

*Archie High School*  
*Career & Education Planning Guide*  
*2013-2014*



[www.archie.k12.mo.us](http://www.archie.k12.mo.us)

Established 1913



# INTRODUCTION

The Archie High School course description booklet is provided to students and parents to assist with high school schedule planning. Courses are arranged by credit area, and for each course, information is provided regarding content, credit information, and prerequisites. Students should go through this booklet with a counselor or parent to choose the classes that best meet individual needs.

Archie High School offers a variety of courses with the intention of creating a well-educated individual who is also well prepared for future endeavors. When selecting courses, students should consider both graduation requirements and a future career path. Guidance counselors will assist students and parents during the scheduling process so that informed scheduling decisions can be made.

Students who plan to attend college should select the most rigorous courses available. Doing so will place them in a position to be successful at the post-secondary level. Please examine all the requirements of potential college and university choices. Consider also personal strengths, weaknesses, goals, and aspirations while preparing for this important part of life.

## MISSION STATEMENT

It is the mission of the Archie R-V School District to strive for excellence in instruction, promote optimum pupil achievement, ensure that every child learns, ensure mastery of essential skills, provide for the development of moral values, assure equal opportunity, develop the skills of citizenship, and to implement an educational plan based upon the research of effective schools.

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# ARCHIE R-V HIGH SCHOOL GRADUATION REQUIREMENTS

To meet the requirements for graduation from Archie High School, a student must earn a minimum of 25 credits during grades nine through twelve which are cooperatively planned by the student, his/her parents, and the school. These credits must include courses that satisfy both state and local requirements. A limited number of credits may be earned in summer school with the approval of local school officials. Students must also pass the US and MO Constitution tests. These credits will be counted toward the high school graduation requirements in accordance with State Board of Education standards and regulations.

	Class of 2010 & Beyond
Communication Arts	4 credits
Social Studies	3 credits
Mathematics	3 credits
Science	3 credits
Fine Arts	1 credit
Practical Arts	1 credit
Health	0.5 credit
Personal Finance	0.5 credit
Physical Education	1 credit
Electives	8 credits
<b>Total</b>	<b>25 credits</b>

## **Core Courses required for all students:**

### ✓ **Communication Arts**

- English I
- English II
- English III

### ✓ **Math**

- Algebra I
- Geometry

### ✓ **Social Studies**

- US History
- World History or Eastern/Western Geography
- Government

### ✓ **Science**

- Intro to Physics and Chemistry (formerly titled Physical Science)
- Biology

# ACADEMIC PLANNING

Academic planning is an integral part of academic success. Students are encouraged to think about interests, skills, and careers long before they enter high school. When students are in the Ninth Grade they will make a Six Year Plan. The Six Year Plan reflects not only graduation requirements, but also movement toward a career path. The High School Staff will work in conjunction with students and their families to formulate the six year plans. These plans are kept on file to be reevaluated annually throughout the high school career. In order for students to make informed decisions about their education, it is imperative that graduation requirements, class options, career paths, and post secondary options are clearly understood.

## **Weighted Classes**

Weighted classes are those classes that present extra challenge and coursework. Because of the additional work involved, an extra GPA point will be given for any grade of “C” or above for the purpose of class rank.

## **Dual Credit /College Credit Classes**

Students may earn both high school and college credit simultaneously for the same coursework. In order to receive college credit for a class, students must enroll at the college/university and pay for the credit.

## **Credit Recovery**

Credit recovery provides an opportunity for high school students who would otherwise fail a course to complete the requirements. Credit recovery may be offered during summer school, and may also be available through an accredited on-line recovery program.

## **Career & Technical Education Classes**

Vocational classes combine academics and occupational skill training. Courses in the following vocational areas are available at Archie: Agriculture, Business, Family and Consumer Sciences, and Industrial Technology. Cass Career Center offers additional vocational programs for Archie’s junior and senior students who are eligible.

## **Embedded Credit**

Students who attend Cass Career Center have the opportunity to earn .5 credit in Communication Arts and Math for one full year of attendance in a vocational program. The Communication Arts and Math curriculum requirements are embedded into the subject matter of some vocational classes, and require additional class work. Arrangements for embedded credit need to be arranged in advance.

## **Honors Diploma**

The criteria for earning the “Honors Diploma” would be a 3.5 cumulative weighted GPA, 95% attendance and a course of study that includes a minimum of 10 credits selected from the advanced courses that are either college prep, college credit, a third sequence class or those identified from the Missouri Department of Elementary and Secondary Education as Advanced Courses. Courses meeting the criteria are as follows:

English III	DC Calculus	Anatomy & Physiology	German II
CP English IV ½ or 1	Psychology ½	Advanced Biology	*Spanish II
DC English ½	Sociology ½	Physics	DC Spanish I
DC Public Speaking ½	Contemporary Issues ½	DC Chemistry	DC Spanish II
Creative Writing ½	DC World History	DC Physics ½	DC Animal Science
Journalism ½	DC Government	IED	*DC Course Additions
*British Literature ½ or 1	DC Early US History	POE	
Geometry	DC Modern US History	*CEA	*Not offered in the current
Algebra II	DC Psychology ½	*ED	school year but will be
Trig ½	DC Criminal Justice ½	*EDD/Capstone	offered in the future.
Calc ½	Botany ½	Advanced Art III	
DC College Algebra	Zoology ½	Advanced Accounting III	

# THE A+ PROGRAM

The Archie A+ program encourages students to stay in school, make career plans, tutor younger students, and graduate with the skills and knowledge required for career success or further education. If students in the class of 2009 and beyond meet the criteria established below, and the Missouri General Assembly continues to fund the program, students may be eligible for two years of free tuition to any publicly funded community college or vocational school in the state of Missouri.

## **An A+ student must:**

- Attend an A+ school for three consecutive years prior to graduation (grades 10-12)
- Graduate with an unweighted cumulative GPA of 2.5 or higher on a 4.0 scale
- Graduate with a 95 percent cumulative attendance record for grades 9-12
- Perform 50 hours of unpaid tutoring or mentoring to other students in the Archie School District
- Maintain a record of good citizenship and avoid the use of alcohol and unlawful drugs
- Apply for non-pay back scholarships by completing a FAFSA (Free Application for Federal Student Aid)
- Attend a Missouri community college or post-secondary vocational/technical school on a full-time basis and maintain a GPA of 2.5 or higher
- Beginning with the class of 2015, students must score proficient or advanced on the Algebra I End of Course (EOC) exam.

## **How Do You Become an A+ Student?**

It is easy to become part of the A+ Schools Program. Contact the A+ Coordinator at Archie and obtain an A+ enrollment packet. Read the guidelines and complete the Archie High School Program Agreement. As long as you meet all the requirements, you are on track for the A+ scholarship. It is recommended that students sign up early in their high school careers. This allows students to complete the tutoring portion of the A+ requirements, receive college and career information from the A+ coordinator and allow the coordinator to monitor the students' GPA and attendance. It is also recommended that students sign up even if they think they are going to a four-year college or not going to college. The Archie High School Program is an opportunity for students to access additional education after high school; it does not obligate them to use the A+ tuition reimbursement.

## **What are the Benefits of Being an A+ Student?**

- A student graduating with A+ status may be eligible for two years of tuition grants to attend any public Missouri community college or vocational/technical school as a full-time student. An A+ student may be eligible for scholarships from four-year colleges and universities.
- The tuition grants may be available to the A+ student up to four years after high school graduation.
- Students graduating from a two-year school may be eligible for transfer scholarships to four-year colleges and universities.

# COLLEGE/TECH SCHOOL PREPARATION

Students planning to attend college need to be prepared to make informed choices that can affect their admissions to Missouri colleges and universities. The Coordinating Board for Higher Education requires a minimum of 16 core curriculum requirements for admission to all public four year colleges and universities in Missouri.

## Guidelines for admission to public colleges and universities in Missouri include:

- **English** ~ 4 credits, one of which may be speech and 2 credits emphasizing composition / writing skills
- **Mathematics** ~ 4 credits (high school level Algebra I and beyond, i.e., Algebra II, Geometry, Trigonometry, and Pre-Calculus)
- **Social Studies** ~ 3 credits
- **Science** ~ 3 credits
- **Visual/Performing Arts** ~ 1 credit (fine arts courses in visual arts, music or theater).
- **Electives** ~ 3 credits, selected from foreign language and /or combinations of the above courses (two credits of foreign language are strongly recommended)

Following these guidelines will help prepare the student for entrance requirements at the majority of colleges and universities throughout the country. These recommendations, particularly for students in competitive colleges or career fields, should be seen as minimum requirements. Some programs within those universities will have their own additional requirements. Conversely, some universities will not require all of the above. Students are encouraged to identify requirements for any college or university they are interested in. In all scenarios, students must also meet the Archie requirements for graduation.

## Community College and Technical School Admission Requirements:

- High School Diploma, G.E.D., or a Certificate of Conclusion of Home School Program

## Military:

- High School Diploma, G.E.D., or a Certificate of Conclusion of Home School Program
- Eligible score on the ASVAB (Armed Services Vocational Aptitude Battery)

# MISSOURI STATE HIGH SCHOOL ACTIVITIES ASSOCIATION ELIGIBILITY

Knowing and following all MSHSAA standards will enable a student to protect his/her athletic eligibility. Also, it is important to know that all the standards must be met in order to be eligible. Grades received the **preceding** semester will determine eligibility for each semester.

## Grades 9-12

To be eligible, a student must be currently enrolled in school and have received passing grades in a minimum of 2.5 units of credit the previous semester. First semester freshman are automatically eligible.

## Semester of Eligibility

High school eligibility begins the first semester of the freshman year and ends the eighth semester (whether or not a student graduates). There is a maximum age for participation.

## Initial College Eligibility Fact Sheet – NCAA Athletics Eligibility

DIVISION I	DIVISION II
16 Core-Course Rule 2008 and after	2005 and after
<b>16 Core Courses:</b> <ul style="list-style-type: none"> <li>• 4 years of English</li> <li>• 3 years of mathematics (<i>Algebra I or higher</i>)</li> <li>• 2 years of natural/physical science (<i>1 year of lab if offered by high school</i>)</li> <li>• 1 year of additional English, mathematics or natural/physical science</li> <li>• 2 years of social science</li> <li>• 4 years of additional course (<i>from any above area</i>)</li> <li>• Foreign language or nondoctrinal religion/philosophy</li> </ul>	<b>14 Core Courses:</b> <ul style="list-style-type: none"> <li>• 3 years of English</li> <li>• 2 years of mathematics (<i>Algebra I or higher</i>)</li> <li>• 2 years of natural/physical science (<i>1 year of lab if offered by high school</i>)</li> <li>• 2 years of additional English, mathematics or natural/physical science</li> <li>• 2 years of social science</li> <li>• 3 years of additional courses (<i>from any above area</i>)</li> <li>• Foreign language, or nondoctrinal religion/philosophy</li> </ul>

For additional information regarding eligibility for collegiate athletics please visit the appropriate web site for the division in which there is an interest.



# ARCHIE R-V COURSE LISTING

**Required Courses are in bold type**    *\*indicates weighted class*    **\*\* indicated weighted and dual credit class**    **\*\*\*Future Courses**

	COURSE TITLE (# of graduation credits)		COURSE TITLE (# of graduation credits)
<b>COMMUNICATION ARTS</b>	<b>English I (1)</b> <b>English II (1)</b> <b>English III (1)</b> CP English III (1) CP English IV (½ or 1) Novels (½) Short Stories (½) Journalism (½) Creative Writing (½) English Composition (½) **Dual Credit College English (1) ** Dual Credit Public Speaking (½)	<b>AG SCIENCE</b>	Introduction to Agricultural Science (1) Fish Wildlife Management (½) Food Science Technology (½) Greenhouse Operations & Management (1) Ag Construction (1) Ag Structures (1) Agriculture Business, Sales & Marketing (1) ** Dual Credit Animal Science (1) (Weighted 1 <sup>st</sup> Semester Only, 2 <sup>nd</sup> Sem is calculated at regular weight) Veterinary Science (1)
<b>MATH</b>	Algebra I (1) Geometry (1) Pre-Algebra II (1) Algebra II (1) Trigonometry (½) Pre-Calculus (½) Math Applications (1) ** Dual Credit College Algebra (1)	<b>BUSINESS</b>	Introduction to Business (½) Desktop Publishing (½) Entrepreneurship (½) Web Design (½) Accounting I (1) Accounting II (1) Advanced Accounting III (1)
<b>SOCIAL STUDIES</b>	<b>U.S. History (1)</b> <b>World History (1)</b> <b>Government (1)</b> Eastern Geography (½) Western Geography (½) Contemporary Issues (½) Civil Rights (½) Criminal Justice (½) Psychology (½) Sociology (½) ** Dual Credit Psychology (½) ** Dual Credit Criminal Justice (½) ** Dual Credit Government (1) ** Dual Credit U.S. History Early or Modern (1)	<b>SCIENCE</b>	<b>Introduction to Physics &amp; Chemistry (1)</b> <b>Biology (1)</b> Chemistry (1) Anatomy & Physiology (1) Zoology (½) Botany (½) Physics (1) Earth Science (1) Environmental Science (1) *Advanced Biology (1) ** Dual Credit College Chemistry (1)
<b>FINE ARTS</b>	Art I (1) Art II-2-D (½) Art II-Drawing (½) Art II-Painting (½) Art II-Photography (½) Art II-Graphic Design (½) Advanced Art III (½ or 1) Band (1) Guitar (1) Concert Choir (1) Show Choir (1)	<b>FAM. &amp; CONS. SCIENCE</b>	Food & Nutrition (½) Child Development (½) Family Living (½) Career & Family Leadership (1) Housing and Interior Design (½) Fashion & Textiles (½) Advanced Foods (½) <b>Personal Finance (½)</b>
<b>TECH</b>	IED-Introduction to Engineering Design (1) POE-Principles of Engineering (1) CEA-Civil Engineering and Architecture (1) ***ED-Engineering Design (1) ***EDD-Engineering Design & Development (1)	<b>Electives</b>	Spanish I (1) Spanish II (1) German I (1) German II (1) Yearbook (1) A+ Tutoring (½) **Dual Credit Spanish I (½) **Dual Credit Spanish II (½)
<b>P.E.</b>	<b>9<sup>th</sup> Grade Boy's/Girl's Physical Education (½)</b> <b>Health (½)</b> Lifetime Fitness (½) Weights (½) Lifetime Activities (½ or 1) Girls Weights (½ or 1)	<b>AL VOCATION</b> <small>Classes offered through Cass Career Center</small>	Career & Technical English/Math Automotive Technology Health Sciences Emergency Medical Technology—Basic (EMT) Construction Technology Information Systems Technology Welding Firefighter I & II

<p align="center"><b>University of Missouri-Kansas City</b>  5100 Rockhill Road  Kansas City, MO 64110  816-235-1125  <a href="http://www.umkc.edu">www.umkc.edu</a>  <a href="https://web2.umkc.edu/hscp/index.shtml">https://web2.umkc.edu/hscp/index.shtml</a> <a href="http://www.umkc.edu/cad/hsvsi/index.shtml">http://www.umkc.edu/cad/hsvsi/index.shtml</a></p>	<p align="center"><b>University of Central Missouri</b>  Ward Edwards 1000  Warrensburg, MO 64093  660-543-4900  <a href="http://www.ucmo.edu">www.ucmo.edu</a>  <a href="http://www.ucmo.edu/dualcredit/student/dcrequire.cfm">http://www.ucmo.edu/dualcredit/student/dcrequire.cfm</a></p>
<p align="center">\$81.87 per credit hour  \$91.87 per credit hour-VSI courses</p>	<p align="center">\$100.00 per credit hour  \$85.00 per credit hour for WeMet Courses</p>
<p><b>Math 110</b>-3 hours  College Algebra  *Senior Year with completion of Trigonometry and Pre-Calculus Offered yearly  *Credit awarded in Spring Semester with enrollment required all year</p>	<p><b>Agri 1420</b>-3 hours  Animal Husbandry (Animal Science)  *After completion of Introduction to Ag  Offered even numbered school years during 1<sup>st</sup> Semester</p>
<p><b>History 101</b>-3 hours  American History to 1877  *Junior/Senior Year  Offered odd numbered school years  *Credit awarded in Spring Semester with enrollment required all year</p>	<p><b>WeMet On-line Courses include:</b>  <b>CJ 1000</b>--3 hours  Intro to Criminal Justice  <b>ENGL 1020</b>-3 hours (ACT score of 18 rq'd)  Composition I (College English)  *Credit awarded in Spring Semester with enrollment required all year  <b>Psy 1100</b>--3 hours  Psychology  <b>Span 1601/1602</b>-3 hours each  Elementary Spanish I/II  (Spanish I/II requires the purchase of an \$80-90 access card used in both courses )</p>
<p><b>History 102</b>-3 hours  American History Since 1877 *Junior/Senior Year  Offered even numbered school years  *Credit awarded in Spring Semester with enrollment required all year</p>	
<p><b>History 206</b>-3 hours (1<sup>st</sup> semester)  World Civilization to 1600  <b>History 208</b>-3 hours (2<sup>nd</sup> Semester)  World Civilization Since 1600  *Sophomore/Junior/Senior Year  Offered yearly</p>	
<p><b>Political Science 210</b>-3 hours  American Government  *Junior/Senior Year  Offered yearly  *Credit awarded in Spring Semester with enrollment required all year</p>	<p><b>WeMet Hybrid/ITV Courses include:</b>  <b>Comm 1000</b>-3 hours  Public Speaking  *Offered Fall or Spring semester of Junior or Senior year  Offered yearly  <b>Math 1151-Calculus &amp; Analytical Geometry</b>-5 hours (ACT score of 26 rq'd)  Calculus  *Senior Year  *Credit awarded in Spring Semester with enrollment required all year</p>
<p><b>Chemistry 211</b>-5 hours w/lab  General Chem I (4 hours) &amp;  Gen Chem I Lab (1 hour)  *Junior/Senior Year with completion of HS Chem or Alg II  Offered yearly  *Credit awarded in Spring Semester with enrollment required all year</p>	<p><b>Please note the following-</b>  <b>UCM</b> requires a 3.0 high school GPA in order for students to receive <i>dual</i> credit/college credit. Additional requirements are listed by the course title.   <b>UMKC</b> requires a 3.0 GPA or an ACT of 22—See links for additional information</p>

# **Personal Career Plan**

Post Secondary Plan:

Career Path:

Career Cluster:

Career Field:

Student Name: \_\_\_\_\_

Student Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Advisor Signature: \_\_\_\_\_

Parent/Guardian Signature: \_\_\_\_\_

High School	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
	<input type="checkbox"/> English I	<input type="checkbox"/> English II	<input type="checkbox"/> English III or <input type="checkbox"/> English III (CP) <input type="checkbox"/> Journalism <input type="checkbox"/> Creative Writing <input type="checkbox"/> English Composition <input type="checkbox"/> Short Stories (1 <sup>st</sup> Sem) <input type="checkbox"/> Novels (2 <sup>nd</sup> Sem) <input type="checkbox"/> DC Public Speaking	<input type="checkbox"/> Short Stories (1 <sup>st</sup> Sem) <input type="checkbox"/> Novels (2 <sup>nd</sup> Sem) <input type="checkbox"/> Journalism <input type="checkbox"/> Creative Writing <input type="checkbox"/> English Composition <input type="checkbox"/> DC Public Speaking <input type="checkbox"/> DC English
	<input type="checkbox"/> Algebra I <input type="checkbox"/> Geometry	<input type="checkbox"/> Geometry <input type="checkbox"/> Algebra II	<input type="checkbox"/> Pre-Algebra II <input type="checkbox"/> Algebra II <input type="checkbox"/> Trig/Calc	<input type="checkbox"/> Pre-Algebra II <input type="checkbox"/> Algebra II <input type="checkbox"/> Math Applications <input type="checkbox"/> Trig /Calc <input type="checkbox"/> DC College Algebra <input type="checkbox"/> DC Calculus
	<input type="checkbox"/> Intro to Physics/Chem	<input type="checkbox"/> Biology I <input type="checkbox"/> Chemistry I	<input type="checkbox"/> Chemistry <input type="checkbox"/> Physics <input type="checkbox"/> Earth Science <input type="checkbox"/> Environmental Science <input type="checkbox"/> Botany/Zoology <input type="checkbox"/> Anatomy/Physiology <input type="checkbox"/> Advanced Biology	<input type="checkbox"/> Chemistry <input type="checkbox"/> Physics <input type="checkbox"/> Earth Science <input type="checkbox"/> Environmental Science <input type="checkbox"/> Botany/Zoology <input type="checkbox"/> Anatomy/Physiology <input type="checkbox"/> Advanced Biology <input type="checkbox"/> DC College Chemistry
	<input type="checkbox"/> US History	<input type="checkbox"/> World History <input type="checkbox"/> Eastern/Western Geog	<input type="checkbox"/> Government <input type="checkbox"/> DC Government <input type="checkbox"/> Eastern/Western Geography <input type="checkbox"/> Psychology <input type="checkbox"/> Sociology <input type="checkbox"/> History thru Film <input type="checkbox"/> Contemporary Issues <input type="checkbox"/> Civil Rights <input type="checkbox"/> Criminal Justice <input type="checkbox"/> DC Psychology <input type="checkbox"/> DC Criminal Justice	<input type="checkbox"/> Government <input type="checkbox"/> DC Government <input type="checkbox"/> DC US History (101-Odd Yrs/102-Even Yrs) <input type="checkbox"/> Eastern/Western Geography <input type="checkbox"/> Psychology <input type="checkbox"/> Sociology <input type="checkbox"/> History thru Film <input type="checkbox"/> Contemporary Issues <input type="checkbox"/> Civil Rights <input type="checkbox"/> Criminal Justice <input type="checkbox"/> DC Psychology <input type="checkbox"/> DC Criminal Justice

	Prerequisite/Intro	Sophomore Year	Junior Year	Senior Year
PE/Health	<input type="checkbox"/> 9 <sup>th</sup> PE (Semester) <input type="checkbox"/> 9 <sup>th</sup> Health (Semester)	<input type="checkbox"/> Weights-1 <sup>st</sup> Semester <input type="checkbox"/> Lifetime Fitness-2 <sup>nd</sup> Semester <input type="checkbox"/> Lifetime Activities-1 <sup>st</sup> or 2 <sup>nd</sup> Semester	<input type="checkbox"/> Weights-1 <sup>st</sup> Semester <input type="checkbox"/> Lifetime Fitness-2 <sup>nd</sup> Semester <input type="checkbox"/> Lifetime Activities-1 <sup>st</sup> or 2 <sup>nd</sup> Semester	<input type="checkbox"/> Weights-1 <sup>st</sup> Semester <input type="checkbox"/> Lifetime Fitness-2 <sup>nd</sup> Semester <input type="checkbox"/> Lifetime Activities-1 <sup>st</sup> or 2 <sup>nd</sup> Semester
Practical Arts		<input type="checkbox"/> Accounting I	<input type="checkbox"/> Accounting I or II <input type="checkbox"/> Advanced Accounting III	<input type="checkbox"/> Accounting I or II <input type="checkbox"/> Advanced Accounting III
	<input type="checkbox"/> Intro to Business (1 <sup>st</sup> sem) <input type="checkbox"/> Desktop Publishing (2 <sup>nd</sup> sem)	<input type="checkbox"/> Intro to Business (1 <sup>st</sup> sem) <input type="checkbox"/> Desktop Publishing (2 <sup>nd</sup> sem) <input type="checkbox"/> Entrepreneurship (1 <sup>st</sup> sem) <input type="checkbox"/> Web Design (2 <sup>nd</sup> sem)	<input type="checkbox"/> Intro to Business (1 <sup>st</sup> sem) <input type="checkbox"/> Desktop Publishing (2 <sup>nd</sup> sem) <input type="checkbox"/> Entrepreneurship (1 <sup>st</sup> sem) <input type="checkbox"/> Web Design (2 <sup>nd</sup> sem)	<input type="checkbox"/> Intro to Business (1 <sup>st</sup> sem) <input type="checkbox"/> Desktop Publishing (2 <sup>nd</sup> sem) <input type="checkbox"/> Entrepreneurship (1 <sup>st</sup> sem) <input type="checkbox"/> Web Design (2 <sup>nd</sup> sem)
	Fr. So. Jr. Sr. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Foods & Nutrition	<input type="checkbox"/> Career & Family Leadership <input type="checkbox"/> Advanced Foods <input type="checkbox"/> Housing/Textiles <input type="checkbox"/> Family Living/Child Dev	<input type="checkbox"/> Career & Family Leadership <input type="checkbox"/> Advanced Foods <input type="checkbox"/> Housing/Textiles <input type="checkbox"/> Family Living/Child Dev	<input type="checkbox"/> Career & Family Leadership <input type="checkbox"/> Advanced Foods <input type="checkbox"/> Housing/Textiles <input type="checkbox"/> Family Living/Child Dev
	Fr. So. Jr. Sr. Intro to <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Engineering Design	<input type="checkbox"/> Principles of Engineering	<input type="checkbox"/> Principles of Engineering <input type="checkbox"/> Civil Engineering & Architecture	<input type="checkbox"/> Principles of Engineering <input type="checkbox"/> Civil Engineering & Architecture <input type="checkbox"/> Capstone-Eng Design & Development
	Fr. So. Jr. Sr. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Intro to Ag	<input type="checkbox"/> Ag Structures (Odd Years) <input type="checkbox"/> Ag Bus, Sales & Mktng (Odd years) <input type="checkbox"/> Fish & Wildlife Mgmnt (Fall Sem/Even Years) <input type="checkbox"/> Food Science Tech (Spring Sem/Even Year) <input type="checkbox"/> Greenhouse Op & Mgmnt (Even Years) <input type="checkbox"/> Ag Construction (Even Years) <input type="checkbox"/> Veterinary Science <input type="checkbox"/> DC Animal Science	<input type="checkbox"/> Ag Structures (Odd Years) <input type="checkbox"/> Ag Bus, Sales & Mktng (Odd years) <input type="checkbox"/> Fish & Wildlife Mgmnt (Fall Sem/Even Years) <input type="checkbox"/> Food Science Tech (Spring Sem/Even Year) <input type="checkbox"/> Greenhouse Op & Mgmnt (Even Years) <input type="checkbox"/> Ag Construction (Even Years) <input type="checkbox"/> Veterinary Science <input type="checkbox"/> DC Animal Science	<input type="checkbox"/> Ag Structures (Odd Years) <input type="checkbox"/> Ag Bus, Sales & Mktng (Odd years) <input type="checkbox"/> Fish & Wildlife Mgmnt (Fall Sem/Even Years) <input type="checkbox"/> Food Science Tech (Spring Sem/Even Year) <input type="checkbox"/> Greenhouse Op & Mgmnt (Even Years) <input type="checkbox"/> Ag Construction (Even Years) <input type="checkbox"/> Veterinary Science <input type="checkbox"/> DC Animal Science
Elective		<input type="checkbox"/> A+ Tutoring	<input type="checkbox"/> A+ Tutoring <input type="checkbox"/> Yearbook <input type="checkbox"/> Personal Finance (rq'd Jr or Sr year)	<input type="checkbox"/> A+ Tutoring <input type="checkbox"/> Yearbook <input type="checkbox"/> Personal Finance (rq'd Jr or Sr year)
Fine Arts	<input type="checkbox"/> HS Choir <input type="checkbox"/> HS Show Choir <input type="checkbox"/> HS Band <input type="checkbox"/> HS Guitar	<input type="checkbox"/> HS Choir <input type="checkbox"/> HS Show Choir <input type="checkbox"/> HS Band <input type="checkbox"/> HS Guitar	<input type="checkbox"/> HS Choir <input type="checkbox"/> HS Show Choir <input type="checkbox"/> HS Band <input type="checkbox"/> HS Guitar	<input type="checkbox"/> HS Choir <input type="checkbox"/> HS Show Choir <input type="checkbox"/> HS Band <input type="checkbox"/> HS Guitar
	Fr. So. Jr. Sr. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Art I	<input type="checkbox"/> Art II-Drawing <input type="checkbox"/> Art II-Painting <input type="checkbox"/> Art II-Photography <input type="checkbox"/> Art II-Graphic Design	<input type="checkbox"/> Art II-Drawing <input type="checkbox"/> Art II-Painting <input type="checkbox"/> Art II-Photography <input type="checkbox"/> Art II-Graphic Design <input type="checkbox"/> Advanced Art III	<input type="checkbox"/> Art II-Drawing <input type="checkbox"/> Art II-Painting <input type="checkbox"/> Art II-Photography <input type="checkbox"/> Art II-Graphic Design <input type="checkbox"/> Advanced Art III
	Fr. So. Jr. Sr. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Spanish I <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> German I	<input type="checkbox"/> Spanish I/II <input type="checkbox"/> German I/II	<input type="checkbox"/> Spanish I/II <input type="checkbox"/> DC Spanish I/II <input type="checkbox"/> German I/II	<input type="checkbox"/> Spanish I/II <input type="checkbox"/> DC Spanish I/II <input type="checkbox"/> German I/II

## The 16 Career Clusters

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One of the keys to improving student achievement is providing students with relevant contexts for studying and learning. Career Clusters™ do exactly this by linking school-based learning with the knowledge and skills required for success in the workplace. The National Career Clusters™ Framework is comprised of 16 Career Clusters™ and related Career Pathways to help students of all ages explore different career options and better prepare for college and career.

Each Career Cluster represents a distinct grouping of occupations and industries based on the knowledge and skills they require. The 16 Career Clusters and related Career Pathways provide an important organizing tool for schools to develop more effective programs of study (POS) and curriculum.

- **Agriculture, Food & 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.*

- **Architecture & Construction**

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

- **Arts, Audio/Video Technology & Communications**

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

- **Business Management & Administration**

*Careers in planning, organizing, directing and evaluating business functions essential to efficient and productive business operations.*

- **Education & Training**

*Planning, managing and providing education and training services, and related learning support services such as administration, teaching/training, administrative support, and professional support services.*

- **Finance**

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

- **Government & Public Administration**

*Planning and executing government functions at the local, state and federal levels, including governance, national security, foreign service, planning, revenue and taxation, and regulations.*

- **Health Science**

*Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.*

- **Hospitality & Tourism**

*Preparing individuals for employment in career pathways that relate to families and human needs such as restaurant and food/beverage services, lodging, travel and tourism, recreation, amusement and attractions.*

- **Human Services**

*Preparing individuals for employment in career pathways that relate to families and human needs such as counseling and mental health services, family and community services, personal care, and consumer services.*

- **Information Technology**

*Building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia and systems integration services.*

- **Law, Public Safety, Corrections & Security**

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

- **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.*

- **Marketing**

*Planning, managing, and performing marketing activities to reach organizational objectives such as brand management, professional sales, merchandising, marketing communications and market research.*

- **Science, Technology, Engineering & 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 & Logistics**

*The 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.*



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	Math (3 units)	Algebra I, Geometry	Geometry, Algebra II	Algebra II, Trig/Calc, Math Apps, Business Math	1 additional Math recommended
	Comm. Arts (4 units)	English I	English II	English III, English III CP	DC English or any English elective
	Science (3 units)	Intro. to P/C	Biology	1 additional Science required	Any Science elective
	Social Studies (3 units)	American History	World History or DC World History	American Government or DC Government	Any History elective
	P.E./Health	½ unit Physical Education ½ unit Health	½ unit elective PE class*	*can be taken this year	*can be taken this year
	Fine Arts	1 unit required*	*can be taken this year	*can be taken this year	*can be taken this year
	Foreign Lang.	Two units same language – any time are recommended/required for students attending a 4-year college			
	Practical Arts	One unit required that includes ½ unit of Personal Finance			
<b>Suggested Electives:</b>		<ul style="list-style-type: none"> <li>• Physics I</li> <li>• DC College English</li> <li>• Eastern/Western Geography</li> <li>• Multi Media</li> <li>• Web Design</li> <li>• Art II (2-D Art)</li> <li>• Art II (3-D Art)</li> <li>• Housing/Textiles</li> </ul>		<b>Recommended Youth Activities:</b> <ul style="list-style-type: none"> <li>• TSA</li> <li>• FFA</li> <li>• SkillsUSA</li> <li>• 4-H</li> <li>• Green Club</li> <li>• Habitat for Humanity</li> <li>• CCC</li> <li>• Intern with a local contractor, architect, or engineer</li> </ul>	

Career Possibilities in:		
Design and Pre-Construction	Construction	Maintenance and Operations
<ul style="list-style-type: none"> <li>• Architect</li> <li>• Architectural Drafter</li> <li>• Cartographer</li> <li>• Cost Estimator</li> <li>• Landscape Architect</li> <li>• Mechanical Engineer</li> <li>• Surveyor</li> </ul>	<ul style="list-style-type: none"> <li>• Brickmason</li> <li>• Carpenter</li> <li>• Construction Laborer</li> <li>• Construction Manager</li> <li>• Electrician</li> <li>• Glazier</li> <li>• Hazardous Materials Removal Worker</li> <li>• Painter</li> <li>• Paper Hanger</li> <li>• Plumber, Pipefitter, Steamfitter</li> <li>• Roofer</li> <li>• Welder, Cutter, Solderer and Brazier</li> </ul>	<ul style="list-style-type: none"> <li>• Heating, Air Conditioning and Refrigeration Mechanic / Installer</li> <li>• Highway Worker</li> <li>• Millwright</li> <li>• Operating Engineer</li> <li>• Telecommunications Line Installer and Repairer</li> </ul>

Post Secondary Options	
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<b>AHS</b> <b>Career Paths</b> <b>&amp; Cluster</b>	<b>Business, Management, &amp; Technology</b> Business, Management and Administration	
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**Students must meet Archie graduation requirements.**  
**These courses are suggested for students interested in this career area.**

High School Courses	Subject	Grade 9	Grade 10	Grade 11	Grade 12
	Math (3 units)	Algebra I, Geometry	Geometry, Algebra II	Algebra II, Trig/Calc, Math Apps, Business Math	1 additional Math recommended
	Comm. Arts (4 units)	English I	English II	English III, English III CP	DC English or any English elective
	Science (3 units)	Intro. to P/C	Biology	1 additional Science required	Any Science elective
	Social Studies (3 units)	American History	World History or DC World History	American Government or DC Government	Any History elective
	P.E./Health	½ unit Physical Education ½ unit Health	½ unit elective PE class*	*can be taken this year	*can be taken this year
	Fine Arts	1 unit required*	*can be taken this year	*can be taken this year	*can be taken this year
	Foreign Lang.	Two units same language – any time are recommended/required for students attending a 4-year college			
	Practical Arts	One unit required that includes ½ unit of Personal Finance			
Suggested Electives:			Recommended Youth Activities:		
<ul style="list-style-type: none"><li>Accounting I,II,III</li><li>Multi Media</li><li>Web Design</li><li>Entrepreneurship</li><li>DC Public Speaking</li><li>Trig/Calc</li><li>DC College Algebra</li></ul>			<ul style="list-style-type: none"><li>FBLA</li><li>DECA</li><li>Yearbook</li><li>Student Council</li><li>FFCLA</li><li>FFA</li></ul>		
<ul style="list-style-type: none"><li>Business Math</li><li>Ag Business</li><li>Psychology</li><li>Sociology</li></ul>			<ul style="list-style-type: none"><li>Boy Scouts</li><li>Girl Scouts</li><li>Intern with a local business professionals</li><li>Intern with local Chamber of Commerce</li></ul>		

<b>Career Possibilities in:</b>				
<b>Human Resources Management</b> <ul style="list-style-type: none"> <li>Compensation, Benefits, and Job Analysis Specialist</li> <li>Corporate Trainer</li> <li>Human Resources Manager</li> <li>OSHA/ADA Compliance Officer</li> <li>Personnel Recruiter</li> </ul>	<b>Administrative Support</b> <ul style="list-style-type: none"> <li>Administrative Assistant</li> <li>Communications Equipment Operator</li> <li>Data Entry Specialist</li> <li>Office Manager</li> <li>Receptionist</li> <li>Stenographer</li> </ul>	<b>Operations Management</b> <ul style="list-style-type: none"> <li>Buyer/Planner</li> <li>Facilities Manager</li> <li>Inventory Manager</li> <li>Procurement Officer</li> <li>Quality Control Technician</li> <li>Supply Chain Manager</li> </ul>	<b>Business Information Management</b> <ul style="list-style-type: none"> <li>Budget Analyst</li> <li>Business Consultant</li> <li>Business Operations Specialist</li> <li>Price Analyst</li> <li>Product Manager</li> </ul>	<b>General Management</b> <ul style="list-style-type: none"> <li>Administrative Services Manager</li> <li>Chief Executive Officer</li> <li>General Manager</li> <li>Management Analyst</li> </ul>

<b>Post Secondary Options</b>	
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<b>AHS</b> Career Paths & Cluster	<b>Business, Management, &amp; Technology</b> Finance	
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**Students must meet Archie graduation requirements.  
These courses are suggested for students interested in this career area.**

High School Courses	Subject	Grade 9	Grade 10	Grade 11	Grade 12
	Math (3 units)	Algebra I, Geometry	Geometry, Algebra II	Algebra II, Trig/Calc, Math Apps, Business Math	1 additional Math recommended
	Comm. Arts (4 units)	English I	English II	English III, English III CP	DC English or any English elective
	Science (3 units)	Intro. to P/C	Biology	1 additional Science required	Any Science elective
	Social Studies (3 units)	American History	World History or DC World History	American Government or DC Government	Any History elective
	P.E./Health	½ unit Physical Education ½ unit Health	½ unit elective PE class*	*can be taken this year	*can be taken this year
	Fine Arts	1 unit required*	*can be taken this year	*can be taken this year	*can be taken this year
	Foreign Lang.	Two units same language – any time are recommended/required for students attending a 4-year college			
	Practical Arts	One unit required that includes ½ unit of Personal Finance			
<b>Suggested Electives:</b> <ul style="list-style-type: none"> <li>Accounting I,II,III</li> <li>Multi Media</li> <li>Web Design</li> <li>Entrepreneurship</li> <li>DC Public Speaking</li> <li>Trig/Calc</li> <li>DC College Algebra</li> <li>Business Math</li> <li>Ag Business</li> <li>Psychology</li> <li>Sociology</li> </ul>			<b>Recommended Youth Activities:</b> <ul style="list-style-type: none"> <li>FBLA</li> <li>DECA</li> <li>Yearbook</li> <li>Student Council</li> <li>FCCLA</li> <li>FFA</li> <li>Boy Scouts</li> <li>Girl Scouts</li> <li>Intern with a local business professionals</li> <li>Intern with local Chamber of Commerce</li> </ul>		

Career Possibilities in:				
<b>Accounting</b> <ul style="list-style-type: none"> <li>Accountant or Auditor</li> <li>Bookkeeping, Accounting and Auditing Clerk</li> <li>Financial Manager</li> </ul>	<b>Securities &amp; Investments</b> <ul style="list-style-type: none"> <li>Investment Advisor</li> <li>Personal Finance Advisor</li> <li>Securities, Commodities and Financial Service Sales Agents</li> <li>Tax Preparation</li> </ul>	<b>Business Finance</b> <ul style="list-style-type: none"> <li>Controller</li> <li>Economist</li> <li>Financial Analyst</li> <li>Financial Examiner</li> </ul>	<b>Banking Services</b> <ul style="list-style-type: none"> <li>Bill and Account Collector</li> <li>Credit Analyst</li> <li>Debt Counselor</li> <li>Loan Officer</li> <li>Operations Manager</li> <li>Teller</li> </ul>	<b>Insurance</b> <ul style="list-style-type: none"> <li>Actuary</li> <li>Claims Adjuster, Examiner, Investigator</li> <li>Insurance Appraiser</li> <li>Insurance Underwriter</li> </ul>

Post Secondary Options	
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<b>AHS</b> <b>Career Paths</b> <b>&amp; Cluster</b>	<h1>Health Services</h1> <h2>Health Science</h2>	
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**Students must meet Archie graduation requirements.**  
**These courses are suggested for students interested in this career area.**

High School Courses	Subject	Grade 9	Grade 10	Grade 11	Grade 12
	Math (3 units)	Algebra I, Geometry	Geometry, Algebra II	Algebra II, Trig/Calc, Math Apps, Business Math	1 additional Math recommended
	Comm. Arts (4 units)	English I	English II	English III, English III CP	DC English or any English elective
	Science (3 units)	Intro. to P/C	Biology	1 additional Science required	Any Science elective
	Social Studies (3 units)	American History	World History or DC World History	American Government or DC Government	Any History elective
	P.E./Health	½ unit Physical Education ½ unit Health	½ unit elective PE class*	*can be taken this year	*can be taken this year
	Fine Arts	1 unit required*	*can be taken this year	*can be taken this year	*can be taken this year
	Foreign Lang.	Two units same language – any time are recommended/required for students attending a 4-year college			
	Practical Arts	One unit required that includes ½ unit of Personal Finance			
Suggested Electives:			Recommended Youth Activities:		
<ul style="list-style-type: none"><li>• Botany</li><li>• Zoology</li><li>• Anatomy/Physiology</li><li>• Advanced Biology</li><li>• Chemistry</li><li>• DC College Chemistry</li><li>• Family Living</li><li>• Child Development</li><li>• Food Nutrition</li><li>• Weights</li><li>• Fitness</li><li>• Lifetime Activities</li><li>• Career and Family Leadership</li><li>• CCC</li></ul>			<ul style="list-style-type: none"><li>• Athletics</li><li>• FCCLA</li><li>• TSA</li><li>• First Aid Training</li><li>• CPR Training</li><li>• Organize a Blood Drive</li><li>• Lifeguard</li><li>• Intern with a professional in the health care industry.</li></ul>		

<b>Career Possibilities in:</b>				
<b>Biotech Research &amp; Development</b> <ul style="list-style-type: none"> <li>• Biological Technician</li> <li>• Clinical Trials Research Coordinator</li> <li>• Epidemiologist</li> <li>• Geneticist</li> <li>• Lab Technician</li> <li>• Medical Scientist</li> <li>• Microbiologist</li> <li>• Research Assistant</li> <li>• Toxicologist</li> </ul>	<b>Diagnostic Services</b> <ul style="list-style-type: none"> <li>• Cardiology Technologist</li> <li>• Diagnostic Medical Sonographer</li> <li>• Medical Lab Technologist</li> <li>• Nuclear Medicine Technologist</li> <li>• Radiologic Technologist</li> </ul>	<b>Health Informatics</b> <ul style="list-style-type: none"> <li>• Health Care Administrator</li> <li>• Health Educator</li> <li>• Medical and Health Services Manager</li> <li>• Medical Records and Health Information Technician</li> <li>• Medical Social Worker</li> <li>• Medical Transcriptionist</li> <li>• Public Health Social Worker</li> </ul>	<b>Support Services</b> <ul style="list-style-type: none"> <li>• Biomedical Engineer</li> <li>• Environmental Services</li> <li>• Facilities Manager</li> <li>• Food Service</li> <li>• Hospital Maintenance Engineer</li> <li>• Industrial Hygienist</li> <li>• Medical Assistant</li> <li>• Medical Equipment Repairer</li> <li>• Pharmacy Aide</li> </ul>	<b>Therapeutic Services</b> <ul style="list-style-type: none"> <li>• Anesthesiologist</li> <li>• Athletic Trainer</li> <li>• Chiropractor</li> <li>• Dental Hygienist</li> <li>• Dentist</li> <li>• Dietitian or Nutritionist</li> <li>• Home Health Aide</li> <li>• Occupational Therapist</li> <li>• Optometrist</li> <li>• Paramedic</li> <li>• Pharmacist</li> <li>• Physical Therapist</li> <li>• Physician Asst.</li> <li>• Radiation Therapist</li> <li>• Registered Nurse</li> <li>• Rehabilitation Counselor</li> <li>• Respiratory Therapist</li> <li>• Speech-Language Pathologist</li> <li>• Surgical Technologist</li> </ul>

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	Social Studies (3 units)	American History	World History or DC World History	American Government or DC Government	Any History elective
	P.E./Health	½ unit Physical Education ½ unit Health	½ unit elective PE class*	*can be taken this year	*can be taken this year
	Fine Arts	1 unit required*	*can be taken this year	*can be taken this year	*can be taken this year
	Foreign Lang.	Two units same language – any time are recommended/required for students attending a 4-year college			
	Practical Arts	One unit required that includes ½ unit of Personal Finance			
Suggested Electives:			Recommended Youth Activities:		
<ul style="list-style-type: none"><li>Journalism</li><li>DC Public Speaking</li><li>DC College Algebra</li><li>Psychology</li><li>Sociology</li><li>Food and Nutrition</li><li>Advanced Foods</li><li>Family Living</li><li>Child Development</li><li>Weights/Fitness</li><li>Accounting I</li><li>Multi Media</li><li>Web Design</li></ul>			<ul style="list-style-type: none"><li>FBLA</li><li>FCCLA</li><li>DECA</li><li>FFA</li><li>4-H</li><li>Boy Scouts</li><li>Girl Scouts</li><li>Intern with local business professionals</li><li>A+ Tutoring</li><li>Intern in local child care facilities</li><li>First Aid training</li><li>CPR training</li><li>Volunteer in the community</li></ul>		

Career Possibilities in:				
<b>Early Childhood Development &amp; Services</b> <ul style="list-style-type: none"> <li>Childcare Facility Director</li> <li>Childcare Worker</li> <li>Nanny</li> <li>Parent Educator</li> <li>Preschool Teacher</li> <li>Teacher Aide</li> </ul>	<b>Counseling and Mental Health Services</b> <ul style="list-style-type: none"> <li>Marriage and Family Therapist</li> <li>Mental Health Counselor</li> <li>Substance Abuse Social Worker</li> <li>Vocational Rehabilitation Counselor</li> </ul>	<b>Family and Community Services</b> <ul style="list-style-type: none"> <li>Child, Family and School Social Worker</li> <li>Clergy</li> <li>Community Housing Service Worker</li> <li>Geriatric Service Worker</li> <li>Social and Human Services Assistant</li> <li>Sociologist</li> <li>Vocational Rehabilitation Service Worker</li> </ul>	<b>Personal Care Services</b> <ul style="list-style-type: none"> <li>Fitness Trainer</li> <li>Funeral Director</li> <li>Hairdresser, Hair Stylist, Cosmetologist</li> <li>Massage Therapist</li> <li>Skin Care Specialist</li> </ul>	<b>Consumer Services</b> <ul style="list-style-type: none"> <li>Consumer Advocate</li> <li>Customer Service Representative</li> <li>Insurance Representative</li> <li>Investment Broker</li> <li>Personal Financial Advisor</li> </ul>

Post Secondary Options	
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<b>AHS</b> <b>Career Paths</b> <b>&amp; Cluster</b>	<h1 style="text-align: center;">Human Services</h1> <p style="text-align: center;">Law, Public Safety, Corrections, and Security</p>	
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**Students must meet Archie graduation requirements.**  
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	P.E./Health	½ unit Physical Education ½ unit Health	½ unit elective PE class*	*can be taken this year	*can be taken this year
	Fine Arts	1 unit required*	*can be taken this year	*can be taken this year	*can be taken this year
	Foreign Lang.	Two units same language – any time are recommended/required for students attending a 4-year college			
	Practical Arts	One unit required that includes ½ unit of Personal Finance			
<b>Suggested Electives:</b> <ul style="list-style-type: none"><li>• DC Public Speaking</li><li>• DC College English</li><li>• Psychology</li><li>• Sociology</li><li>• Contemporary Issues</li><li>• Multi Media</li><li>• Web Design</li><li>• Weights/Fitness</li><li>• Photography</li><li>• Chemistry I</li><li>• Yearbook</li><li>• CCC</li></ul>			<b>Recommended Youth Activities:</b> <ul style="list-style-type: none"><li>• FBLA</li><li>• FCCLA</li><li>• Skills USA</li><li>• 4-H</li><li>• CPR Training</li><li>• First Aid Training</li><li>• Boy Scouts</li><li>• Girls Scouts</li><li>• Intern with local Emergency, Fire, and Police Departments</li><li>• Lifeguard</li></ul>		

<b>Career Possibilities in:</b>				
<b>Emergency and Fire Management Services</b> <ul style="list-style-type: none"> <li>• Dispatcher</li> <li>• Emergency Medical Technician/Paramedic</li> <li>• Emergency Management and Response Coordinator</li> <li>• Firefighter</li> <li>• Forest Firefighter</li> <li>• Hazardous Materials Responder</li> </ul>	<b>Security and Protective Services</b> <ul style="list-style-type: none"> <li>• Computer Security Specialist</li> <li>• Forensic Science Technician</li> <li>• Gaming Surveillance Officer/Investigator</li> <li>• Industrial Espionage Security</li> <li>• Loss Prevention Assistant</li> <li>• Security and Fire Alarm Systems Installer</li> <li>• Security Guard</li> </ul>	<b>Law Enforcement Services</b> <ul style="list-style-type: none"> <li>• Animal Control Officer</li> <li>• Bomb Technician</li> <li>• Child Support</li> <li>• Criminal Investigator</li> <li>• Federal Marshall</li> <li>• Park Ranger</li> <li>• Police and Patrol Officer</li> </ul>	<b>Correction Services</b> <ul style="list-style-type: none"> <li>• Case Manager</li> <li>• Corrections Officer</li> <li>• Probation and Parole Officer</li> <li>• Transport Officer</li> <li>• Youth Services Worker</li> </ul>	<b>Legal Services</b> <ul style="list-style-type: none"> <li>• Arbitrator</li> <li>• Attorney</li> <li>• Court, Municipal and License Clerk</li> <li>• Judge</li> <li>• Law Clerk</li> <li>• Mediator</li> <li>• Paralegal and Legal Assistant</li> </ul>

<b>Post Secondary Options</b>	
Please visit these sites for up to date lists of Technical Schools, Community Colleges, and 4-year Colleges & Universities with degree programs in this field: <a href="http://www.missouriconnections.org">www.missouriconnections.org</a> <a href="http://www.collegeboard.com">www.collegeboard.com</a> <a href="http://www.dhe.mo.gov">www.dhe.mo.gov</a> <a href="http://www.archie.k12.mo.us">www.archie.k12.mo.us</a>	If interested in pursuing a career involving this cluster in the U.S. military please refer to the following websites: <a href="http://www.army.mil">www.army.mil</a> (Army) <a href="http://www.navy.mil">www.navy.mil</a> (Navy) <a href="http://www.marines.mil">www.marines.mil</a> (Marines) <a href="http://www.af.mil">www.af.mil</a> (Air Force) <a href="http://www.uscg.mil">www.uscg.mil</a> (Coast Guard) <a href="http://www.ng.mil">www.ng.mil</a> (National Guard)

<b>AHS</b> <b>Career Paths</b> <b>&amp; Cluster</b>	<b>Business, Management, &amp; Technology</b> <b>Marketing, Sales, and Service</b>	
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**Students must meet Archie graduation requirements.**  
**These courses are suggested for students interested in this career area.**

<b>High School Courses</b>	<b>Subject</b>	<b>Grade 9</b>	<b>Grade 10</b>	<b>Grade 11</b>	<b>Grade 12</b>
	Math (3 units)	Algebra I, Geometry	Geometry, Algebra II	Algebra II, Trig/Calc, Math Apps, Business Math	1 additional Math recommended
	Comm. Arts (4 units)	English I	English II	English III, English III CP	DC English or any English elective
	Science (3 units)	Intro. to P/C	Biology	1 additional Science required	Any Science elective
	Social Studies (3 units)	American History	World History or DC World History	American Government or DC Government	Any History elective
	P.E./Health	½ unit Physical Education ½ unit Health	½ unit elective PE class*	*can be taken this year	*can be taken this year
	Fine Arts	1 unit required*	*can be taken this year	*can be taken this year	*can be taken this year
	Foreign Lang.	Two units same language – any time are recommended/required for students attending a 4-year college			
	Practical Arts	One unit required that includes ½ unit of Personal Finance			
<b>Suggested Electives:</b> <ul style="list-style-type: none"> <li>Accounting I,II,III</li> <li>Multi Media</li> <li>Web Design</li> <li>Entrepreneurship</li> <li>DC Public Speaking</li> <li>Trig/Calc</li> <li>DC College Algebra</li> <li>Business Math</li> <li>Ag Business</li> <li>Psychology</li> <li>Sociology</li> </ul>			<b>Recommended Youth Activities:</b> <ul style="list-style-type: none"> <li>FBLA</li> <li>DECA</li> <li>Yearbook</li> <li>Student Council</li> <li>FCCLA</li> <li>FFA</li> <li>Boy Scouts</li> <li>Girl Scouts</li> <li>Intern with a local business professionals</li> <li>Intern with local Chamber of Commerce</li> </ul>		

<b>Career Possibilities in:</b>				
<b>Marketing Research</b> <ul style="list-style-type: none"> <li>Customer Service Representative</li> <li>Interviewer</li> <li>Market Research Analyst</li> <li>Product Planner</li> </ul>	<b>Marketing Communications</b> <ul style="list-style-type: none"> <li>Media Buyer</li> <li>Public Information Director</li> <li>Public Relations Manager</li> <li>Public Relations Specialist</li> <li>Research Specialist</li> </ul>	<b>Marketing Management</b> <ul style="list-style-type: none"> <li>Advertising and Promotions Manager</li> <li>Distributor</li> <li>Entrepreneur</li> <li>Franchisee</li> <li>Marketing Manager</li> <li>Small Business Owner</li> </ul>	<b>Professional Sales</b> <ul style="list-style-type: none"> <li>Field Representative</li> <li>Real Estate Sales Agent</li> <li>Retail Salesperson</li> <li>Sales Engineer</li> <li>Sales Manager</li> <li>Sales Representative</li> <li>Territory Representative</li> </ul>	<b>Merchandising</b> <ul style="list-style-type: none"> <li>Merchandise Buyer</li> <li>Purchasing Agent</li> <li>Purchasing Manager</li> <li>Retail Marketing Coordinator</li> </ul>

<b>Post Secondary Options</b>	
Please visit these sites for up to date lists of Technical Schools, Community Colleges, and 4-year Colleges & Universities with degree programs in this field: <a href="http://www.missouriconnections.org">www.missouriconnections.org</a> <a href="http://www.collegeboard.com">www.collegeboard.com</a> <a href="http://www.dhe.mo.gov">www.dhe.mo.gov</a> <a href="http://www.archie.k12.mo.us">www.archie.k12.mo.us</a>	If interested in pursuing a career involving this cluster in the U.S. military please refer to the following websites: <a href="http://www.army.mil">www.army.mil</a> (Army) <a href="http://www.navy.mil">www.navy.mil</a> (Navy) <a href="http://www.marines.mil">www.marines.mil</a> (Marines) <a href="http://www.af.mil">www.af.mil</a> (Air Force) <a href="http://www.uscg.mil">www.uscg.mil</a> (Coast Guard) <a href="http://www.ng.mil">www.ng.mil</a> (National Guard)

<b>AHS</b> <b>Career Paths</b> <b>&amp; Cluster</b>	<h1 style="text-align: center;">Industrial &amp; Engineering Technology</h1> <p style="text-align: center;">Science, Technology, Engineering and Mathematics</p>	
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**Students must meet Archie graduation requirements.**  
**These courses are suggested for students interested in this career area.**

High School Courses	<b>Subject</b>	<b>Grade 9</b>	<b>Grade 10</b>	<b>Grade 11</b>	<b>Grade 12</b>
	Math (3 units)	Algebra I, Geometry	Geometry, Algebra II	Algebra II, Trig/Calc, Math Apps, Business Math	1 additional Math recommended
	Comm. Arts (4 units)	English I	English II	English III, English III CP	DC English or any English elective
	Science (3 units)	Intro. to P/C	Biology	1 additional Science required	Any Science elective
	Social Studies (3 units)	American History	World History or DC World History	American Government or DC Government	Any History elective
	P.E./Health	½ unit Physical Education ½ unit Health	½ unit elective PE class*	*can be taken this year	*can be taken this year
	Fine Arts	1 unit required*	*can be taken this year	*can be taken this year	*can be taken this year
	Foreign Lang.	Two units same language – any time are recommended/required for students attending a 4-year college			
	Practical Arts	One unit required that includes ½ unit of Personal Finance			
<b>Suggested Electives:</b> <ul style="list-style-type: none"> <li>• Trig/Calc</li> <li>• DC College Algebra</li> <li>• <b>DC College Calculus</b></li> <li>• Chemistry I</li> <li>• DC College Chemistry</li> <li>• Advanced Biology</li> <li>• Botany/Zoology</li> <li>• Anatomy/Physiology</li> <li>• Physics I</li> <li>• DC College English</li> <li>• DC Public Speaking</li> <li>• <b>IED</b></li> <li>• POE</li> <li>• CEA</li> <li>• EDD</li> </ul>			<b>Recommended Youth Activities:</b> <ul style="list-style-type: none"> <li>• TSA</li> <li>• FFA</li> <li>• FCCLA</li> <li>• FBLA</li> <li>• SkillsUSA</li> <li>• 4-H</li> <li>• Green Club</li> <li>• Habitat for Humanity</li> <li>• CCC</li> <li>• Intern with a local contractor, scientist, or engineer</li> </ul>		

<b>Career Possibilities in:</b>			
<b>Engineering and Technology</b>		<b>Science and Math</b>	
<ul style="list-style-type: none"> <li>• Chemical Engineer</li> <li>• Civil Engineer</li> <li>• Electrical Engineer</li> <li>• Electro-Mechanical Technician</li> <li>• Engineering Manager</li> <li>• Environmental Engineer</li> <li>• Hazardous Waste Technician</li> <li>• Industrial Engineer</li> </ul>	<ul style="list-style-type: none"> <li>• Materials Engineer</li> <li>• Mechanical Engineer</li> <li>• Mining Engineer</li> <li>• Nuclear Engineer</li> <li>• Power Systems Engineer</li> <li>• Quality Technician</li> <li>• Technical Writer</li> </ul>	<ul style="list-style-type: none"> <li>• Atmospheric Scientist</li> <li>• Biochemist</li> <li>• CAD Operator</li> <li>• Chemist</li> <li>• Conservation Scientist</li> <li>• Demographer</li> <li>• Economist</li> <li>• Environmental Scientist</li> </ul>	<ul style="list-style-type: none"> <li>• Geological and Petroleum Technician</li> <li>• Geologist</li> <li>• Lab Technician</li> <li>• Math Teacher</li> <li>• Research Technician</li> <li>• Science Teacher</li> <li>• Zoologist</li> </ul>

<b>Post Secondary Options</b>	
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<b>AHS</b> <b>Career Paths</b> <b>&amp; Cluster</b>	<h1 style="text-align: center;">Arts &amp; Communication</h1> <p style="text-align: center;">Arts, Audio-Visual Technology and Communication</p>	
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**Students must meet Archie graduation requirements.**  
**These courses are suggested for students interested in this career area.**

High School Courses	Subject	Grade 9	Grade 10	Grade 11	Grade 12
	Math (3 units)	Algebra I, Geometry	Geometry, Algebra II	Algebra II, Trig/Calc, Math Apps, Business Math	1 additional Math recommended
	Comm. Arts (4 units)	English I	English II	English III, English III CP	DC English or any English elective
	Science (3 units)	Intro. to P/C	Biology	1 additional Science required	Any Science elective
	Social Studies (3 units)	American History	World History or DC World History	American Government or DC Government	Any History elective
	P.E./Health	½ unit Physical Education ½ unit Health	½ unit elective PE class*	*can be taken this year	*can be taken this year
	Fine Arts	1 unit required*	*can be taken this year	*can be taken this year	*can be taken this year
	Foreign Lang.	Two units same language – any time are recommended/required for students attending a 4-year college			
	Practical Arts	One unit required that includes ½ unit of Personal Finance			
<b>Suggested Electives:</b> <ul style="list-style-type: none"> <li>Choir</li> <li>Show Choir</li> <li>Band</li> <li>Instrumental Band</li> <li>Art II</li> <li>Art III</li> <li>Multi Media</li> <li>IED</li> <li>POE</li> <li>Yearbook</li> <li>Web Design</li> <li>Photography</li> <li>Graphic Design</li> <li>DC Public Speaking</li> <li>Journalism</li> <li>Creative Writing</li> <li>Short Stories</li> <li>American Novels</li> <li>DC College English</li> <li>Historical Films</li> </ul>			<b>Recommended Youth Activities:</b> <ul style="list-style-type: none"> <li>Choir</li> <li>Band</li> <li>Debate Team</li> <li>Drama Club</li> <li>School Play</li> <li>Book Club</li> <li>Yearbook</li> <li>FFA</li> <li>FBLA</li> <li>TSA</li> <li>4-H</li> <li>Intern with a professional</li> </ul>		

Career Possibilities in:			
<b>Arts, A-V Technology and Film</b> <ul style="list-style-type: none"> <li>Animator</li> <li>Audio Technician</li> <li>Sound Engineering Technician</li> </ul>	<b>Journalism and Broadcasting</b> <ul style="list-style-type: none"> <li>Broadcast News Analyst</li> <li>Editor</li> <li>Reporter</li> <li>Writer</li> </ul>	<b>Printing Technology</b> <ul style="list-style-type: none"> <li>Desktop Publishing Specialist</li> <li>Prepress Technician</li> <li>Press Operator</li> </ul>	<b>Telecommunications</b> <ul style="list-style-type: none"> <li>Central Office Installer</li> <li>Network &amp; Computer Administrator</li> <li>Telecommunications Equipment Installer</li> </ul>
<b>Performing Arts</b> <ul style="list-style-type: none"> <li>Actor/Actress</li> <li>Agent or Business Manager</li> <li>Choreographer</li> <li>Composer</li> <li>Director/Producer</li> <li>Model</li> <li>Musician</li> <li>Professional Athlete</li> <li>Singer</li> </ul>		<b>Visual Arts</b> <ul style="list-style-type: none"> <li>Art Director</li> <li>Artist</li> <li>Commercial Photographer</li> <li>Fashion Designer</li> <li>Floral Designer</li> <li>Graphic Designer</li> <li>Interior Designer</li> <li>Jeweler</li> </ul>	

Post Secondary Options	
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**Students must meet Archie graduation requirements.**  
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	Comm. Arts (4 units)	English I	English II	English III, English III CP	DC English or any English elective
	Science (3 units)	Intro. to P/C	Biology	1 additional Science required	Any Science elective
	Social Studies (3 units)	American History	World History or DC World History	American Government or DC Government	Any History elective
	P.E./Health	½ unit Physical Education ½ unit Health	½ unit elective PE class*	*can be taken this year	*can be taken this year
	Fine Arts	1 unit required*	*can be taken this year	*can be taken this year	*can be taken this year
	Foreign Lang.	Two units same language – any time are recommended/required for students attending a 4-year college			
	Practical Arts	One unit required that includes ½ unit of Personal Finance			
Suggested Electives:			Recommended Youth Activities:		
<ul style="list-style-type: none"><li>• DC Public Speaking</li><li>• DC College Algebra</li><li>• Psychology</li><li>• Sociology</li><li>• Food and Nutrition</li><li>• Advanced Foods</li><li>• </li><li>• Family Living</li><li>• Child Development</li><li>• Weights/Fitness</li><li>• Accounting I</li><li>• Multi Media</li><li>• Web Design</li></ul>			<ul style="list-style-type: none"><li>• FBLA</li><li>• FCCLA</li><li>• DECA</li><li>• FFA</li><li>• 4-H</li><li>• Boy Scouts</li><li>• Girl Scouts</li><li>• Coach a little league team</li><li>• Intern with local business professionals</li><li>• A+ Tutoring</li><li>• Intern in local child care facilities</li><li>• First Aid training</li><li>• CPR training</li><li>• Volunteer in the community</li></ul>		

<b>Career Possibilities in:</b>		
<b>Administration &amp; Administrative Support</b> <ul style="list-style-type: none"> <li>College President</li> <li>College Dean</li> <li>Curriculum Developer</li> <li>Education Administrator</li> <li>Instructional Media Designer</li> <li>Librarian</li> <li>Principal</li> <li>Superintendent</li> </ul>	<b>Professional Support Services</b> <ul style="list-style-type: none"> <li>Audiologist</li> <li>Counselor</li> <li>Parent Educator</li> <li>Psychologist</li> <li>Social Worker</li> <li>Speech-Language Pathologist</li> </ul>	<b>Teaching and Training</b> <ul style="list-style-type: none"> <li>Career Education Teacher</li> <li>Coach</li> <li>College Professor</li> <li>Elementary Teacher</li> <li>High School Teacher</li> <li>Human Resource Trainer</li> <li>Kindergarten Teacher</li> <li>Middle School Teacher</li> <li>Preschool Teacher</li> <li>Preschool Aide</li> </ul>

Post Secondary Options	
<p>Please visit these sites for up to date lists of Technical Schools, Community Colleges, and 4-year Colleges &amp; Universities with degree programs in this field:</p> <p><a href="http://www.missouriconnections.org">www.missouriconnections.org</a></p> <p><a href="http://www.collegeboard.com">www.collegeboard.com</a></p> <p><a href="http://www.dhe.mo.gov">www.dhe.mo.gov</a></p> <p><a href="http://www.archie.k12.mo.us">www.archie.k12.mo.us</a></p>	<p>If interested in pursuing a career involving this cluster in the U.S. military please refer to the following websites:</p> <p><a href="http://www.army.mil">www.army.mil</a> (Army)</p> <p><a href="http://www.navy.mil">www.navy.mil</a> (Navy)</p> <p><a href="http://www.marines.mil">www.marines.mil</a> (Marines)</p> <p><a href="http://www.af.mil">www.af.mil</a> (Air Force)</p> <p><a href="http://www.uscg.mil">www.uscg.mil</a> (Coast Guard)</p> <p><a href="http://www.ng.mil">www.ng.mil</a> (National Guard)</p>



<b>AHS</b> <b>Career Paths</b> <b>&amp; Cluster</b>	<h1>Human Services</h1> <h2>Government and Public Administration</h2>	
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**Students must meet Archie graduation requirements.**  
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High School Courses	<b>Subject</b>	<b>Grade 9</b>	<b>Grade 10</b>	<b>Grade 11</b>	<b>Grade 12</b>
	Math (3 units)	Algebra I, Geometry	Geometry, Algebra II	Algebra II, Trig/Calc, Math Apps, Business Math	1 additional Math recommended
	Comm. Arts (4 units)	English I	English II	English III, English III CP	DC English or any English elective
	Science (3 units)	Intro. to P/C	Biology	1 additional Science required	Any Science elective
	Social Studies (3 units)	American History	World History or DC World History	American Government or DC Government	Any History elective
	P.E./Health	½ unit Physical Education ½ unit Health	½ unit elective PE class*	*can be taken this year	*can be taken this year
	Fine Arts	1 unit required*	*can be taken this year	*can be taken this year	*can be taken this year
	Foreign Lang.	Two units same language – any time are recommended/required for students attending a 4-year college			
	Practical Arts	One unit required that includes ½ unit of Personal Finance			
<b>Suggested Electives:</b>		<b>Recommended Youth Activities:</b>			
		<ul style="list-style-type: none"> <li>• Journalism</li> <li>• DC Public Speaking</li> <li>• DC College Algebra</li> <li>• Psychology</li> <li>• Sociology</li> <li>• Food and Nutrition</li> <li>• Advanced Foods</li> <li>• Family Living</li> <li>• Child Development</li> <li>• Weights/Fitness</li> <li>• Accounting I</li> <li>• Multi Media</li> <li>• Web Design</li> <li>• FBLA</li> <li>• FCCLA</li> <li>• DECA</li> <li>• FFA</li> <li>• 4-H</li> <li>• Boy Scouts</li> <li>• Girl Scouts</li> <li>• Intern with local business professionals</li> <li>• Volunteer in the community</li> <li>• Boys and Girls State</li> <li>• Student Council</li> <li>• Attend local School Board meetings</li> </ul>			

<b>Career Possibilities in:</b>			
<b>Planning</b> <ul style="list-style-type: none"> <li>• Census Clerk</li> <li>• Chief of Vital Statistics</li> <li>• County Clerk</li> <li>• Economic Development Coordinator</li> <li>• Global Imaging Systems Specialist</li> <li>• Political Scientist</li> </ul>	<b>Foreign Service Affairs</b> <ul style="list-style-type: none"> <li>• Ambassador</li> <li>• Administrative Foreign Service Officer</li> <li>• Consular Officer</li> <li>• Diplomatic Courier</li> <li>• Economic Foreign Service Officer</li> <li>• Political Foreign Service Officer</li> </ul>	<b>Governance</b> <ul style="list-style-type: none"> <li>• Assistant, Deputy, or Chief of Staff</li> <li>• Legislator</li> <li>• Legislative Aide</li> <li>• Lobbyist</li> <li>• Public Advisor</li> </ul>	<b>Revenue &amp; Taxation</b> <ul style="list-style-type: none"> <li>• Assessor</li> <li>• Internal Revenue Investigator</li> <li>• Revenue Agent</li> <li>• Tax Attorney</li> <li>• Tax Examiner</li> </ul>
<b>Regulation</b> <ul style="list-style-type: none"> <li>• Aviation Safety Officer</li> <li>• Bank Examiner</li> <li>• Cargo Inspector</li> <li>• Code Inspector</li> <li>• Court, Municipal and License Clerk</li> <li>• Election Supervisor</li> <li>• Immigration Officer</li> <li>• Postal Service Mail Carrier</li> </ul>	<b>National Security</b> <ul style="list-style-type: none"> <li>• Air Defense Artillery</li> <li>• Combat Engineer or Aircraft Pilot</li> <li>• Cryptographer</li> <li>• Electronic Warfare Operations</li> <li>• Infantry Field Artillery</li> <li>• Intelligence/Counter-Intelligence Agent</li> <li>• Missile and Space Systems</li> <li>• Special Forces</li> </ul>	<b>Public Management &amp; Administration</b> <ul style="list-style-type: none"> <li>• Archeologist</li> <li>• Archivist</li> <li>• City Manager</li> <li>• Court Administrator</li> <li>• Curator</li> <li>• Executive Director of an Association, Foundation, or Chamber of Commerce</li> <li>• Program Administration Officer</li> </ul>	

<b>Post Secondary Options</b>	
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	Social Studies (3 units)	American History	World History or DC World History	American Government or DC Government	Any History elective
	P.E./Health	½ unit Physical Education ½ unit Health	½ unit elective PE class*	*can be taken this year	*can be taken this year
	Fine Arts	1 unit required*	*can be taken this year	*can be taken this year	*can be taken this year
	Foreign Lang.	Two units same language – any time are recommended/required for students attending a 4-year college			
	Practical Arts	One unit required that includes ½ unit of Personal Finance			
<b>Suggested Electives:</b> <ul style="list-style-type: none"> <li>Journalism</li> <li>DC Public Speaking</li> <li>DC College Algebra</li> <li>Anatomy/Physiology</li> <li>Psychology</li> <li>Sociology</li> <li>Food and Nutrition</li> <li>Advanced Foods</li> </ul>			<b>Recommended Youth Activities:</b> <ul style="list-style-type: none"> <li>FBLA</li> <li>FCCLA</li> <li>DECA</li> <li>FFA</li> <li>4-H</li> <li>Boy Scouts</li> <li>Girl Scouts</li> <li>Intern with local business professionals</li> <li>Volunteer in the community</li> </ul>		

<b>Career Possibilities in:</b>			
<b>Restaurants and Food &amp; Beverage Services</b> <ul style="list-style-type: none"> <li>Baker</li> <li>Chef</li> <li>Counter Service</li> <li>First Line Supervisor</li> <li>Food and Beverage Manager</li> <li>General Manager</li> <li>Manager of Food Preparation and Serving Workers</li> </ul>	<b>Recreation, Amusement &amp; Attractions</b> <ul style="list-style-type: none"> <li>Conservator</li> <li>Equipment and Facility Maintenance</li> <li>Event Planner</li> <li>Gaming Manager</li> <li>Museum Technician</li> <li>Museum, Zoo or Aquarium Exhibit Developer</li> <li>Parks and Garden Ranger</li> <li>Recreation Worker</li> </ul>	<b>Travel and Tourism</b> <ul style="list-style-type: none"> <li>Director of Sales and Marketing</li> <li>Event Planner</li> <li>Interpreter</li> <li>Tour Guide</li> <li>Transportation Specialist</li> <li>Travel Agent</li> </ul>	<b>Lodging</b> <ul style="list-style-type: none"> <li>Laundry Attendant</li> <li>Lodging Manager</li> <li>PBX Operator</li> <li>Reservations Supervisor</li> <li>Valet Attendant</li> </ul>

<b>Post Secondary Options</b>
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	Fine Arts	1 unit required*	*can be taken this year	*can be taken this year	*can be taken this year
	Foreign Lang.	Two units same language – any time are recommended/required for students attending a 4-year college			
	Practical Arts	One unit required that includes ½ unit of Personal Finance			
<b>Suggested Electives:</b> <ul style="list-style-type: none"> <li>Accounting I,II,III</li> <li>Multi Media</li> <li>Web Design</li> <li>Entrepreneurship</li> <li>DC Public Speaking</li> <li>Trig/Calc</li> <li>DC College Algebra</li> </ul>			<b>Recommended Youth Activities:</b> <ul style="list-style-type: none"> <li>FBLA</li> <li>DECA</li> <li>Yearbook</li> <li>Student Council</li> <li>FCCLA</li> <li>FFA</li> <li>TSA</li> <li>Boy Scouts</li> <li>Girl Scouts</li> <li>Intern with a local business professionals</li> <li>Intern with local Chamber of Commerce</li> </ul>		

Career Possibilities in:			
Programming and Software Development	Information Support and Service	Network Systems	Web and Digital Communications
<ul style="list-style-type: none"> <li>Computer Programmer</li> <li>Computer Software Engineer</li> <li>Data Modeler</li> <li>Game Programmer</li> <li>Tester</li> </ul>	<ul style="list-style-type: none"> <li>Computer and Information Systems Manager</li> <li>Computer Support Specialist</li> <li>Customer Liaison</li> <li>Database Administrator</li> <li>Help Desk Specialist</li> <li>Information Systems Architect</li> <li>Technical Writer</li> </ul>	<ul style="list-style-type: none"> <li>Computer Systems Analyst</li> <li>Data Communications Analyst</li> <li>Information Systems Operator</li> <li>Information Technology Engineer</li> <li>Network Architect</li> <li>Network Systems Analyst</li> <li>PC Support Specialist</li> <li>Telecommunications Network Technician</li> </ul>	<ul style="list-style-type: none"> <li>3-D Animator</li> <li>Audio/Visual Engineer</li> <li>Streaming Media Specialist</li> <li>Web Designer</li> <li>Webmaster</li> </ul>

Post Secondary Options	
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	P.E./Health	½ unit Physical Education ½ unit Health	½ unit elective PE class*	*can be taken this year	*can be taken this year
	Fine Arts	1 unit required*	*can be taken this year	*can be taken this year	*can be taken this year
	Foreign Lang.	Two units same language – any time are recommended/required for students attending a 4-year college			
	Practical Arts	One unit required that includes ½ unit of Personal Finance			
Suggested Electives:			Recommended Youth Activities:		
<ul style="list-style-type: none"><li>• Trig/Calc</li><li>• DC College Algebra</li><li>• DC College Calculus</li><li>• IED</li><li>• POE</li><li>• CEA</li><li>• EDD</li></ul>			<ul style="list-style-type: none"><li>• Physics I</li><li>• DC College English</li><li>• Eastern/Western Geography</li><li>• Multi Media</li><li>• Web Design</li><li>• Art II (2-D Art)</li><li>• Art II (3-D Art)</li><li>• Housing/Textiles</li><li>• TSA</li><li>• FFA</li><li>• FCCLA</li><li>• FBLA</li><li>• Green Club</li><li>• Habitat for Humanity</li><li>• CCC</li><li>• SkillsUSA</li><li>• 4-H</li><li>• Intern with a local contractor, architect, engineer or mechanic</li></ul>		

Career Possibilities in:		
<b>Quality Assurance</b> <ul style="list-style-type: none"> <li>• Calibration Technician</li> <li>• Inspector</li> <li>• Lab Technician</li> <li>• Process Control Technician</li> <li>• Quality Control Technician</li> </ul>	<b>Health, Safety, &amp; Environmental Assurance</b> <ul style="list-style-type: none"> <li>• Environmental Specialist</li> <li>• Health and Safety Engineer</li> <li>• Occupational Health and Safety Specialist</li> <li>• Operations Research Analyst</li> </ul>	<b>Logistics and Inventory Control</b> <ul style="list-style-type: none"> <li>• Dispatcher</li> <li>• Freight, Stock and Material Mover</li> <li>• Logistician</li> <li>• Material Handler</li> <li>• Quality Control Technician</li> <li>• Traffic, Shipping and Receiving Clerk</li> </ul>
<b>Production</b> <ul style="list-style-type: none"> <li>• Assembler</li> <li>• Industrial Production Manager</li> <li>• Machine Operator</li> <li>• Machinist</li> <li>• Manager or Supervisor</li> <li>• Model Maker</li> <li>• Power Distributor and Dispatcher</li> <li>• Tool and Die Maker</li> <li>• Welder</li> </ul>	<b>Manufacturing Production Process Development</b> <ul style="list-style-type: none"> <li>• Design Engineer</li> <li>• Electronics Engineer</li> <li>• Engineering Technician</li> <li>• Labor Relations Manager</li> <li>• Precision Inspector</li> <li>• Purchasing Agent</li> <li>• Supervisor</li> </ul>	<b>Maintenance, Installation, &amp; Repair</b> <ul style="list-style-type: none"> <li>• Boilermaker</li> <li>• Computer Installer or Repairer</li> <li>• Electronic Motor Repairer</li> <li>• Instrument Calibration and Repairer</li> <li>• Laser System Technician</li> <li>• Major Appliance Repairer</li> <li>• Manager of Mechanics, Installers and Repairers</li> <li>• Plumber</li> </ul>

Post Secondary Options	
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<b>AHS</b> Career Paths & Cluster	<h1>Natural Resources</h1> <h2>Agriculture, Food &amp; Natural Resources</h2>	
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	Foreign Lang.	Two units same language – any time are recommended/required for students attending a 4-year college			
	Practical Arts	One unit required that includes ½ unit of Personal Finance			
<b>Suggested Electives:</b>		<b>Recommended Youth Activities:</b>			
		<ul style="list-style-type: none"> <li>• Intro. to Ag</li> <li>• Ag. Business</li> <li>• Ag. Structures</li> <li>• Ag. Construction</li> <li>• Greenhouse</li> <li>• Vet Science</li> <li>• DC Animal Science</li> <li>• DC Public Speaking</li> <li>• Botany</li> <li>• Zoology</li> <li>• Advanced Biology</li> <li>• IED</li> <li>• POE</li> <li>• CEA</li> <li>• Food and Nutrition</li> <li>• CCC</li> <li>• FFA</li> <li>• FBLA</li> <li>• FCCLA</li> <li>• 4-H</li> <li>• Green Club</li> <li>• TSA</li> <li>• Intern at a local greenhouse, vet office, farm, ranch, agribusiness, animal shelter</li> </ul>			

Career Possibilities in:					
Animal Systems	Agribusiness Systems	Plant Systems	Food Products & Processing Systems	Power Structural & Technical Systems	Natural Resources & Environmental Service Systems
<ul style="list-style-type: none"> <li>• Animal Breeder</li> <li>• Animal Geneticist</li> <li>• Animal Nutritionist</li> <li>• Animal Trainer</li> <li>• Aquaculturist</li> <li>• Farmer or Rancher</li> <li>• Veterinarian</li> <li>• Zoologist</li> </ul>	<ul style="list-style-type: none"> <li>• Agricultural Commodity Broker</li> <li>• Agricultural Economist</li> <li>• Agricultural Loan Officer</li> <li>• Agricultural Products Buyer</li> <li>• International Agri-Marketing Specialist</li> </ul>	<ul style="list-style-type: none"> <li>• Aquaculturist</li> <li>• Botanist</li> <li>• Farmer or Rancher</li> <li>• Forester</li> <li>• Landscaping Manager</li> <li>• Plant Breeder and Geneticist</li> <li>• Soil and Water Specialist</li> <li>• Tree Surgeon</li> </ul>	<ul style="list-style-type: none"> <li>• Agricultural &amp; Food Science Technician</li> <li>• Agricultural Inspector</li> <li>• Bacteriologist</li> <li>• Biochemist</li> <li>• Food and Drug Inspector</li> <li>• Food and Fiber Engineer</li> <li>• Meat, Poultry, Fish Cutter and Trimmer</li> <li>• Microbiologist</li> </ul>	<ul style="list-style-type: none"> <li>• Agricultural Technologist</li> <li>• Biochemistry Technologist</li> <li>• Equipment Parts Manager</li> <li>• Farm Equipment Mechanic</li> <li>• Global Positioning System Technician</li> <li>• Remote Sensing Specialist</li> </ul>	<ul style="list-style-type: none"> <li>• Atmospheric/Space Scientist</li> <li>• Chemical Technician</li> <li>• Conservation Scientist</li> <li>• Fisheries Manager</li> <li>• Geographer</li> <li>• Hazardous Materials Handler</li> <li>• Meteorologist</li> <li>• Pollution Prevention and Control Manager</li> </ul>

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<b>AHS</b> <b>Career Paths</b> <b>&amp; Cluster</b>	<h1 style="text-align: center;">Industrial &amp; Engineering Technology</h1> <p style="text-align: center;">Transportation, Distribution, and Logistics</p>	
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<b>Suggested Electives:</b> <ul style="list-style-type: none"> <li>• Trig/Calc</li> <li>• DC College Algebra</li> <li>• <b>DC College Calculus</b></li> <li>• <b>IED</b></li> <li>• POE</li> <li>• CEA</li> <li>• EDD</li> <li>• Physics I</li> </ul>			<b>Recommended Youth Activities:</b> <ul style="list-style-type: none"> <li>• DC College English</li> <li>• Eastern/Western Geography</li> <li>• Multi Media</li> <li>• Web Design</li> <li>• Art II (2-D Art)</li> <li>• Art II (3-D Art)</li> <li>• Housing/Textiles</li> <li>• Ag. Business</li> <li>• Ag. Structures</li> </ul>		

<b>Career Possibilities in:</b>			
<b>Logistics Planning &amp; Management Systems</b> <ul style="list-style-type: none"> <li>• International Logistics</li> <li>• Logistician</li> <li>• Logistics Analyst</li> <li>• Logistics Engineer</li> </ul>	<b>Transportation Operations</b> <ul style="list-style-type: none"> <li>• Airline Pilot</li> <li>• Delivery Truck Driver</li> <li>• Transportation, Storage, and Distribution</li> <li>• Manager</li> <li>• Tractor-Trailer Truck Driver</li> </ul>	<b>Transportation Systems &amp; Infrastructure</b> <ul style="list-style-type: none"> <li>• Air Traffic Controller</li> <li>• Civil Engineer</li> <li>• Motor Vehicle Inspector</li> <li>• Regulator</li> <li>• Surveying and Mapping Technician</li> <li>• Urban Planner</li> </ul>	<b>Sales and Service</b> <ul style="list-style-type: none"> <li>• Cargo and Freight Agent</li> <li>• Cahier</li> <li>• Counter or Rental Clerk</li> <li>• Customer Order Clerk</li> <li>• Sales Manager</li> <li>• Sales Representative</li> </ul>
<b>Health, Safety and Environment Management</b> <ul style="list-style-type: none"> <li>• Hazardous Materials Removal Worker</li> <li>• Industrial Health and Safety Engineer</li> <li>• Environmental Compliance Inspector</li> <li>• Environmental Science and Protection Technician</li> <li>• Safety Analyst</li> </ul>	<b>Warehousing and Distribution Center Operations</b> <ul style="list-style-type: none"> <li>• Freight, Stock and Material Mover</li> <li>• Industrial and Packing Engineer</li> <li>• Laborer</li> <li>• Shipping, Receiving and Traffic Clerk</li> <li>• Stock Clerk</li> <li>• Warehouse Manager</li> </ul>	<b>Facility and Mobile Equipment Maintenance</b> <ul style="list-style-type: none"> <li>• Aircraft Mechanic</li> <li>• Automotive Service Technician/Mechanic</li> <li>• Automotive Body Repairer</li> <li>• Bus and Truck Mechanic and Diesel Specialist</li> <li>• Electrical and Electronics Repairer</li> <li>• Mobile Heavy Equipment Mechanic</li> <li>• Painter</li> </ul>	

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## ENGLISH

### English I H1100 1 Credit

***This is a required course for all freshmen***

Students improve reading skills through the study of short stories, novels, poetry, plays, and non-fiction. Communication skills are enhanced through the study and practice of formal and informal speaking and writing. Students also review Standard English and improve vocabulary with the study of ten words per week.

### English II H1200 1 Credit

***This is a required course for all sophomores***

This class is designed to provide students with practice in the basic skills of writing to communicate effectively and to introduce the student to literature. Standard English usage, vocabulary development and grammar will be studied as they relate to writing. Students will read and interpret short stories, poetry, essays, novels, and drama.

### English III H1300 1 Credit

***This course is required for all juniors not enrolled in English III College Prep***

This course focuses on reading & writing skills needed for students who do not plan to attend college. Students can expect to read at least one novel & will complete a research project based on a topic of interest.

### CP English III H1500 1 Credit

***This course is strongly recommended for students who plan to attend college***

This course focuses on a study of American Literature. Students can expect to learn about important and influential American authors, dating from pre-Revolutionary War to modern time. This course will also provide students with strategies and practice for college entrance exams, such as the ACT test. Additionally, students will learn about the research process, completing one 4-6 page research paper & one or more smaller research projects.

### CP English IV H1510 ½ or 1 Credit

***This course is recommended for all students planning to attend college***

***\*\*This course is available for college credit 2<sup>nd</sup>***

***Semester as DC English***

Students will write papers in response to a variety of writing topics including: recollection, observation, imagination, conversation, controversial issues, analysis, comparisons, individual research, and response to literature. In addition, students will work on grammar, punctuation, and usage skills that will increase writing proficiency. This course is designed to foster the process aspect of writing tasks.

### Novels H1402 ½ Credit

***Prerequisite: English I***

Students in this English elective will read four or five novels from a variety of genres and time periods. For each novel the student can expect to demonstrate knowledge and understanding on quizzes, daily writings, class discussions, and projects or papers.

### Short Stories H1403 ½ Credit

***Prerequisite: English I***

Students in Short Stories will read a wide variety of short fiction focusing on a variety of themes relevant in the lives of teenagers, such as identity and relationships. Through the study of short fiction, students will review key concepts such as characterization, plot, imagery, figurative language, and theme while also enhancing their understanding of the world around them. In addition to reading, students can expect to write papers, complete projects, and participate in class discussions about the short stories.

### Journalism H1610 ½ Credit

***Prerequisite: English I***

Students will be introduced to the history of journalism and to ethical issues related to the field. Students will learn the various techniques of journalistic reporting and writing. Students will be given the opportunity to demonstrate the audio and visual aspects of journalism as well in the form of optional outside-of-class labs.

### Creative Writing H1601 ½ Credit

***Prerequisite: English I***

Students will learn to use descriptive language, to develop characters, setting, and narrative, and to write dialogue and engaging plots. Students will observe and analyze creative elements in both professional and amateur texts and will create original fiction and non-fiction works based on their observations. Journaling, in-class collaboration and various creative exercises will help students meet the course objective.

### English Composition H1407 ½ Credit

***Prerequisite: English I and English II***

Using the "Step up to Writing" curriculum, students will learn to develop carefully crafted, purposeful topic sentences, which will progress into paragraphs and full length papers. One day each week, the course will also serve as a Writing Lab, where students from other classes can come for intensive writing help.



**DC Public Speaking** **½ Credit**  
**COMM 1000-Public Speaking**  
**WMH15** **3 College Credit Hours**

*Student must be a junior or senior*

**\*\*This course is available for college credit**

**Prerequisite: 3.0 High School GPA**

A study and practice of the basic principles involved in discovering, arranging, delivering, and evaluating ideas in speech situations.

**DC English** **½ Credit**  
**ENGL 1020-Composition I (College English)**  
**WMO17** **3 College Credit Hours**

**Students must have successfully completed English I, II, III & 1<sup>st</sup> Semester English IV or instructor approval**

**Prerequisite: 3.0 HS GPA & English ACT of 18**

Composition I is the logic and rhetoric of expository writing. This course is an online course facilitated by an onsite communication arts teacher.

## MATH

**Algebra I** **1 Credit**  
**H2003**

This course is designed to develop a strong foundation in algebra by exploring and applying mathematical concepts. This course gives special emphasis to linear and quadratic functions. Students will learn to represent these functions in various ways, such as verbal descriptions, equations, tables, and graphs. Students will also learn to model real-world situations using functions in order to solve problems.

**Geometry** **1 Credit**  
**H2100**

**Prerequisite: Algebra I**

This is a course in plane geometry with emphasis on special concepts, logic, angles and lines, special triangles, and proofs. Surface area and volume of all polyhedra will be covered.

**Pre-Algebra II** **1 Credit**  
**H2120**

**Prerequisite: Algebra I & Geometry**

This course will include the study of all linear, quadratic, cubic, rational, exponential and absolute value functions and their graphs. It will review basic operations on rational numbers as well as simplification of radical expressions. The students will study matrices, factoring polynomials and solving systems of equations. All graphs represent by functions will be translated and analyzed. The students will solve real-world problems using formulas and identify properties of all real numbers.

**Algebra II** **1 Credit**  
**H2200**

**Prerequisite: Geometry**

This advanced course consists of the study of quadratic functions and their graphs, matrices, logarithmic relations, and the simplification and graphing of rational functions.

**Math Applications** **1 Credit**  
**H2110**

**Prerequisite: Algebra I & Geometry**

This course will include the study of math in the real world represented by payroll deductions, mortgages, personal budgets, loans and insurance. Construction phases will also be discussed for single family homes as well as the separate loans available for each phase. College tuition, car insurance and health statistics will also be topics of study. This course will be a one year class.

**Trigonometry** **½ Credit**  
**H2311**

**Prerequisites: Geometry & Algebra II**

This course is designed for the college bound student, especially those interested in mathematics and science. Angles and their trigonometric functions will be studied. The right triangle and circular definitions if the trigonometric functions will be proved and trigonometric equations will be solved.

**Pre-Calculus** **½ Credit**  
**H2321**

**Prerequisite: Trigonometry**

This class will prepare students for college-level calculus, limits, continued derivatives and integration.

**DC College Algebra** **1 Credit**  
**Math 110-College Algebra**  
**H2505** **3 College Credit Hours**

**Prerequisites: Trig/Pre-Calculus & 3.0 HS GPA**

**\*\*This course is available for college credit**

This is an advanced algebra class which covers linear, quadratic, rational, logarithmic and exponential graphs and their functions. Students will perform all operations on these functions. Topics also include two- and three-variable systems, sequences, probability and conics.

**DC Calculus** **1 Credit**  
**MATH 1151 Calculus**  
**WMH25** **5 College Credit Hours**

**Prerequisites: 3.0 High School GPA & Math ACT of 24**  
Fundamentals of Spanish pronunciation, the building of basic vocabulary and patterns, oral work, studies in structure, and reading selections. Not open to native speakers or students who have had three years of high school Spanish without the permission of the UCM department chair. This course requires students to purchase an access card that is approximately \$80-\$90+. This course is offered through ITV-Interactive TV.



## SCIENCE

### Intro to Physics & Chemistry H4004 1 Credit

***This is a required course for all freshmen***

Physical science is the study of basic chemistry and physics. This course stresses the use of mathematics and language in science. The physical science topics of matter, motion, energy, light and sound, and electricity receive broad coverage.

### Biology H4100 1 Credit

***This is a required course for all sophomores***

This course is designed to introduce the student to a variety of biological topics. These topics include scientific investigation, classification, cells, evolution, genetics, invertebrate animals, and the environment. Quarter projects are regularly assigned. Lab sessions are performed to reinforce class discussion. Chapter tests and comprehensive semester exams are given.

### Environmental Science H4325 1 Credit

***Prerequisite: Intro to Physics & Chemistry/Biology***

This course introduces students to broad aspects of environmental science and environmental studies. This course examines the risks associated with growth in a developing world; environmental impact of population growth on natural resources; water resource uses; and finally renewable and non-renewable sources of per generation.

### Earth Science H4300 1 Credit

***Prerequisite: Intro to Physics & Chemistry***

This course will provide students with the comprehensive study of earth and space sciences. Topics will include earth's place in the universe, dynamic earth processes, energy in earth systems, biogeochemical cycles, weather and climate, and Missouri geology. Students will also understand how life on earth creates changes in the atmosphere, which in turn, affects conditions for life on Earth. Scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world will be addressed. Emphasis is given to data analysis, laboratory investigation skills, and critical thinking.

### Chemistry I H4200 1 Credit

***Prerequisite: Algebra I***

Chemistry I is an introductory chemistry course which stresses critical thinking and problem solving skills. Class includes lecture and lab. Topics include data analysis, properties and changes in matter, the structure of the atom, ionic and covalent compounds, chemical reactions,

moles, Stoichiometry, acid/base chemistry, and organic chemistry.

### Physics H4476 1 Credit

***Prerequisite: Algebra II or Concurrent Enrollment***

This is a study of heat energy, light energy, electrical energy, nuclear energy, the inter-relationships and conservation laws of motion, and the basic structure of matter.

### Anatomy & Physiology H4404 1 Credit

***Prerequisite: Biology***

This course stresses the complexity of the human body through studying its structures, functions, cell biology, and pathology (breakdowns). The circulatory system, nervous system, tissues, skeletal system, muscle mechanics, nutrition, digestive system, and respiratory system are studied.

### Botany H4454 ½ Credit

***Prerequisite: Biology***

This semester course will study the different divisions in the plant kingdom. Students will study plant anatomy, physiology, and identification of plant species. This class is a college prep course which will have research projects and papers.

### Zoology H4453 ½ Credit

***Prerequisite: Biology***

This semester course will be designed to study different phyla in the animal kingdom. The students will study the ecology, behavior, and anatomy of these phyla. This is a college prep course, which will have research projects and papers.

### Advanced Biology H4125 1 Credit

***Prerequisite: Biology***

This course is designed to be the equivalent of an introductory college Biology course. This course varies significantly from sophomore level high school Biology in the depth and range of topics covered as well as the type of laboratory work required by the students and the time and effort required to be successful in the course. The topics covered will be I. Molecules & Cells (25%), II. Heredity & Evolution (25%), & III. Organisms & Populations (50%).

**DC College Chemistry** **1 Credit**  
**Chemistry 211-General Chem I & Gen Chem I Lab**  
**H4500** **4 College Credit Hours**

**Prerequisites:** *Chem I & junior or senior standing*

**\*\*This course is available for college credit**

College chemistry is a dual credit course. Topics include Data Analysis, the Components of Matter, Stoichiometry, Chemical Reactions, Gases, Thermo chemistry, Quantum Theory, and Shapes of Molecules.

## SOCIAL STUDIES

**U.S. History** **1 Credit**  
**H3100**

***This is a required course for all freshmen***

The 9<sup>th</sup> grade U.S. history class will be a chronological investigation of American history. It will start with a brief review of the events leading to the Civil War then move into a study of that conflict. This investigation will continue through Reconstruction and the growth and expansion of the United States leading to its emergence as a world power. The class will study the forces, both internal and external, that affected the U.S. through the early 20<sup>th</sup> Century, World War I, the roaring 20s', World War II, the Cold War and Vietnam. The purpose of this class is to produce a culturally literate student who understands the origins and functions of American society, and the forces driving it as we approach the 21<sup>st</sup> century.

**Eastern World Geography** **½ Credit**  
**H3260**

This course will examine the diverse geographic aspects of countries that are deemed to be part of the Eastern World: Southwest Asia and North Africa, Sub-Saharan Africa, Southeast Asia, East Asia, South Asia, and Central Asia. The interrelationship between people and their geographic environments (physical, social, economic, political, demographic, cultural, historical environments) will be considered. The knowledge and skills learned will enable the students to mature into responsible citizens in a global society/world.

**Western World Geography** **½ Credit**  
**H3270**

This course will examine the diverse geographic aspects of countries that are deemed to be part of the Western World: The Americas, Europe, Russia and Australia/New Zealand. The interrelationship between people and their geographic environments (physical, social, economic, political, demographic, cultural, historical environments) will be considered. The knowledge and skills learned will enable the students to mature into responsible citizens in a global society/world.

**World History** **1 Credit**  
**H3200**

This course will include the study of various interrelationships of nations and civilizations from pre-historical civilizations to the present day. The continuity of history and the influence of each era upon succeeding times will be examined as well as the sweeping forces of historical cause and effect.

**Government** **1 Credit**  
**H3301**

***This is a required course for all juniors***

The course is designed to inform students about the American system of government and political process at the national level, state level, and local level. Both the U.S. Constitution test and the Missouri Constitution test must be passed prior to graduation in compliance with state law, along with the class.

**DC Government** **1 Credit**  
**Political Science 210- American Government**  
**H3303** **3 College Credit Hours**

***This meets the Government graduation requirement***

**Prerequisites:** *3.0 HS GPA, US History & World History*

The course is designed to inform students about the American system of government and political process at the national level, state level, and local level. Both the U.S. Constitution test and the Missouri Constitution test must be passed prior to graduation in compliance with state law, along with the class.

**Psychology** **½ Credit**  
**H3432**

***Student must be a junior or senior***

Psychology is an elective social studies course designed to present students with an orderly discussion of psychological concepts and their applications. Special emphasis will be placed on learning theory, personality development and their respective effects on behavior. This course will briefly explore job opportunities available to those who might wish to pursue a course in the field of psychology.

**DC Psychology** **½ HS Credit**  
**PSY 1100 Psychology**  
**WMO34** **3 College Credit Hours**

**Prerequisite:** *3.0 High School GPA*

This course is a general introduction to the science of behavior, surveying the broad field of psychology and the methods of investigation. This course is offered online.

**Sociology** **½ Credit**  
**H3441**

***Student must be a junior or senior***

This is an elective social studies course. Our interactions with people and how our behavior is influenced by others is the basis of sociology. This course takes a broad and

general look at the study of human relationships. Basic concepts of culture and society will be considered.

**History through Film** **½ Credit**  
**H3460**

***Student must be a junior or senior***

This course is designed to take a chronological journey through history utilizing media that refer to specific time periods. After viewing the material, students will discriminate elements that are fact from those elements which are fictitious. This course is designed to assist students' understanding of the major events that have taken place in our history and what impact they have made on our society in the past, present and future.

**Contemporary Issues** **½ Credit**  
**H3410**

***Student must be a junior or senior***

This course will focus on modern issues in all areas of the social studies: political, economic, and social. The students will read from several sources including newspapers, magazines, and Internet articles. Current events will be studied with a historical perspective and projection of future possibilities. Both domestic and international issues will be examined.

**Criminal Justice** **½ Credit**  
**H3490**

***Student must be a junior or senior***

This course will study the interpretation of our constitutional heritage, including the growth of federal judicial power and the role of the Supreme Court. It will also examine the political process of judicial appointments, role of judges and how they decide cases. In addition, the course will explore the development of and the incorporations of the 14<sup>th</sup> Amendment. The examination of the major legal principles concerning the definition of crimes and defenses and the legal parameters of criminal investigation and prosecution will be studied.

**DC College US History I** **1 Credit**  
**History 101-American History to 1877**  
**H3605** **3 College Credit Hours**

***Prerequisites: 3.0 HS GPA, US History & Government  
Offered in "Odd Numbered" Years***

***This course is available for college credit***

This course covers the evolution of American civilization from its colonial beginnings to Reconstruction.

**DC College US History II** **1 Credit**  
**History 102-American History since 1877**  
**H3615** **3 College Credit Hours**

***Prerequisites: 3.0 HS GPA, US History & Government  
Offered in "Even Numbered" Years***

***\*\*This course is available for college credit***

This college-level course covers the evolution of American civilization beginning with Reconstruction through present.

**DC Criminal Justice** **½ Credit**  
**CJ 1000 Intro to Criminal Justice**  
**WMO35** **3 College Credit Hours**

***Prerequisite: 3.0 HS GPA***

The course covers the history, nature, and function of the criminal justice system in America. Special attention is given to the philosophical basis underlying this system in and to the problems associated with crime control in a democratic society. At each stage of the process, major issues confronting the system are examined. This course is offered as an online option.

## FINE ARTS

**Art I** **½ Credit**  
**H5111**

***Recommended for freshmen/sophomores***

Students will explore art as it affects themselves and society. They will use various art media and techniques to produce personal art. Basic skills in a variety of media are stressed. This will help the students choose specific media as their focus in the future. Students will critique works of art.

**Skills taught:** Various media techniques, formal compositions skills, drawing skills, and proper critique techniques.

**Art II-Drawing** **½ Credit**  
**H5180**

***Prerequisite: Art I or Portfolio Submission***

Students will focus on drawing techniques and their proper applications. This class focuses on technique. Various styles are used in multiple medias.

**Skills Taught:** Advanced composition and craftsmanship skills to produce quality drawings.

**Art II-Painting** **½ Credit**  
**H5170**

***Prerequisite: Art I***

This course is a visual art course where students will explore and experience a variety of painting techniques, media, and historical approaches to art. Painting is a problem-solving course dealing with the elements and principles of art. Through the use of the world outside the classroom, models, drawing, photographs, and imagination, students interpret and express the painter's world in a variety of materials including acrylic, watercolor, ink, paper and canvas as well as a variety of experimental media.

**Art II-Photography** **½ Credit**  
**H5150**

**Prerequisite: Art I or Portfolio Submission**

Students will explore film and digital photography. This class focuses on the technical and aesthetic aspects of photography, dark room photography, and the digital darkroom.

**Skills Taught:** Photographic composition, developing film, processing digital photography, and the presentation of photography.

**Art II-Graphic Design** **½ Credit**  
**H5160**

**Prerequisite: Art I or Portfolio Submission**

This course explores the area of visual communication. Graphic design requires problem solving skills to produce effective designs. Graphic design aesthetics, typography, and digital image editing are the areas of focus.

**Skills taught:** Students will learn to create successful design through the use of image, type, color, and form. Students will learn to use software that enables them to create successful designs.

**Advanced Art III** **½ Credit**  
**H5190**

**Prerequisite: B or higher in previous art classes**

**Recommended for juniors and seniors**

**Course can be taken both 1<sup>st</sup> & 2<sup>nd</sup> Semesters**

Students will use design elements in various techniques and media to create quality artwork. This class stresses the use of originality in art and communicating thoughts and ideas through art.

**Skills taught:** Advanced composition and skills to create quality artwork in various media.

**High School Band** **1 Credit**  
**H5210**

This course is open to students in Grades 9-12 who have successfully completed JH Band or have instructor permission. It covers many different types and styles of music. Students will participate in concert, marching and pep bands. Outside class time is required. Individual opportunities are available through solo and small ensemble contests. Students in Grades 9-12 may also audition for All-District and All-State Bands.

**Guitar** **1 Credit**  
**H5260**

This course is designed to teach the basics of guitar performance. Students will learn how to perform simple chord progressions from both guitar tablature and chord symbols. Each student is required to provide his/her own equipment (acoustic guitar or electric guitar, amp, cords, etc.). No musical background is necessary.

**Concert Choir** **1 Credit**  
**H5300**

This course is open to students in grades 9-12 that want to sing in a performance ensemble. Students will learn how to improve their vocal ability, sing their part independently, and blend their voice in four part harmony. Students will also learn how to read music and prepare for concerts and contests. Concert Choir will have anywhere from 4 to 8 public performances a year which are figured into the student's grade. Outside class time is required.

**Show Choir** **1 Credit**  
**H5350**

This course is open to grades 9-12 who have successfully completed one year of JH Choir or Concert Choir or who have specifically received instructor permission. This is a full year performance based class that focuses on singing popular music and show tunes in a choral arrangement. Students will learn to sing and dance in many different styles and will put together a full choreographed show. There will be multiple performances and competitions throughout the school year that are figured into the student's grade.

**HEALTH & PHYSICAL  
EDUCATION**

**Freshman Girls' or Boys' PE** **½ Credit**  
**Girls H9110/Boys H9120**

***This is a required course for all freshmen***

This course includes basketball, football, volleyball, softball, badminton, table tennis, various lifetime sports activities, and fitness activities.

**Health Education** **½ Credit**  
**H9203**

***This is a required course for all freshmen***

This semester long course is designed to assist students in obtaining accurate information, developing lifelong positive attitudes and behaviors, and making wise decision related to their personal health. Study will include personal and community health; mental, emotional, and social health; injury prevention and safety; nutrition and physical activity; alcohol, tobacco, and other drugs growth, development, and sexual health.

**Lifetime Fitness** **½ Credit**  
**H9202**

This course is designed to give students the opportunity to learn weight training concepts and techniques used for obtaining optimal physical fitness. Students will benefit from comprehensive weight training and cardio respiratory endurance activities as well as proper nutrition. Students will learn the basic fundamentals of weight training, strength training, aerobic training, and overall fitness training and conditioning. The course includes both

lecture and activity sessions. Students will be empowered to make wise choices, meet challenges, and develop positive behaviors in fitness, wellness, and movement activity for a lifetime.

### **Weight Training H9201** **½ Credit**

This is a basic weight training course in which principles of weight training are discussed and applied to provide a foundation of total body strength and muscle tone. We also learn basic knowledge relevant to the physiology of strength, muscle power, size and endurance. You will understand how to develop a safe workout as well as learn the major muscle groups.

### **Girls Weights H9420** **½ or 1 Credit**

**Prerequisite:** Freshmen PE

Weight Training is offered to students who are interested in improving their strength and fitness. The course includes high intensity weight training and aerobic activity. Individual goals are set and students are frequently assessed using a variety of cardiovascular and strength related tests. Class can be repeated and taken both semesters if desired.

### **Lifetime Activities H9300** **½ Credit**

Lifetime Activities is designed to give the students the opportunity to learn activities that they will be able to enjoy long after high school and college. These activities include table tennis, badminton, volleyball, golf and weight training just to name a few. The objective of this course is to give the student the techniques, understanding of strategy and the confidence to participate in these activities in a social setting.

## **AGRICULTURE SCIENCE**

### **Introduction to Agricultural Science 1 Credit H6100**

**Prerequisite:** FFA membership

Introduction to Agriculture Science begins a student's path in the Agriculture Education program. This course is a prerequisite for all other agriculture education courses. It is an introduction to FFA history and traditions, crop and plan science, entomology, beef cattle, dairy cattle, forestry, arc welding, and oxygen-acetylene torch use as well as beginning agricultural record keeping.

### **Agriculture Structures H6120** **1 Credit**

**Offered in "Odd Numbered" Years**

**Prerequisites:** Intro to Ag Science

Students enrolled in Agricultural Structures will explore the planning and arrangement that goes into a farmstead. They will learn about environmental factors that determine how a farmstead is arranged as well as how slope,

proximity to utilities, and other factors affect where a farmstead is placed. Students will also work in the metal shop for a semester either constructing a small building or working on small metal projects.

### **Agriculture Construction H6125** **1 Credit**

**Offered in "Even Numbered" Years**

**Prerequisites:** Intro to Ag Science

Instruction will include identification of common metals, shop safety, arc welding, oxyacetylene cutting, plasma cutting, MIG welding, and metal project construction. Students will develop skills in different methods of cutting and welding metal in the agricultural shop. They will also design and construct a metal project in the shop. Students will learn shop safety, shop organization, welding, and cutting of metal.

They will also learn how to plan, estimate cost, and actually build a project.

### **Fish & Wildlife Management H6140** **½ Credit**

**Offered in "Even Numbered" Years**

**Prerequisites:** Intro to Ag Science

**Fish & Wildlife Management (1<sup>st</sup> Semester-1/2 credit):**

Units of instruction will include ecological principles of: habitat management of forestry, grassland, cropland, and wetlands, animal histories and lifecycles, fish and wildlife values, outdoor ethics, conservation careers, as well as the Missouri Hunter Education Program. Students will learn the infrastructure of the Missouri department of conservation as well as how the different animals and fish common in Missouri affect one another. They will also learn about how habitat plays an important role in wildlife management. Students will be taught basic understanding of how the different facets of fish and wildlife in Missouri interrelate. They will also be taught basic appraisal of land for suitability for wildlife usage.

### **Food Science & Tech H6160** **½ Credit**

**Offered in "Even Numbered" Years**

**Food Science Technology (2<sup>nd</sup> Semester-1/2 credit):**

This class will include instruction of how the food industry in the U.S. is organized. The class will also learn about all of the aspects of processing animal products, crops, fruits, vegetables, nuts, and dairy products. Out of the class a Dairy Foods FFA contest team will be chosen and trained along with the rest of the class on identification of cheeses and milks. The students will be expected to participate in class discussions. They will also be expected to help with in-class laboratory activities. Students will learn the infrastructure of the U.S. food industry. They will also learn where all of the wholesale meat cuts come from on an animal.

### **Greenhouse Operations & Mngment 1 Credit H6130**

**Offered in "Even Numbered" Years**

**Prerequisites:** *Intro to Ag Science*

Units of instruction will include benefits of greenhouses, greenhouse careers, horticulture plant identification, cost estimates, plant selection, and developing a plan. Students will learn about opportunities in the greenhouse industry and develop the knowledge and skills needed to work in the horticultural industry. The students will learn the basic principles of how to design a landscaping plan. This will include where and how to place trees, shrubs, flowers, and grasses to design the most appealing home or building.

### **Agri Business Sales & Marketing 1 Credit H6145**

**Offered in "Odd Numbered" Years**

**Prerequisites:** *Intro to Ag Science*

Students will study economic principles of supply and demand, diminishing returns, substitution, and time value of money. They study of business management will include depreciation, tax management, and real estate. Students will learn many complex business formulas and theories. They will also learn about management of money and how to obtain credit.

### **Veterinary Science ½ Credit H6155**

**Prerequisites:** *Intro to Ag*

A course that builds on animal science topics introduced in Intro. to Ag.. Students will learn basic animal anatomy, body systems, care, and maintenance for small animals and livestock. Units of instruction will include: anatomy and physiology, genetics, reproduction, nutrition, health, and proper care and maintenance. Career opportunities in animal science and veterinary medicine will also be examined.

### **Animal Science ½ Credit H6152**

**Prerequisites:** *Intro to Ag Science & DC Animal Sci*

**\*\*This course follows DC Animal Science**

This portion of the course focuses on preparation for contest is areas such as: The Food Industry, Breeding & Reproduction, Animal Nutrition, livestock management practices, livestock marketing & basic economics.

### **DC Animal Science ½ Credit Agri 1420-Animal Husbandry-1<sup>st</sup> Semester Dual Credit H6151 3 College Credit Hours**

**Prerequisites:** *Intro to Ag Science & Biology*

**\*\*This course is available for college credit 1<sup>st</sup> Sem**

College Animal Science offers a comprehensive view of the livestock industry and the science of biology as utilized in modern livestock management. Course of study includes: The Food Industry, Breeding and

Reproduction, Animal Nutrition, livestock management practices, livestock marketing and basic economics.

## **BUSINESS EDUCATION**

### **Accounting I 1 Credit H6320**

**Recommended for sophomores, juniors and seniors**

The student will be introduced to the basic concepts of double-entry accounting using multicolumn journals for a proprietorship and a partnership. The student will have a basic knowledge of the accounting concepts used in a sole proprietorship and a partnership and can use that knowledge in an office accounting area.

### **Accounting II 1 Credit H6330**

**Prerequisite:** *Accounting I*

The student will have a basic knowledge of the accounting concepts used in a corporation can use that knowledge to gain an entry-level accounting job in a business.

### **Advanced Accounting III 1 Credit H6440**

**Prerequisite:** *Accounting II*

The student will continue with the basic concepts of double entry accounting and will encompass management accounting, cost accounting, not-for-profit accounting, and financial analysis. The student will have a basic knowledge of the accounting concepts used in a corporation can use that knowledge to gain an entry-level accounting job in a business.

### **Introduction to Business ½ Credit H6300**

**Recommended for freshmen**

This course will cover today's most relevant business topics such as how business has been affected by the global economic crisis and recovery as well as global environmental issues. The roles of marketing and human resources management are also incorporated into this course.

### **Desktop Publishing ½ Credit H6340**

**Recommended for freshmen**

In this class, students become the hired desktop publishers for a new restaurant about to open its doors to the public for business or a concert tour for a rock band. Throughout the simulation, students are guided step-by-step in creating an assortment of documents. Creativity, design, and page layout skills are challenged as students receive hands-on experience in applying desktop publishing skills to a real world business.

**Entrepreneurship** **½ Credit**  
**H6304**

***Recommended for sophomores & up***

The student will learn the role of entrepreneurship in the global economic marketplace. We will look at information on marketing functions to reflect the latest marketing trends as well as how to conduct research and the importance of research as a part of entrepreneurship.

**Web Design** **½ Credit**  
**H6612**

***Recommended for sophomores & up***

Students will learn more advanced concepts regarding the elements of web design. Students will apply appealing design elements of a web page, hyperlinking, and ease of use for the user at a more advanced level.

**FAMILY AND CONSUMER SCIENCES**

**Family Living** **½ Credit**  
**H6904**

***Recommended for sophomores, juniors, and seniors***

This course studies the dynamics of marriage and family life. It is taught in the fall semester.

**Food and Nutrition** **½ Credit**  
**H6908**

This course is a study of basic meal preparation. Complete meals will be planned. Nutrition and meal planning principles will be applied. This course has been developed to help an individual prepare economical and quick family meals. The course study includes bread baking, desserts, salads, and meats.

**Career & Family Leadership** **1 Credit**  
**H6906**

This comprehensive instructional program describes the general study of family and consumer science, including how individuals develop and function in family, work, and community settings and how they relate to their physical, social, emotional, and intellectual environment. Career exploration and its impact on families are key components. Membership in FCCLA is strongly recommended when enrolled in this course.

**Child Development** **½ Credit**  
**H6907**

***Recommended for sophomores, juniors, and seniors***

This course of study will provide students with information they will use in caring for children, either their own or as a career choice. It is taught in the spring semester.

**Housing & Interior Design** **½ Credit**  
**H6910**

***Offered in "Even Numbered" Years***

***Recommended for sophomores, juniors, and seniors***

This course of study addresses selecting and planning living environments to meet the needs and wants of individuals and families throughout the family life cycle. Economic, social, cultural, technological, environmental, maintenance, and aesthetic factors are considered.

**Fashion and Textiles** **½ Credit**  
**H6920**

***Offered in "Even Numbered" Years***

***Recommended for sophomores, juniors, and seniors***

This course of study addresses knowledge and skills related to design, production, acquisition, and distribution in fashion and textiles arenas. Topics include exploration of textiles and fashion industries; elements of science and design in textiles and apparel; textiles principles and applications; social, psychological, cultural and environmental aspects of clothing and textiles selection; textiles, and related equipment and tools; care and maintenance of textile products, equipment, and tools; impacts of technology; construction and alteration skills; contemporary issues, including global applications.

**Advanced Foods** **½ Credit**  
**H6911**

***Prerequisites: Foods and Nutrition***

This course is in a sequence that builds on concepts from Nutrition and Wellness. This course addresses more complex concepts in nutrition and foods, with emphasis on advanced special topics such as International, Regional, and/or Cultural Foods; Food Science, Nutrition, and Dietetics.

**Personal Finance** **½ Credit**  
**H6902**

***Prerequisites: None***

***Requirement for graduation***

***This course is recommended for juniors and seniors.***

This course is designed to prepare students to meet personal financial and legal obligations. Emphasis is placed on the effects personal money management decisions have on individual lifestyles. Areas of study include budgeting, basic record keeping activities, employment, income, investments, financial planning, credit, ownership records, banking, insurance, federal and state tax records, and personal statements.

## PROJECT LEAD THE WAY

### Intro to Engineering Design 1 Credit H6250

**Designed for 9<sup>th</sup> and 10<sup>th</sup>**

The major focus of IED is the design process and it's application. Through hands-on projects, students apply engineering standards and document their work. Students use industry standard 3D modeling software to help them design solutions to solve proposed problems, document their work using an engineer's notebook, and communicate solutions to peers and members of the professional community.

### Principles of Engineering 1 Credit H6260

**Designed for 10<sup>th</sup> or 11<sup>th</sup> grade students.**

This survey course exposes students to major concepts they'll encounter in a post-secondary engineering course of study. Topics include mechanisms, energy, statics materials, and kinematics. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, document their work and communicate solutions.

### Civil Engineering & Architecture 1 Credit H6270

**Offered beginning 2013-2014**

**Designed for 11<sup>th</sup> or 12<sup>th</sup> grade students**

Students learn about various aspects of civil engineering and architecture and apply their knowledge to the design and development of residential and commercial properties and structures. In addition, students use 3D design software to design and document solutions for major course projects. Students communicate and present solutions to their peers and members of a professional community of engineers and architects.

### Capstone-Engineering Design & Dvlpmnt 1 Credit H6280

**Offered beginning 2014-2015**

**This course is appropriate for 12<sup>th</sup> grade students.**

Students work in teams to design and develop an original solution to a valid open-ended technical problem by applying the engineering design process. Students perform research to choose, validate, and justify a technical problem. After carefully defining the problem, teams design, build, and test their solutions while working closely with industry professionals who provide mentoring opportunities. Finally, student teams present and defend their original solution to an outside panel.

## ELECTIVES

### Yearbook 1 Credit H6820

**Prerequisite: Minimum of 2 years of English required, with 3 years of English recommended**

**Recommended for juniors and seniors**

Students in this class are responsible for production of both the High School and the Elementary School's yearbooks. Course content includes principles of photography, cutline and feature writing, typography, spread design, and yearbook sales and promotion. Students in yearbook class must be comfortable utilizing technology and must be available to attend events outside the regular school day.

### A+ Tutoring ½ Credit H6751

**Prerequisite: Students must apply & be eligible for the A+ Program**

A+ Tutoring is a service-learning program designed to aid at-risk students in the elementary or JH school. Each student applying will be expected to commit one block of time to serve as a tutor/mentor to an elementary/JH student or group of students. Training for the program will be done in the first session of class. This course can be taken for a semester or a full year. Time spent tutoring/mentoring students will help fulfill the requirements for the Archie A+ Program.

### Spanish I 1 Credit H8000

**Prerequisites: None**

*Although any student, grades 9-12, may enroll in this course, enrollment is limited and preference will be given to upperclassmen.*

This course is intended to give students a basic knowledge of Spanish grammar rules, vocabulary, and pronunciation, along with an understanding of the culture of Spanish-speaking countries. A progressive study of the language includes an understanding of basic conversation skills and phrases, verb conjugation, use of adjectives & pronouns, & basic sentence structure. Students also complete study of Hispanic holidays, customs, & history.

### Spanish II 1 Credit H8050

**Offered beginning 2013-2014**

**Prerequisites: Spanish I**

*Although any student, grades 10-12, may enroll in this course, enrollment is limited and preference will be given to upperclassmen.*

This course is intended to give students a broader knowledge of Spanish grammar rules, vocabulary, and pronunciation, along with a more in-depth understanding of the culture of Spanish-speaking countries. Students in Spanish Two will learn new conversation skills and



phrases, additional verb conjugation skills, including reflexive, preterit, and progressive types, additional pronoun functions, and more complex sentence structures. Students who complete Spanish Two will have a very solid understanding of basic Spanish language grammar and structure. Students also complete study of Hispanic holidays, customs, and history.

**DC Spanish I** **½ Credit**  
**SPAN 1601 Elementary Spanish I**  
**WMO80** **3 College Credit**

**Prerequisite:** 3.0 High School GPA

Fundamentals of Spanish pronunciation, the building of basic vocabulary and patterns, oral work, studies in structure, and reading selections. Not open to native speakers or students who have had three years of high school Spanish without the permission of the UCM department chair. This course requires students to purchase an access card that is approximately \$80-\$90+. This course is offered online with the use of a webcam.

**DC Spanish II** **½ Credit**  
**SPAN 1602 Elementary Spanish II**  
**WMO82** **3 College Credit**

**Prerequisite:** 3.0 High School GPA & SPAN 1601

A continuation of Spanish I, with increased attention to grammar. Not open to native speakers or students who have had four years of high school Spanish without the permission of the department chair. Students will continue to use the access card purchased for Spanish I. This course is offered online with the use of a webcam.

**German I** **1 Credit**  
**H8200**

**Offered in** *Offered in "Even Numbered" Years*

**Prerequisites:** None

*Although any student, grades 9-12, may enroll in this course, enrollment is limited and preference will be given to upperclassmen.*

This course is intended to give students a basic knowledge of German grammar rules, vocabulary, and pronunciation, along with an understanding of the culture of German-speaking countries. A progressive study of the language includes an understanding of basic conversation skills and phrases, verb conjugation, use of adjectives and pronouns, and basic sentence structure. Students also complete study of German holidays, customs, and history.

**German II** **1 Credit**  
**H8205**

**Offered in** *"Odd Numbered" Years*

**Prerequisites:** German I

*Although any student, grades 10-12, may enroll in this course, enrollment is limited and preference will be given to upperclassmen.*

This course is intended to give students a broader knowledge of German grammar rules, vocabulary, and

pronunciation, along with a more in-depth understanding of the culture of German-speaking countries. Students in German II will learn new conversation skills and phrases, additional verb conjugation skills, including reflexive, preterit, and progressive types, additional pronoun functions, and more complex sentence structures. Students who complete German II will have a very solid understanding of basic German language grammar and structure. Students also complete study of German holidays, customs, and history.

## Junior High Course Descriptions

**7<sup>th</sup> Grade Geography** **JH-1 year**  
**J7300**

**7<sup>th</sup> Grade Core**

This course focuses on the topic of Geography. This course teaches student to be able to identify land, countries, capitals, weather, and population. Students will also be taught to read a map and be able to locate areas based on longitude and latitude using a map. We will also look at how people and culture have affected the world we live in.

**7<sup>th</sup> Grade Math** **JH-1 year**  
**J7200**

**7<sup>th</sup> Grade Core**

This course will focus on rational numbers, their operations, and their algebraic representations in the early chapters. The later chapters will include topics such as equations and functions, geometry, square roots, and probability. This course will also have the students apply skills to problems-solving situations and use estimation to check reasonableness.

**7<sup>th</sup> Grade Adv Math** **JH-1 year**  
**J7250** **Pre-Algebra**

**7<sup>th</sup> Grade Core**

This course will focus on rational numbers, their operations, and their algebraic representations in the early chapters. The later chapters will include topics such as equations and functions, geometry, square roots, and probability. This course will go more in depth in algebraic concepts and applying them to real-world application. It will also have the students apply skills to problems-solving situations and use estimation to check reasonableness.

**7<sup>th</sup> Grade Communication Arts** **JH-1 year**  
**J7100**

**7<sup>th</sup> Grade Core**

Seventh grade Communication Arts builds on a continuum of skills in reading, writing, listening, and speaking. Students will become more proficient in using the conventions of Standard English through the study of spelling, vocabulary, capitalization, punctuation, grammar, and usage. Students will develop writing skills through a

series of creative assignments. Reading emphasis is on literal and interpretive skills, making inferences, drawing conclusions, and summarizing. Students in this class will read and evaluate a variety of genres including short stories, poetry, fiction, nonfiction, and two novels (one per semester).

**7<sup>th</sup> Grade Science** **JH-1 year**  
**J7400**

**7<sup>th</sup> Grade Core**

Seventh grade Science focuses on introductory units in the areas of forms of energy, matter and motion, earth systems, the universe and scientific inquiry.

**7<sup>th</sup> Grade PE** **JH-3 quarters**  
**Girls PE-J7900-01 (Spring)**  
**Boys PE-J7900-02 (Spring)**

**7<sup>th</sup> Grade Elective**

This class is a comprehensive physical education experience. This age will be introduced to flag football, Frisbee, basketball, volleyball, team handball, badminton, pickle ball, as well as several fitness concepts. Our goal is to refine some of the skills within the sports/activities. Through the Sport Education Model (game play) students will learn a variety of social concepts such as teamwork, communication, and sportsmanship. We will also learn several fitness concepts as well as injury care and prevention.

**7<sup>th</sup> Grade Health** **JH-1 semester**  
**Girls Health-J7800-01 (Fall)**  
**Boys Health-J7810-02 (Fall)**

**7<sup>th</sup> Grade FACS**

This is a semester long course that is designed to introduce the student to numerous health concepts. Subjects included in the curriculum are mental health, communicable disease, drug and alcohol use and abuse, as well as nutrition and fitness. Cause and effect relationships of health and disease are shown as well as a 2 week Abstinence Training from the LifeGuard Youth Development Program. Disease prevention and wellness are high priority concerns of this course.

**7<sup>th</sup> Grade Art** **JH-1 semester**  
**J7520 (Fall)**

**7<sup>th</sup> Grade Elective**

Students will focus on exploring and understanding art. They will use various art media and techniques to produce personal art works. Drawing and design skills are stressed. Students are expected to complete all required units including homework drawings. The skills taught in JH Art will be: Drawing skills, various art media techniques, and design skills are included.

**JH Choir** **JH-1 year**  
**J7515**

**7<sup>th</sup>/8<sup>th</sup> Grade Elective**

This course is open to all students in 7<sup>th</sup> & 8<sup>th</sup> grade students who want to sing in a performance ensemble. Students will learn to sing their part independently in different styles of choral music. The choir will have 2-6 required public performances a year. Outside class time may be required.

**JH Band** **JH-1 year**  
**J7512**

**7<sup>th</sup>/8<sup>th</sup> Grade Elective**

This course is open to students in 7<sup>th</sup> and 8<sup>th</sup> Grades who have successfully completed 6<sup>th</sup> Grade Band or have instructor permission. It covers many different types and styles of music. Students will participate in concert, marching and pep bands. Individual opportunities are available through solo and small ensemble contests. Outside class time is required.

**7<sup>th</sup> Grade Business** **JH-1 semester**  
**J7601 (Spring)** **Career Exploration**

**7<sup>th</sup> Grade Elective Wheel**

The student will learn the skills needed to be a business professional. Students will explore career aptitudes and interests through completing the MO Connections career interest surveys.

**7<sup>th</sup> Grade GTT** **JH-1 semester**  
**J7540 Gateway to Technology-Intro to PLTW**

**7<sup>th</sup> Grade Elective Wheel**

Students will learn about how their daily lives are changing through the impact of technology. This course emphasizes basic principles, work habits, tool, and their uses through a variety of hands-on activities. The major areas of study in this course are material processing, communication, and power & energy.

**8<sup>th</sup> Grade**

**8<sup>th</sup> Grade Science** **JH-1 year**  
**J8400**

**8<sup>th</sup> Grade Core**

The 8<sup>th</sup> science curriculum is focused on introductory units in the areas of weather, astronomy, physics, and chemistry. Eighth grade science students will complete the Missouri Science MAP assessment in the spring.

**8<sup>th</sup> Grade US History** **JH-1 year**  
**J8300**

**8<sup>th</sup> Grade Core**

This American History course is a study throughout American history starting with the early European Exploration and going up to current events. Students will study in chronological order.

**8<sup>th</sup> Grade Communication Arts      JH-1 year**  
**J8100**

**8<sup>th</sup> Grade Core**

Students enrolled in eighth grade Communication Arts will continue the study of reading, writing, grammar, usage, spelling, vocabulary, viewing, and listening skills. Students will develop their reading with an emphasis on literal, interpretive, and critical reading skills. Various genres will be read from the text including fiction, nonfiction, short stories, and poetry based on different themes. Students will also read one novel per semester. Students will develop their writing skills with a special emphasis on writing a research paper in preparation for high school.

**8th Grade Math      JH-1 year**  
**J8200      Pre-Algebra**

**8<sup>th</sup> Grade Core**

This course will focus on rational numbers, their operations, equations and inequalities in the early chapters. The later chapters will include topics such as linear equations and their graphs, properties of right triangles, geometric transformations, and probability. This course will also have the students apply skills to problem solving situations and use estimation to check reasonableness.

**8<sup>th</sup> Grade Algebra      1 HS credit**  
**J8210**

**8<sup>th</sup> Grade Core**

This year, we will build upon previous mathematical foundations by introducing and mastering new algebra topics. We will learn skills such as solving multi-step equations, rational equations and inequalities, graphing linear functions, graphing and solving systems of equations, graphing and solving for quadratic and exponential functions, solve and factor polynomials, and investigate data and probability. This course will also integrate geometric concepts throughout the year.

**8<sup>th</sup> Grade Business      JH-1 semester**  
**J8603 (Fall)**

**8<sup>th</sup> Grade Elective**

The main goal of this class is to introduce the student to the business career path. The student will learn the role of business in economic decisions and systems how businesses are organized, and the role of management and leadership in relationship to business. This course is for one quarter.

**8<sup>th</sup> Grade Art      JH-1 semester**  
**J8520 (Spring)**

**8<sup>th</sup> Grade Elective**

Students will focus on exploring and understanding art. They will use various art media and techniques to produce personal art works. Drawing and design skills are stressed. Students are expected to complete all required

units including homework drawings. The skills taught in JH Art will be: Drawing skills, various art media techniques, and design skills are included.

**8<sup>th</sup> Grade GTT      JH-1 semester**  
**J8600 Gateway to Technology-Intro to PLTW**

**8<sup>th</sup> Grade Elective**

Students will expand their knowledge in the fields of manufacturing, material processing, communication and power & energy. Students will learn safety and the proper use of power tools.

**8<sup>th</sup> Grade PE      JH-3 quarters**  
**Girls PE-J8800-01 (Fall)**  
**Boys PE-J8800-02 (Fall)**

**8<sup>th</sup> Grade Elective**

This class is a comprehensive physical education experience. This age has been introduced to most of the sports and activities that we cover. (flag football, Frisbee, basketball, volleyball, team handball, badminton, pickle ball, as well as several fitness concepts) Our goal is to refine some of the skills within the sports/activities. Through the Sport Education Model (game play) students will learn a variety of social concepts such as teamwork, communication, and sportsmanship. We will also learn several fitness concepts as well as injury care and prevention. Topics that were not covered in 7<sup>th</sup> grade, due to time of class (fall or spring) will be covered in the 8<sup>th</sup> grade. Some of the same activities will be repeated but will be taught more in-depth and with more emphasis on strategy.

**8<sup>th</sup> Grade Health      JH-1 quarter**  
**Girls Health-J8900-01 (Spring)**  
**Boys Health-J8900-02 (Spring)**

**8<sup>th</sup> Grade FACS**

This quarter long course is designed to assist 8<sup>th</sup> grade students in obtaining accurate health related information, developing lifelong positive attitudes and behaviors, and making wise decisions related to their personal lifestyle choices. Study will include personal and community health; mental, emotional, and social health; injury prevention and safety; nutrition and physical activity; alcohol, tobacco, and other drugs growth, development, and sexual health through abstinence.

**JH Band      JH-1 year**  
**J7512**

**7<sup>th</sup>/8<sup>th</sup> Grade Elective**

This course is open to students in 7<sup>th</sup> and 8<sup>th</sup> Grades who have successfully completed 6<sup>th</sup> Grade Band or have instructor permission. It covers many different types and styles of music. Students will participate in concert, marching and pep bands. Individual opportunities are available through solo and small ensemble contests. Outside class time is required.

## JH Choir J7515

JH-1 year

### 7<sup>th</sup>/8<sup>th</sup> Grade Elective

This course is open to all students in 7<sup>th</sup> & 8<sup>th</sup> grade students who want to sing in a performance ensemble. Students will learn to sing their part independently in different styles of choral music. The choir will have 2-6 required public performances a year. Outside class time may be required.

## Career & Technical Ed Cass Career Center

**Integrated credit:** One credit of communication arts credit is available for students who complete a six-hour CTE (Career and Technical Education) program and specific, additional Fundamentals of criteria. Program instructors will provide a list of objectives and course guidelines.

The purpose of the program is to prepare students to be self-sufficient, employable citizens. Students in Life Careers will learn about career opportunities available to them. Juniors and Seniors second semester have the chance to select rotations at a variety of settings such as Animal Care, Dental Office, Custodial Maintenance, Child Care, Pharmacy, Dietary, or Physical Therapy. Seniors may choose to certify as a nurse assistant.

### General Information:

The Cass Career Center enrolls adults and students from eleven other sending high schools. For this reason, some courses have limited enrollment. Students with the best qualifications are enrolled by June. Other students go on a "waiting list" to see if openings will be available in August. When students Interview with an instructor in the spring, it is important that they share all information that could strengthen their requests for the course. All credits earned at the CCC appear on high school permanent records and the transcript.

Several of the courses require special clothing which is furnished by the student. CCC is an affirmative action school. No person shall, on the basis of race, sex, age, creed, color, or handicap, be subject to discrimination in employment or in admission to any educational program or activity.

Students at CCC are typically involved in the national organizations that relate to their area of study. This includes the National FFA Organization, Future Business Leaders of America, DECA, and SkillsUSA . Student membership **fees** are in the **\$10.00 - \$20.00 range**.

## Computer-Aided Drafting & Design (Practical Arts)

### C717201+ INTRODUCTION TO COMPUTER-AIDED DRAFTING & DESIGN

Grades: 9-12

Credit: 1.0

This course introduces students to drafting, the language of engineering and related fields. Students will learn drafting room procedures, basic drawing skills, and computer-aided drafting. College-bound students will have the advantage of having basic knowledge of drafting before entering their freshman year at college.

### C717302+ MECHANICALCOMPUTER-AIDED DRAFTING & DESIGN

Grades: 10-12

Credit: 1.0

This course introduces students to techniques of mechanical drafting. Students will learn dimension and tolerance, orthographic projection, auxiliary and sectional views, pictorial drawings and descriptive geometry. College-bound students will find this helpful to gain knowledge of methods used to create mechanical drawings before entering a college-level drafting program.

### C717303+ ARCHITECTURALCOMPUTER-AIDED DRAFTING & DESIGN

Grades: 10-12

Credit: 1.0

This course introduces students to architectural drafting and designing. Students will learn about the international residential code, room planning, exterior design, energy conservation, elevations, sketching, and computer-aided drafting. College-bound students will have the advantage of having basic knowledge of architecture.

### C717374+ ADVANCED PROJECTS CADD

Grades: 12

Credit: 3.0

**Prerequisite:** Intro to CADD, Mechanical CADD, & Architectural CADD

This course is designed to give students opportunities to further develop understanding of architectural and mechanical drafting through modeling projects. Students will use basic CADD for intro to sheet metal, intro to structural steel, intro to production drawings, intro to piping and plumbing drawings, and electrical and civil drawings.

## Information Systems Technology (Practical Arts)

### C717354+ DATABASE MANAGEMENT

Grades: 11-12

This hands-on class is designed to prepare students for employment in the field of data management and manipulation. Students will learn to build and work with databases, backup and retrieve files, organize data into different forms. Database creation using satellite GPS points will result in maps and elevations for use in exploration and documentation.

**C717355+ COMPUTER FORENSICS**

Grades: 11-12 Credit: 1.0

This course will focus on laws concerning computer data and train students to recover such material when it's damaged or lost. Students will use scenarios to learn the recovery process and step through methods least likely to cause further damage. The course also covers ethical and legal issues, data storage, workstation backup and retrieval techniques along with network and enterprise recovery.

**C717356+ NETWORKING & A+ CERTIFICATION**

Grades: 11-12 Credit: 10

This class prepares students to pass A+ and Network+ exams. Students learn soft skills, customer service techniques, and will be able to identify and troubleshoot hardware and software. Use of Network+ curriculum includes vendor-independent training introducing students to additional operating systems.

**C717454+ ADVANCED PROJECTS IST**

Grades: 12 Credit: 3.0

**Prerequisite:** Database Management, Computer Forensics, & Networking/A+Certification

The advanced IST coursework allows for expert-level understanding and manipulation of repair & maintenance, Forensics and Databases. Projects will require students to combine areas of study in order to solve real-world problems.

**Health Services (Practical Arts)****C707310+ HEALTH SCIENCES**

Grades: 11 or 12 Credit: 3.0

**Prerequisite:** Visit with instructor

**Articulated Credit:** Vatterott College

With many new job opportunities in health care, students enrolling in this program will have the opportunity to learn basic health care skills to prepare them to directly enter the health care field or to continue their education in the health care field. Students will learn basic health assistant skills, medical terminology, anatomy and physiology, and research various health care careers. Students will work hands-on in a long term health care facility and have the opportunity to do job shadowing in various departments in the hospital setting such as emergency room, ICU, laboratory, radiology, dietary, medical/surgical, and medication order entry. In addition, students will have shadowing opportunities in fields such as veterinary, daycare, dialysis, and dental. Students will complete the requirements to obtain their CNA certification in this class. ALL students must submit a valid Social Security card and successfully pass a background check in order to meet the requirements of this program.

**C919906 LIFE CAREERS**

Grades: 10-11 Credit: 3.0

**C919907 LIFE CAREERS 2**

Grades: 11-12 Credit: 3.0

**Trade and Technical (Practical Arts)****C717320 AUTOMOTIVE ELECTRICAL & BRAKES**

Grades: 11-12 Credit: 3.0

**Prerequisite:** Application & visit with instructor.

**Articulation Credit:** Metropolitan Community College and Linn State

This program includes an introduction to automobile and chassis design, automotive electricity, breaks, and testing electrical systems. In addition, students will be trained and tested in shop and equipment safety. All students must visit with instructor prior to enrolling in class. The visit will include a short test of math, language and mechanical ability. Students will be eligible to sit for NATEF/ASE student certification exam upon successful completion of program. This class is one year of a 2-year program.

**C717321+ AUTOMOTIVE STEERING & ENGINE**

Grades: 11-12 Credit: 3.0

**Prerequisite:** Application & visit with instructor.

**Articulation Credit:** Metropolitan Community College and Linn State

This program includes an introduction to automobile and chassis design, fuel systems, wheel suspension systems, tune-up procedures, and emissions systems. In addition, students will be trained and tested in shop and equipment safety. All students must visit with instructor prior to enrolling in class. The visit will include a short test of math, language and mechanical ability. Students will be eligible to sit for NATEF/ASE student certification exam upon successful completion of program. This class is one year of a 2-year program

**C717330 EMERGENCY MEDICAL TECHNOLOGY-Basic (EMT)**

Grades: 11-12 Credit: 3.0

**Prerequisites:** Minimum of a 2.5 GPA; 90% attendance record at home high school; good reading, writing, and math skills. A Interview with the instructor during the sophomore year is mandatory.

**Articulated Credit:** Metropolitan Community College; may be earned for 8 college credit hours.

Basic life support and emergency care skills taught. The student receives instruction for the skills necessary to detect signs, symptoms, and procedures of field management for emergency medical situations. Clinical observations on local ambulance services occur after class time, and students will need to provide their own transportation to these locations. A class uniform will be required. This course is both a physical and knowledge demanding course. Successful completion of all requirements allows the student to be eligible to take the National Registry of EMT practical and written examinations. The student must be 18 years of age to take the examinations.

**C717331+ FIREFIGHTER I & II**

Grades: 11-12

Credit: 3.0

**Prerequisite:** Minimum of a 2.5 GPA; 90% attendance record; good reading, writing, & math skills. An interview with the instructor prior to enrollment in class is mandatory for EMT and Firefighter I & II.

**Articulated Credit:** Metropolitan Community College; may be earned for 13 college credit hours.

Upon successful completion of this course the student will have received training for certification as a Firefighter I & II, Hazardous Materials Awareness & Operations. A class uniform will be required. This course is both a physical and knowledge demanding course. Successful completion of all required courses allows the student to be eligible for testing as a firefighter through the Missouri Division of Fire Safety. Students must be 17 years old by October 31<sup>st</sup> during the Firefighter training year to be eligible for state certification examinations. The requirement by the Missouri Division of Fire Safety and the IFSAC requires this in order to take any certification exam for this course.

**Suggested Requirements:** Students have completed at their home school an appropriate standardized test battery (General Aptitude Test Battery (GATB), Differential Aptitude Test Battery, and Apticom) and a standardized test of reading achievement. Aptitude batteries assess capacities and abilities necessary to competently perform the responsibilities of the Firefighter/EMT such as learning ability, verbal, numerical and spatial ability, form & clerical perception, motor coordination, finger and manual dexterity, eye-hand-foot coordination, color discrimination. Students are encouraged to participate in SkillsUSA student organization. There is a fee associated with membership for dues. Participation in a fundraiser or optional buyout will be required to help cover charges associated with competitions.

**C717340 CONSTRUCTIONTECHNOLOGY EXTERIOR**

Grades: 11-12

Credit: 3.0

**Prerequisite:** Application & visit with the instructor.

This program will focus on the total construction industry. Students will learn construction safety, rough-in/framing, doors, windows, siding, roofing, and concrete skills. General math and tape measure reading necessary. Students meeting requirements will have the opportunity to receive advanced placement with the Association of General Contractors (union) and certification with the Associated Builders and Contractors (union and nonunion). This class is one year of a 2-year program.

**C717341+ CONSTRUCTION TECHNOLOGY INTERIOR**

Grades: 11-12

Credit: 3.0

**Prerequisite:** Application & visit with the instructor.

This program will focus on the total construction industry. Students will learn construction safety, plumbing, electricity, HVAC, insulation, drywall/finishing, trim, cabinet installation, and installation of alarm systems and

computer/TV cabling systems. General math and tape measure reading necessary. Students meeting requirements will have the opportunity to receive advanced placement with the Association of General Contractors (union) and certification with the Associated Builders and Contractors (union and nonunion). This class is one year of a 2-year program.

**C717360+ WELDING 1**

Grade: 11

Credit: 1.5

**C717361+ WELDING 2**

Grade: 11

Credit: 1.5

**C717362+ ADVANCED WELDING 3**

Grade: 12

Credit: 1.5

**C717363+ ADVANCED WELDING 4**

Grade: 12

Credit: 1.5

**Prerequisite:** Application & interview with instructor.

**Articulated Credit:** Metropolitan Community College; may be earned for up to 6 credit hours and a reduction in apprenticeship hours with the iron workers union available upon successful completion of this class. Students

learn basic welding skills and safety measures essential in the field of welding. Course content includes oxyacetylene welding, shielded metal arc welding, gas metal arc welding and brief exposure to gas tungsten arc welding. Also covered is math for welders, blueprint reading, welding symbols, and welding safety. Student must have general math skills and to be able to read a tape measure. The student must provide their own personal protective equipment.

**C705400+ ENGLISH 4**

Grades: 11-12

Credit: .25 per semester

**Prerequisite:** Enrolled in a 3-Hour Block Class at the Cass Career Center

This course covers instruction in methods of technical writing, work readiness, job-related vocabulary development, and effective written and oral communications. Students will compose a variety of essays, including expository (informative) and persuasive forms; students will complete formal and informal presentations; and students will complete a course portfolio and senior capstone. Students may earn a maximum of 1.0 credit over a two-year period to fulfill the Language Arts graduation requirement

**C711401+ MATH 4**

Grades: 11-12

Credit: 0.25 per semester

**Prerequisite:** Enrolled in a 3-Hour Block Class at the Cass Career Center

This course presents informational methods of contextual mathematical instruction directly related to the corresponding 3-Hour Block Class. Students will review preexisting concepts and learn new concepts specific to the chosen trade to prepare students for higher education or enter directly into that trade. Students will complete various assignments including but not limited to team projects, periodic problem solving, lab participation, and job site applications.

