge they need for success in the industry. On-the-job training and experience, coupled with a comprehensive curriculum are the foundation of the program. During this second course, students will receive instruction in nutrition, cost control, purchasing and inventory, desserts, global cuisine, and other current industry topics. The student may continue participation in an internship and will be given the National Exam at the end of the year. With successful completion of the ProStart 2 National Exam and internship hours, the student will be awarded with a National ProStart Certificate. *This class may not be repeated.*

Catering & Entrepreneurship

10th, 11th, 12th - 1 Practical Art Credit

Prerequisite: Completion of Foods & Nutrition with a final average of 80% or better.

This course is designed to prepare students for success in their future career and community lives. The course will focus on career development and preparation as well as entrepreneurship (starting a business and becoming your own boss). Whether students end up working for themselves or someone else later in life, this course will help prepare students to enter the workforce with effective communication, problem-solving, and decision-making skills. This course allows students to gain entrepreneurial knowledge and skills by participating in a student-run take home meal business as well as many other projects. Students are encouraged to take this course along with ProStart 1 and/or ProStart 2. This course may only be repeated with instructor approval.

HUMAN SERVICES CLUSTER

Child Development

9th, 10th, 11th, 12th Grade – ½ Practical Art credit

This is a good course for students who are interested in working with children. This semester course will help prepare students for future parenting roles. Emphasis will be placed on prenatal development and the effects on the developing infant, pregnancy, and caring for the infant. Ages and stages of human development that will be covered will include: social, emotional, physical, and intellectual development in children from birth through childhood. Units on development, discipline, child abuse, and special needs children will also be studied. This class is recommended for students interested in the Education and Training Career Pathway. This class may not be repeated.

Housing and Interior Design

9th, 10th, 11th, 12th Grade – ½ Practical Art credit

This is a good introduction course for students who are interested in careers in drafting, architecture, urban planning, landscape design, construction, real estate, interior design, etc. In this semester course, students will learn about basic human needs as they relate to housing, the basic principles and elements of design, housing styles, general information on maintaining a home, and facts about renting, buying, and real estate agencies. This course will feature projects throughout the semester to apply the knowledge students have acquired. This class may not be repeated.

PAT Work

9th, 10th, 11th, 12th Grade – ½ Practical Art credit per semester

PAT Work is intended and provided for teen parents within the Carthage R-9 School District. The course will train students to be better parents while building better relations between teen parents and their babies. The course will involve meeting with a parent educator at scheduled times, attending seminar meetings with the CHS teen support group and keeping a journal that will be assigned and graded by the FACS instructor. This course may be repeated.

LAW, PUBLIC SAFETY, CORRECTIONS AND SECURITY CLUSTER

911 Dispatching/Emergency Response (Crowder College Dual Credit Option)

12th grade - 1 Practical Arts Credit

Prerequisite: Students must be 18 years of age to obtain a certificate for the 911 Dispatching Certification for this program, 90% Attendance, Acceptable Behavior Record, Good Grades.

Students who elect to take the class for dual credit will earn 3 credit hours. The Crowder course title is *CJ 103 - Telecommunications*. The optional college course fee is currently \$60 per credit hour (subject to change yearly).

The Emergency Telecommunicator course is a course for entry-level emergency telecommunicators. This course was created by the National Academies of Emergency Dispatch. This program is designed to train new students who want to study emergency communications centers and their technology, legal guidelines, stress factors, and learn methods of communication. Certification for this course is available upon completion of the Academy's 40 hour (minimum) Emergency Telecommunicator Course along with a passing score of 80% or greater on the exam. The certification is

valid for two years. Training shall be based on the duties and function to be performed by each responder of an emergency response organization. The skill and knowledge levels required for all new responders, those hired after the effective date of this standard, shall be conveyed to them through training before they are permitted to take part in actual emergency operations on an incident. First responders at this awareness level are individuals who are likely to witness or discover a hazardous substance release and who have been trained to initiate an emergency response sequence by notifying the proper authorities of the release. They would take no further action beyond notifying the authorities of the incident. Students are encouraged to join SkillsUSA, the Career and Technical Student Organization for Public Safety. There is a \$30 fee for Skills USA membership (optional but encouraged).

Criminal Justice 1 (Crowder College Dual Credit Option)

11th, 12th Grade – 2 Practical Arts Credit (2 Block Course)

Prerequisite: 90% Attendance, Acceptable Behavior Record, Good Grades.

Students who elect to take the class for dual credit will earn 3 credit hours. The Crowder course title is *CJ 101 - Intro to Criminal Justice*. The optional college course fee is currently \$60 per credit hour (subject to change yearly).

Students will study social life, social change, and the social causes and consequences of behavior. Students will use a social science research model to investigate contemporary American issues of social inequality, patterns of behavior, forces for social change and resistance, and also learn how social systems work. Students will study people in their interactions with others and practice interpersonal skills. They will discuss self-concept, develop and understanding of how people function as individuals and members of groups, and understand the impact of social institutions. Content includes introductions to criminology, ethics as applied to correction services, legal responsibilities, teamwork, constitutional law, use of force, and conflict resolution. Students will learn and be certified in: National Incident Management System, and Hunter's Safety. Student will need the following: 1" ring binder and notebook paper. Students are encouraged to join SkillsUSA, the Career and Technical Student Organization for Public Safety. There is a \$30 fee for Skills USA membership (optional but encouraged).

Criminal Justice 2 (Crowder College Dual Credit Option)

11th, 12th Grade – 2 Practical Arts Credit (2 Block Course)

Prerequisite: Criminal Justice I 90% Attendance, Acceptable Behavior Record, Good

Grades. Students may take Criminal Justice 1 and Criminal Justice II concurrently with approval.

Students who elect to take the class for dual credit will earn 3 credit hours. The Crowder course title is *CJ 190 - Patrol Operations*. The optional college course fee is currently \$60 per credit hour (subject to change yearly).

Students will learn everyday police tactics (traffic stops, calls for service, interview techniques, etc.) with many hands on activities. Students will also use standard operational procedures used in the criminal justice system, apply psychology principles to deal with erratic behavior, apply anger management techniques to resolve conflicts and reduce anger, evaluate the surrounding environment for signs of potential problems and/or danger, and take on leadership responsibilities to demonstrate the knowledge and skills to collaborate in projects and work activities in the correctional environment. Students will learn and practice crime scene processing techniques with many hands on activities. Students will learn and be certified in: POST Approved Basic Corrections Officer Academy, intermediate control device training and certifications, National Incident Management System, TASER, and Firearm Safety. Lab Fee: \$75.00. Student will need the following: 1" ring binder and notebook paper. Students are encouraged to join SkillsUSA, the Career and Technical Student Organization for Public Safety. There is a \$30 fee for Skills USA membership (optional but encouraged).

Criminal Justice 3 - INTERNSHIP

12th Grade – 1 Practical Arts Credit (2 blocks for 1 semester)

Prerequisite: Criminal Justice I, 90% Attendance, Background Check (Done by LEO Agency), Acceptable Behavior Record, Good Grades.

The internship program is by application only through the Criminal Justice Program. Prior to enrolling, students must be approved by criminal justice instructor. Students will be given various options in the court, records, police and sheriff offices in the area. An interview process with the selected organization is required.

Intro Public Safety/First Responder

10th, 11th Grade- 1 Practical Arts Credit

This class provides students with entry-level knowledge of the various divisions of public safety from: Law Enforcement, Emergency Medical, and Firefighting. Students will also learn the effective and appropriate responses to emergency situations as it pertains to public safety. Topics covered in this course include the preparatory process, police practices, state and federal laws, corrections, firefighting techniques, trauma, special patient populations, and general EMS operations. This course also provides the student with the opportunity to become certified BLS CPR and Heartsaver First Aid through the American Heart Association. Students will need the following: 1" ring binder and notebook paper. Students are encouraged to join SkillsUSA, the Career and Technical Student Organization for Public Safety. There is a \$30 fee for SkillsUSA membership (optional but encouraged).

Crime Scene Investigation 1

11th grade - 1 Practical Arts Credit

This course will give an introduction to the importance of physical evidence in solving crimes, basics in crime scene assessment, elements of fingerprinting, evidence collecting, photography, and processing methods and documentation. Topics covered include: orientation and evaluation, ethics and integrity, review of report writing, law enforcement forensics field work, safety, interpersonal skills and group dynamics, thinking and problem solving skills, and communication skills. Students are encouraged to join SkillsUSA, the Career and Technical Student Organization for Public Safety. There is a \$30 fee for Skills USA membership (optional but encouraged)

Crime Scene Investigation 2 (Crowder College Dual Credit Option)

12th grade - 1 Practical Arts Credit

Prerequisite - Passed CSI 1 with a C or higher OR teacher permission

Students who elect to take the class for dual credit will earn 3 credit hours. The Crowder course title is *CJ 102 – Crime Scene Processing*. The optional college course fee is currently \$60 per credit hour (subject to change yearly). This course will be an extension of Crime Scene Investigation 1 and will cover physical evidence in solving crimes, crime scene assessment, fingerprinting, evidence collecting, photography, and processing methods and documentation. This course will have project based work including much field-work in the crime scene area. Topics covered include: orientation and evaluation, ethics and integrity, review of report writing, law enforcement forensics field work, safety, interpersonal skills and group dynamics, thinking and problem solving skills, and communication skills. Students are encouraged to join SkillsUSA, the Career and Technical Student Organization for Public Safety. There is a \$30 fee for Skills USA membership (optional but encouraged).

GOVERNMENT & PUBLIC ADMINISTRATION CLUSTER

World History

9th Grade - 1 Social Studies credit

Ninth grade World History is a comprehensive survey of the history of civilization. Beginning with the ancient civilizations (Mesopotamia, China, Egypt, Greece and Rome), we trace the development of culture and society, government and law. Attention is also given to scientific and economic advancements. Interactions among civilizations through trade, transportation, conquest, and the sharing of ideas and philosophies are covered. Other major topics include: the Middle Ages, Crusades, the Renaissance, and Reformation. Our study continues with the Age of Discovery, the decline of the monarchy, the rise and fall of Communism, and the many power struggles among European powers, including World Wars I & II and the Cold War.

U.S. History (EL U.S. History is available for students in the EL program)

10th Grade – 1 Social Studies credit

This year-long course will examine American History from the expansion of America to the present. U.S. History is designed to link important events and people involved in each event to show how the United States has progressed.

Advanced Placement U.S. History (Missouri Southern State University Dual Credit Option)

11th and 12th Grade – 1 Social Studies credit

Prerequisite: Teacher Recommendation and minimum GPA of 3.0

Students who elect to take the class for dual credit can earn credits per semester, for a total of 6 credit hours. The Missouri Southern State University course titles are *HIST 110 - US History 1492-1877* (Fall) and *HIST 120 - US History 1877-Present* (Spring). The optional college course fee is currently \$50 per credit hour (subject to change yearly). Students must have an ACT Reading subscore of 17 or greater to enroll for college credit.

This yearlong course will examine American History from the colonial period to the present. U.S. History is designed to link important events and people involved in each event to show how the United States has progressed since its beginning in 1776.

U.S. Government (EL U.S. Government is available for students in the EL program)

11th, 12th Grade – 1 Social Studies credit

EOC required for graduation.

The course is a study of politics and government. Students investigate the role of political parties, interest groups, elections, and the structures of government as these relate to the political system of the United States. Students will also receive an overview of the government's policy-making process and how public opinion influences it. The course includes a study of the U.S. Constitution as well as Missouri and local government. Students are required to pass both the US Constitution test and Missouri Constitution test to graduate from CHS.

Advanced Placement U.S. Government

11th, 12th Grade – 1 Social Studies credit. Students are **NOT** required to take U.S. government prior to requesting this class.

Prerequisite: Instructor's approval based on student's cumulative GPA. Students are recommended to have a minimum of a 3.5 cumulative GPA and committed to extensive outside reading.

This college level course examines the U.S. and Missouri Constitutions, a variety of political beliefs and behaviors in the U.S., and how these impact the political system. Political parties, interest groups, institutions of the federal government, and public policy formation will be studied. Finally, students will discuss civil rights, civil liberties, and civil responsibilities of citizens in our democracy. Through this course, students will meet the state requirements for study of both the US and Missouri Constitutions.

Psychology 1

10th, 11th, 12th Grade – ½ Social Studies credit

Psychology is the study of the behavior of the human animal. The course covers human development, perceptions, sensations, learning, intelligence, emotions, consciousness, and many more topics. The purpose for studying psychology is to gain a basic knowledge about behavior to better deal with real life situations.

Psychology 2

10th, 11th, 12th Grade – ½ Social Studies credit

Recommended: A minimum grade of "C" in Psychology 1 is strongly recommended for success in this course

Psychology 2 is an extension of Psychology 1. We will be using a more advanced text.

Sociology

10th, 11th, 12th Grade – ½ Social Studies credit

Study of group theory, group behavior, and why people behave based on their associations. Various cultural backgrounds and traditions will also be explored.

Holocaust

10th, 11th, 12th Grade – ½ Social Studies credit

This course will be an in-depth, research-intensive class covering the time period known as the Holocaust. Its roots, the first actions against the Jewish, the concentration camps and the events

surrounding the liberation process will be discussed. Information will come from knowledge gained in a college level course devoted to the Holocaust, internet and library research, personal experiences, and a Holocaust museum field trip. Students will be expected to complete the required number of hours to gain ½ credit in social studies.

EDUCATION AND TRAINING CLUSTER

Child Development

9th, 10th, 11th, 12th Grade – ½ Practical Art credit

This is a good course for students who are interested in working with children. This semester course will help prepare students for future parenting roles. Emphasis will be placed on prenatal development and the effects on the developing infant, pregnancy, and caring for the infant. Ages and stages of human development that will be covered will include: social, emotional, physical, and intellectual development in children from birth through childhood. Units on development, discipline, child abuse, and special needs children will also be studied. Students will be required to take the Baby Think It Over infant simulator home during the course. This class is recommended for students interested in the Education and Training Career Pathway. This class may not be repeated.

Teach and Train

10th, 11th, 12th Grade - 1 Practical Art credit

Prerequisite: An application with instructor approval is required. (See Mrs. Hodson for an application.)

Teach and Train is the first class of a 3-course program designed for students who are considering the elementary or secondary teaching profession; who are interested in being a coach or club sponsor; or who are interested in being a corporate trainer. This course focuses on the general theory and practice of teaching and learning. In this first course, students will learn the basic principles of educational psychology, the art of teaching, the planning and administration of educational activities, school safety and health issues, and the social foundations of education. *This course may not be repeated.*

Teach and Train Practicum 1 (Dual Credit Option)

11th, 12th Grade - 1 Practical Art Credit

Prerequisite: Currently enrolled in or successful completion of Teach and Train (70% or above) AND an application with instructor approval is required. (See Mrs. Hodson for an application.)

Special Note: Senior students may enroll in both Teach and Train AND Practicum I during the same school year to be able to complete the first two courses of the program in one year. These courses will be offered during separate hours.

Students who elect to take the class for dual credit will earn 3 credit hours. The Missouri Southern State University course title is EDUC 100: Intro to Teacher Education*. The optional college course fee is currently \$50 per credit hour (subject to change yearly). *Effective Fall 2019, EDUC 100 will be a required course for ALL MSSU teacher education majors.

Teach and Train Practicum I is the second class in a 3-course program designed for students who are considering the elementary or secondary teaching profession. This course provides a seamless pathway to study the profession through experience as a classroom intern. Students will be assigned to intern with district personnel. Students will complete reflection journals, prepare and present lessons, and work closely with students of their assigned supervising teacher. Students are required to demonstrate good moral character, work habits, responsibility, punctuality, and organizational skills. This course may not be repeated. **Students must have computer access (at home or at school) to complete weekly assignments online and are responsible for providing their own transportation to and from their practicum assignment. Practicum hours can count toward A+ Program.**

Teach and Train Practicum 2

12th Grade - 1 Practical Art Credit

Prerequisite: Currently enrolled in or successful completion of Teach and Train Practicum I (70% or above) AND an application with instructor approval is required. (See Mrs. Hodson for an application.)

Teach and Train Practicum II is the final class in a 3-course program designed for students who are considering the elementary or secondary teaching profession. This course provides an opportunity for students to continue their classroom intern experience. Students will be assigned to intern with district personnel. Students will prepare and present lessons, work closely with students of their assigned supervising teacher, and complete other tasks as directed by their cooperating teacher. Students are required to demonstrate good moral character, work habits, responsibility, punctuality, and organizational skills. **Students must have computer access (at home or at school) to complete weekly assignments online and are responsible for providing their own transportation to and from their practicum assignment. Practicum hours can count toward A+ Program**

Tutoring A+

11th, 12th Grade (10th Grade if room is available and with instructor permission) – ½ Elective credit

Prerequisite: Complete the A+ Agreement Form

Tutoring A+ is used to help A+ students meet the fifty hours of tutoring requirement for students enrolled in the A+ program. Eligible students provide their own transportation to elementary public schools to tutor young children. Students attend tutoring training sessions each semester, keep a journal, and complete required teaching activities and mandatory paperwork that is evaluated by the supervising teacher as well as the A+ Coordinator. Eligibility for the A+ program is based on maintaining good attendance, good citizenship and obtaining a minimum 2.5 GPA by graduation. Students may not miss more than a total of 36 days throughout their high school career, including their ninth grade year, to remain eligible in the A+ program. A student may take this class for one semester or for an entire year, but they may not enroll in it if they have already accumulated their 50 hours. **(Starting with the graduating class of 2015 you must score Proficient on the Algebra 1 End Of Course Examination).** Students must also meet all criteria as set by Missouri Legislation in accordance with funding related to A+ legislation. Please see the A+ Coordinator for more information and clarification.

PATH OF NATURAL RESOURCES & AGRICULTURE

AGRICULTURE, FOOD & NATURAL RESOURCES CLUSTER

All students in an agriculture course are required to become members of the Carthage FFA. Dues must be paid within two weeks of the start of class, or will be subject to removal from course.

Agriculture Science I

9th and 10th Grade - 1 Practical Art credit

This course is an introductory course designed for instruction in animal science, agricultural mechanics, career exploration, leadership, personal development, and supervised agricultural experience. Units may include FFA, animal science, animal husbandry, plant science, agribusiness and basic welding and project construction. This course is designed to focus on the role and importance of agriculture in our society.

CASE - Introduction to AFNR (Agriculture, Food and Natural Resources)

9th and 10th Grade - 1 Practical Art credit

This course is an introductory course designed for instruction in animal science, agricultural mechanics, career exploration, leadership and personal development and supervised agricultural experience. Units may include agribusiness, natural resources, food science, animal industry and horticulture. Emphasis is placed on the role and importance of agriculture in our society.

CASE - Animal Science

10th, 11th, 12th Grades – 1 Practical Art credit

Prerequisite: CASE-Introduction to AFNR or Agricultural Science I

This course includes advanced scientific principles in livestock production, marketing, judging, food science, nutrition, breeding, production records, and selection and animal health & waste management. There will be additional instruction in career development and leadership in the agricultural field.

CASE - Plant Science

10th, 11th, 12th Grade – 1 Practical Art credit

Prerequisite: CASE-Introduction to AFNR or Agricultural Science I

This course provides instruction that builds upon the scientific knowledge and technical skills gained in Project CASE-Introduction to AFNR in the area of plant production. Areas of study include soils, hydroponics, plant anatomy and physiology, taxonomy, growing environments, sexual reproduction, asexual reproduction, insects and diseases, and production and marketing.

CASE - Food Science and Safety

11th, 12th Grade- 1 Practical Art Credit

Prerequisites: CASE-Introduction to AFNR and CASE-Animal Science or CASE-Plant Science

This course is a specialization course in the CASE Program of Study. Students will complete hands-on activities, projects, and problems that simulate actual concepts and situations found in *the food science and safety* industry allowing students to build content knowledge and technical skills. Students will investigate areas of food science, including food safety, food quality, food chemistry, food processing, food product development, marketing, and consumer behavior. Research and experimental design will be highlighted as students develop and conduct industry appropriate investigations.

Principles of Agricultural Mechanics (Formerly Ag Science 2)

10th, 11th, 12th, Grades – 1 Practical Art credit

Prerequisite: CASE-Introduction to AFNR or Agricultural Science I.

Students must pay a \$15 shop fee, and provide proof of insurance.

This course provides instruction that builds upon the scientific knowledge and technical skills gained in Project CASE-Introduction to AFNR.

CASE - Animal and Plant Biotechnology

11th, 12th Grade – 1 Practical Art credit

Prerequisite: CASE-Introduction to AFNR, and either CASE Animal Science or CASE-Plant Science

This course includes the topics in the history of biotechnology, the principles of scientific research, cell biology, genetic transfer, genetically modified organisms, cloning, and the application of biotechnology to plant science, animal science, medicine, the food industry, and ecology. Consumer issues, ethics, and careers are also addressed.

CASE - Ag Research and Development

12th Grade – 1 Practical Art credit

Prerequisite: Application only or by permission.

The Agricultural Research and Development (ARD) course is the capstone designed to culminate students' experiences in agriculture, based on the pathway of study they pursued. Woven throughout the course are projects and problems based in practical applications and designed to develop and improve employability skills of students. Students will further enhance research, critical thinking, and teamwork skills as they expand on content knowledge from previous CASE courses. Students will work to solve complex, real-world problems through a focused research project. This process will include conducting research, data analysis and communication, and the development of new products.

Advanced Animal Science (Crowder College Dual Credit Option)

11th, 12th Grades – 1 Practical Art credit

Prerequisite: Application only or by permission.

Students who elect to take the class for dual credit will earn 4 credit hours. The Crowder course title is *ANSC 114 - Animal Science*. The optional college course fee is currently \$60 per credit hour (subject to change yearly). This course provides students with a greater appreciation and understanding of the advanced structure and economics of livestock production. Students will gain a new perspective on the influence of livestock production globally, nationally and statewide. This course lays a good foundation for a continuing education in agriculture.

Agricultural Natural Resources and Conservation

11th, 12th Grade – 1 Practical Art credit

Prerequisite: Must have completed 2 units of agriculture courses or teacher permission

This course prepares students for activities in the conservation and/or improvement of natural resources such as oil, water, air, forests, fish and wildlife for economic and recreational purposes. Students learn that management of our natural resources, wildlife, and ecological systems is an essential component in sustaining our environment.

Agricultural Business Communications

11th, 12th Grade – 1 Practical Art credit

Prerequisite: FFA Officer or Committee Chairman, or teacher permission

This course is designed to enable students to develop and demonstrate agricultural leadership skills. Curriculum will focus on public speaking, written communication, team organizational goals and team organizational activities

Agricultural Business Leadership

11th, 12th Grade – 1 Practical Art credit

Prerequisite: Senior FFA Officer or Committee Chairman, or teacher permission

This course is designed for Senior FFA Officers and Committee Chairman. It will equip students with individual and group leadership skills. Course content includes leadership principles, officer training, and effective communication, positive public relations skills, organizing and conducting group meetings and activities, and team building.

Agricultural Construction 1

11th Grade – 1 Practical Art credit

Prerequisite: Successful completion of 2 units in Agriculture courses or instructor permission.

Students must pay a \$15 shop fee and project fees (amount TBD)..

This course provides instruction in metal fabrication and design of agricultural equipment. Students will focus on the study and practice of AC-DC arc, mig and oxyacetylene welding. Instruction will be given in shop equipment operation and safety.

Agricultural Construction 2

12th Grade - 2 Practical Art credit

Prerequisite: Agricultural Construction I; *Students must pay a \$15 shop fee and project fees (amount TBD).*

This course expands on training in the areas of agricultural fabrication with emphasis on shop safety, drawing and reading plans for projects, and the design and layout of projects. Principles learned in Agricultural Construction I will be applied when students choose and construct a project (with the approval of the instructor).

Introduction to Small Engine Technology

10th, 11th Grade - 1 Practical Art credit

This complete course curriculum is refined from the Briggs & Stratton Authorized Field Service School, a widely-digital acclaimed small engine training program in the industry. Students will complete hands on tasks related to the assembly, maintenance, and troubleshooting of a single cylinder carbureted engine. Upon completion of the course, students will take an on-line certification exam through the Equipment Engine and Training Council. Passing the Basic Engines exam with a 70% or higher will earn the student a "market value asset", an industry related credential that includes a certificate, certification patch, and a chevron for the students' work uniform. Students have the opportunity to join a CTSO and compete in the SkillsUSA Power Equipment Technology contest.

Agricultural Power 1 – Powered Equipment Tech

11th, 12 Grade - 1 Practical Art Credit

Prerequisite: Intro to Small Engines

In this course students will build upon the knowledge and skills obtained in the Intro to Small Engines course. Students will learn theory and complete hands-on, project-based tasks related to the servicing and maintenance of components used to transfer power including: bearings and gears, as well as drive systems commonly found in agricultural implements. Students will have the opportunity to earn industry related credentials pertaining to safety, engine equipment technology, and forklift operation. **Must Pass OSHA Safety within first three weeks of the class, ineligible to be in shop until passed, and must have proof of current insurance and medical form on file.**

Agricultural Power 2 – Powersports Maintenance Technology

12th Grade - 1 Practical Art Credit

Prerequisite: Ag Power 1

In this course students will build upon the knowledge and skills obtained in the Agricultural Power 1 course. Students will learn theory and complete hands-on, project-based tasks using service and parts manuals related to the servicing and maintenance of powersports equipment including: chassis and suspension systems, tire mounting and wheel balancing, brake service, electrical and control systems, and fuel injection systems. Students will have the opportunity to earn industry related credentials pertaining to engine equipment technology. **Must Pass OSHA Safety within first three weeks of the class, ineligible to be in shop until passed, and must have proof of current insurance and medical form on file.**

Ag AOE

11th, 12th Grade – 1-2 Practical Art credits

Prerequisite: Successful completion of any 2 units of Ag courses and instructor permission

This course provides for the enrollment of students that are released on school time to complete a cooperative occupational experience in an approved training station in agriculture.

Agricultural Structures

11th, 12th Grade – 1 Practical Art credit

Prerequisite: Successful completion of 2 introductory Ag classes or teacher permission. Students must pay a \$15 shop fee, and provide proof of insurance.

This course offers instruction in the proper planning and construction of farm buildings and facilities. Emphasis will be placed on drawing and plan reading, surveying, concrete, electricity, plumbing and shop safety.

Landscape Design & Greenhouse Management

11th, 12th Grade – 1 Practical Art credit

Prerequisite: CASE-Introduction to AFNR

First semester will cover the production of plants and shrubs, for the purpose of landscaping. Approved practices in wholesaling and retailing horticulture products will be studied. This course includes the techniques of landscape design, landscape construction, installation, and maintenance. Students will utilize a 3-D CAD on their landscape projects. Second semester, students will develop a basic understanding of greenhouse techniques. The production of greenhouse crops will be used to demonstrate procedures such as plants started from cuttings, Seeds, grafts, and layering. Students will manage their own crop as a greenhouse project.

Environmental Science (EL Pre-Biology is available for students in the EL program)

10th, 11th, 12th, Grade – 1 Science credit

Prerequisite: Physical Science

Environmental Science is an interdisciplinary course that integrates biology, earth science, chemistry, and other disciplines. Students enrolled in this course conduct in-depth scientific studies of ecosystems, population dynamics, resource management, and environmental consequences. Students formulate, design, and carry out laboratory and field investigations as an essential course component. Students

completing Environmental Science, acquire the essential tools for understanding the complexities of local, national and global environmental systems.

ADDITIONAL ELECTIVES

RISE Seminar

9th, 10th, 11th, & 12th Grade – 1 Elective credit

RISE Seminar is a class for identified gifted students in grades 11 & 12. Students in this class must work independently, be self-starting, and demonstrate a willingness to explore topics from many perspectives. During the year, the class covers three to four in-depth units on topics of interest to the students. The class includes a unit on ethics, and offers students the opportunity to participate in hands-on projects, Socratic discussion, in depth research, leadership advancement, affective development, and community service.

Civil Leadership

9th, 10th, 11th, & 12th Grade – 1 elective credit

The purpose of the Student Council shall be: (a) to develop student initiative, leadership, and democracy; (b) to promote the general welfare of the students and to arouse school spirit; (c) to promote good fellowship among the students and close cooperation between the students, faculty, and community; and (d) to create and maintain standards of good citizenship among students.

Student Council involves student leadership. We organize and carry out many projects throughout the school year. It requires hard work and dedication to the student body of Carthage High School.

ACT Prep and College Transitions

10th (As space allows), 11th (Fall and spring), 12th (Fall only) grade – .5 Elective credit

Prerequisite: Completion of or concurrent enrollment in Geometry.

This semester course is designed to prepare college-bound students to attain their best score on the ACT. Instruction will focus on all ACT areas and allow time for skills and test-taking practice. Concepts needed for a successful college transition, such as time management and goal-setting, career interest exploration, college search, paying for college, college applications and campus living will also be introduced. It is expected that students will take the ACT upon completion of the course, preferably in December or April. See Mrs. Keeling for more details.

Index

Course Title	Page Number
3-D Design	26
3D Modeling, Animation, & Game Development	32
911 Dispatching/Emergency Response (Crowder College Dual Credit Option)	47
Accounting 1	31
Accounting 2	31
ACT Math	41
ACT Prep and College Transitions	56
Acting 1	25
Acting 2	25
Advanced 3D Design	26
Advanced Animal Science (Crowder College Dual Credit Option)	53
Advanced Art	26
Advanced Computer Applications (Crowder College Dual Credit Option)	30
Advanced Computer Programming	32
Advanced Drafting	37
Advanced Guitar Studio	29
Advanced Personal Communication (Missouri State University Dual Credit Option)	22
Advanced Placement Art	26
Advanced Placement Biology	38
Advanced Placement Calculus	41
Advanced Placement Chemistry	39
Advanced Placement English Language and Composition	21
Advanced Placement English Literature and Composition (Crowder College Dual Credit Option)	21
Advanced Placement Physics 1 (Missouri State University Dual Credit Option)	39
Advanced Placement Physics 2	39
Advanced Placement U.S. Government	50
Advanced Placement U.S. History (Missouri Southern State University Dual Credit Option)	50
Ag AOE	55
Agricultural Business Communications	54
Agricultural Business Leadership	54
Agricultural Construction 1	54
Agricultural Construction 2	54
Agricultural Natural Resources & Conservation	54
Agricultural Power 1	55
Agricultural Power 2	55
Agricultural Science 1	52
Agricultural Structures	55
Algebra 1	40
Algebra 2	41
Anatomy and Physiology	44
Athletic Training/Therapeutic Services	43
Athletic Weights (Boys/Girls)	45
Banking & Finance	31
Biology	38
Biomedical Innovation (PLTW)	42
Business Co-Op (BOE)	31
Business Communication	31

Business Computers	29
Business Law	30 & 31
Business Leadership	30
Cardio Fitness	46
Carpentry 1	35
Carpentry 2	36
Carpentry Core	35
Cardio Fitness	44
CASE – Introduction to AFNR (Ag. Science 1)	52
CASE – Ag Research & Development	53
CASE – Animal Science	52
CASE – Animal and Plant Biotechnology	53
CASE – Food Science and Safety	53
CASE – Plant Science	53
Catering & Entrepreneurship	46
Certified Nurse Assisting (Crowder College Dual Credit Option)	43
Chemistry	38
Child Development	47 & 51
Civil Engineering and Architecture (PLTW)	40
Civil Leadership	56
Clinical Medical Assisting	43
CNC Machining	37
College Algebra (Crowder College Dual Credit Option)	41
College Prep Math	41
Competitive Speech/Oral Interpretation	23
Computer-Aided Manufacturing	37
Computer Networking	32
Computer Programming	32
Computer Technology	32
Concert Choir	29
Concert/Marching Band	27
Crime Scene Investigation 1	49
Crime Scene Investigation 2 (Crowder College Dual Credit Option)	49
Criminal Justice 1 (Crowder College Dual Credit Option)	48
Criminal Justice 2 (Crowder College Dual Credit Option)	48
Criminal Justice 3 INTERNSHIP	48
Debate	23
Digital Media & Broadcasting I	22
Digital Media & Broadcasting II	22
Digital Media & Broadcasting Capstone	22
District IT Internship	33
Drawing	27
Elements of Geometry	40
EL Study Skills	24
Engineering Design and Development (EDD) (PLTW)	40
English Language Arts 1	20
English Language Arts 1 Honors	20
English Language Arts 1 (Reading Intensive)	20
English Language Arts 2	20
English Language Arts 2 Honors	20
English Language Arts 2 (Reading Intensive)	20
English Language Arts 3	20
English Language Arts 4	21

English Language Arts 4 (Crowder College Dual Credit Option)	21
Environmental Science	55
Foods and Nutrition	46
Film Appreciation	25
French 1	24
French 2	24
French 3	24
Fundamentals of Carpentry	35
General Weights (Boys/Girls)	45
Geometry	41
Graphic Design	21
Guitar Studio	28
Health	44
Health Science Core	43
Holocaust	50
Honors Physical Science	38
Honors Chemistry	38
Housing and Interior Design	47
Human Body Systems (PLTW)	42
In Tune with Music	28
International Foods	45
Intro to CTE	34 & 36
Intro to Creative Media	22 & 34
Intro to Culinary Arts	46
Intro to Public Safety/1 st Responder	49
Introduction to 2D Art & Design	24
Introduction to 3D Art & Design	24
Introduction to Acting	25
Introduction to Business	30
Introduction to Debate	23
Introduction to Engineering Design (IED) (PLTW)	39
Introduction to Industrial Trades	36 & 37
Introduction to Small Engine Technology	54
Jazz Ensemble 1	28
Jazz Ensemble 2	28
Landscape Design & Greenhouse Management	55
Machine Technology 1	36
Machine Technology 2	36
Machine Technology 3	36
Machine Technology Internship (SOE)	37
Marketing 1	33
Marketing 2	33
Math Analysis and Trigonometry	41
Media & Advertising 1	34
Media & Advertising 2	34
Media & Advertising Capstone	34
Medical Intervention (PLTW)	42
Music Appreciation	27
Music Appreciation (Crowder College Dual Credit Option)	27
Office Management	31
PAT Work	47
Personal Communication	22
Personal Finance	31

Personal Fitness (Boys or Girls)	44
Photography	27
Physical Science	37
Power Walking	45
Pre-Algebra	40
Principles of Ag Mechanics	53
Principles of Biomedical Sciences (PLTW)	42
Principles of Engineering (POE) (PLTW)	40
ProStart Culinary Arts 1	46
ProStart Culinary Arts 2	46
Psychology 1	50
Psychology 2	50
Publications (Yearbook)	21
RISE Seminar	56
Sociology	50
Soundwave	29
Spanish 1	23
Spanish 2	23
Spanish 3	24
Spanish 4	24
Sports & Entertainment Marketing I	33
Sports & Entertainment Marketing II	33
Suite Sounds	29
Survey of Physical Science (Crowder College Dual Credit Option)	39
Teach & Train	51
Teach & Train Practicum 1 (Missouri Southern State University Dual Credit Option)	51
Teach & Train Practicum 2	51
Textiles and Design	26
Theatre Appreciation	25
Theatre Technology	24
Tiger Tech Internship	33
Tutoring A+	52
U.S. Government	50
U.S. History	49
Unified Physical Education	45
Web Page Design	30
Welding (Introduction or Advanced)	37
Wind Ensemble	27
World History	49
World Percussion	28