

Lee's Summit R-7 School District

**2024-25**  
**Career & Educational**  
**Planning Guide**

Dear Parents, Students, and Caregivers:

This Career and Educational Planning Guide contains a wealth of information to assist as you organize and implement a plan for your high school career and beyond. The career path information offers a range of possible careers for each student to consider. Parents can use the career path information to discuss career opportunities with their children. Student course selection is very important. Schedule changes can be very difficult and/or denied; therefore, students and parents should carefully consider course selections to ensure the most appropriate choices for students. The teachers, counselors, and administrators are available to assist students and parents as they make course decisions. Please do not hesitate to ask for this assistance.

Sincerely,

Lee's Summit R-7 Secondary Administration

#### NOTICE OF NON-DISCRIMINATION

Discrimination is any behavior that prevents individuals from achieving their full human potential. Discrimination involves treating persons as members of groups, rather than on the basis of their individual capacities or merits. It includes any conduct that is based solely on race, color, creed, sex, religion, national origin, socioeconomic status, disability, age, or marital status. Both individuals and institutions perpetuate discrimination. School systems, as one of society's most influential institutions, must address themselves to this issue.

The R-7 Lee's Summit School System strives to develop each student's fullest potential as a unique human being. To do this requires an awareness of the subtlety and harmfulness of all forms of discrimination. It is the responsibility of each board member, administrator, teacher, staff member, and student to understand the nature of discrimination and to see that it is eliminated wherever it may exist in the R-7 Lee's Summit School System.

The Board of Education affirms its intent to provide equal opportunity in its programs, practices, and activities regardless of race, color, creed, sex, religion, national origin, socioeconomic status, disability, age, or marital status.

Actions, statements, or other conduct by students, staff, or administration constituting discrimination on any basis set forth above is strictly prohibited on school premises, or in connection with any school related program or activity and may be grounds for appropriate disciplinary action.

This District is committed to follow a policy of non-discrimination in all of its programs and activities. The District will endeavor to ensure an environment for our students, employees, and patrons free of discrimination, including an environment free of racial, religious, sexual, or other unlawful harassment. This policy prohibits harassment in any form, including verbal and physical harassment, unwelcome comments, jokes, or statements of a discriminatory nature, and unwelcome advances.

The Board has designated the Assistant Superintendent of Human Resources, Dr. Deborah Delsemme, located at 301 NE Tudor Road, Lee's Summit, MO 64086, 986-1004, as the district's Title IX/Section 504/Non-discrimination/ADA Compliance coordinator.

**Lee's Summit R-7 District Web Site**  
**[www.lsr7.org](http://www.lsr7.org)**

**LEE'S SUMMIT SCHOOL DISTRICT  
CAREER AND EDUCATIONAL PLANNING GUIDE  
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# HIGH SCHOOL COURSE GRADUATION REQUIREMENTS

Please see the student handbook for a complete listing of all requirements for graduation

CURRICULAR AREAS	Graduation
COMMUNICATION SKILLS	4 units (Must include 1 unit in a core English class for each grade 9-12)
SOCIAL STUDIES	3 units (Must include 1 unit Am. History, 1 unit World History, 1/2 unit American Government and 1/2 unit Modern Global Issues)
MATHEMATICS	3 units (Must include 1 unit Algebra I and 1 unit Geometry or Algebra/Geometry I, Algebra/Geometry II, and Algebra/Geometry III) *The Algebra/Geometry sequence is being phased out starting 2022-23 and will not be an option for the class of 2026 and beyond.)
SCIENCE	3 units (Must include 1 unit Biology I or Advanced Studies Biology I and 1 unit Advanced Studies Chem., Chem. I or Fundamentals of Physics and Chemistry)
FINE ARTS	1 unit
PRACTICAL ARTS	1 unit
PHYSICAL EDUCATION	1 unit (Must include 1/2 unit of Foundations of Fitness)
PERSONAL FINANCE	1/2 unit
HEALTH	1/2 unit
ELECTIVES	9 units
<b>Totals</b>	26 units

# POST-HIGH SCHOOL EDUCATION ADMISSIONS REQUIREMENTS

CURRICULAR AREAS	Selective Missouri Public 4 Year College Credit Requirements*	Other Missouri Public 4 Year Colleges Credit Requirements*	Community & Technical Colleges (I.E. Metropolitan Community Colleges, etc.)	Military Careers	Apprenticeships
COMMUNICATION SKILLS	4 Units	4 Units	HIGH SCHOOL Diploma, High School Equivalency Certificate (HSE) Or A Certificate Of Completion Of Home School Program	HIGH SCHOOL Diploma Or A Certificate Of Completion Of Home School Program	MOST REQUIRE A High School Diploma or High School Equivalency Certificate (HSE) And Must Be At Least 18 Years Of Age
SOCIAL STUDIES	3 Units Govt. 1/2	3 Units Govt. 1/2			
MATHEMATICS	4 Units Alg. 1 & Higher	3 Units Alg. 1 & Higher			
SCIENCE	3 Units No General Science 1 Must Be a Lab Class	3 Units No General Science 1 Must Be a Lab Class			
FINE ARTS	1 Unit	1 Unit			
PRACTICAL ARTS	0 Units	0 Units			
PHYSICAL EDUCATION	0 Units	0 Units			
ADDITIONAL ELECTIVES	2 Units 2 Years of The Same Foreign Language	3 Units Selected from Foreign Language &/Or core courses			
OTHER REQUIREMENTS	Appropriate class rank and a minimum score on the ACT	Appropriate class rank and ACT score			

\*This information is provided as a general guideline and is subject to change. Always check with the college you are considering for specific, updated requirements.

## Personal Plan of Study

In this box please make notes about your career goals, educational goals after high school, and high school goals (PLTW, IB, extra-curricular activities, Summit Tech, Herndon, etc.).

Career Path

Area of Focus

R

<b>Comm. Arts (4 credits)</b>								
<b>Social Studies (3 credits)</b>								
<b>Mathematics (3 credits)</b>								
<b>Science (3 credits)</b>								
<b>P.E. (.5 credit)</b>								
<b>Foundations of Fitness (.5 credit)</b>								
<b>Health (.5 credit)</b>								
<b>Fine Arts (Music, Art, Theatre) (1 credit)</b>								
<b>Practical Arts (Industrial Tech., FACS, Business) (1 credit)</b>								
<b>Personal Finance (.5 credit)</b>								
<b>Electives (9 credits)</b>								

Name \_\_\_\_\_ Class of \_\_\_\_\_

# GENERAL ENROLLMENT INFORMATION

## Credit Requirements

To be eligible to graduate from one of the R-7 high schools in the school year, a student must complete 26 units of credit.

## Community Service

All students must complete a minimum of ten hours of community service to be eligible for graduation. These hours should be completed by the end of the junior year.

Students should select service projects that are posted on the school website. All other projects should be pre-approved by the community service coordinator.

A+ tutoring/mentoring hours can count as community service hours if the tutoring/mentoring fits the guidelines of community service and a community service form is completed for the activity in addition to the tutor log.

## Internship Programs

Five state-approved internship programs are available at the high school:

- 1) Marketing Internship--Retail and customer service positions
- 2) Supervised Business Experience (SBE)--Professional business, office, and technology positions
- 3) Cooperative Career Education (CCE)-- Skilled trades and human services positions
- 4) Internship in STEM Careers – Science, Technology, Engineering and Math advanced academic positions;  
includes Cerner Scholars
- 5) Internship in MIC – See Missouri Innovation Campus.

Applicants must meet certain state requirements, follow all guidelines and policies established by coordinator and administrator; and provide own transportation to employment site.

**NOTE: To leave place of employment during school year requires approval by coordinator.**

## Missouri State High School Activities Association Eligibility (MSHSAA)

1. Knowing and following all MSHSAA standards will enable a student to protect his/her eligibility for MSHSAA interscholastic competition. Activity participation should be for all students making appropriate progress toward graduation and otherwise in good standing.
2. Grades 9-12:
3. Grades received the preceding semester will determine eligibility to participate in interscholastic activities.
4. The student shall have earned, the preceding semester, a minimum of 3.0 units of credit.
5. The student shall currently be enrolled in and regularly attending courses that offer 3.0 units of credit. (student aides, etc does not count as a full class)
6. A beginning ninth grade student shall have been promoted from the eighth grade to the ninth grade for first semester of eligibility.
7. A student must be making satisfactory progress towards graduation as determined by local school policies. There is a maximum age limit for participation
8. Online Students planning to participate should visit with their counselor or Activities Director to make sure they will be eligible to participate in MSHSAA sanctioned activities. More information can be found at: [www.mshsaa.org](http://www.mshsaa.org)

## National Association Of Intercollegiate Athletics (NAIA)

For more information about eligibility to play NAIA athletics, go to [www.playnaia.org](http://www.playnaia.org)

## National Collegiate Athletic Association (NCAA)

Before a student is eligible to participate in college athletics at the NCAA Division I or Division II level, the NCAA Clearinghouse must certify the student. Part of that certification process includes making sure that the student has successfully taken the required number of core courses. The required number of core courses is listed below. For further requirements to be deemed eligible contact the Counseling Center.

### CORE UNITS REQUIRED FOR NCAA CERTIFICATION

	Division I	Division II
English core	4 years	3 years
Mathematics core	3 years	2 years
Science core	2 years	2 years
Social Studies Core	2 years	2 years
From English, Math, or Science	1 year	3 years
Additional Core (English, Math, Science, Social Science, Foreign Language, Computer Science, Philosophy, Non-doctrinal Religion)	<u>4 years</u>	<u>4 years</u>
<b>TOTAL CORE UNITS REQUIRED</b>	<b>16</b>	<b>16</b>

Be sure to look at your high school's list of NCAA-approved core courses on the Eligibility Center's Web site to make certain that courses being taken have been approved as core courses. The Web site is [www.eligibilitycenter.org](http://www.eligibilitycenter.org).

For college-bound student athletes entering NCAA Division I college or university on or after August 1, 2016:

- NCAA will require 10 core courses to be completed prior to the seventh semester (beginning of the senior year).
- Seven of the 10 core courses must be a combination of English, math or natural or physical science.
- These 10 courses become "locked in" at the start of the seventh semester and cannot be retaken for grade improvement.
- Have a minimum core-course GPA of 2.3.

For college-bound student athletes entering NCAA Division II college or university on or after August 1, 2016:  
Have minimum core-course GPA of 2.2.

## ADVANCED STUDIES AND RECOGNITION PROGRAMS

Several unique programs are designed to meet the needs of academically talented students, providing intellectual challenge through curriculum, which are designed to improve competitive advantage for college admission or other advanced study and increase their scholarship opportunities. These programs are listed below:

- I. International Baccalaureate (IB) Diploma Program
- II. International Baccalaureate (IB) Career-Related Program
- III. International Baccalaureate (IB) Course Candidate
- IV. Advanced Placement (AP)
- V. Courses for Dual Credit
- VI. Honors Credit
- VII. Project Lead The Way (PLTW)
- VIII. Articulated Credit
- IX. Other Credit Options (Correspondence/On-line)
- X. College Credit Courses
- XI. MCC Dual Enrollment
- XII. Summit Technology Academy – Missouri Innovation Campus Program
- XIII. Early College Program

All students who take AP and IB exams must pay the examination fee. Financial assistance is available for students who qualify. See IB/AP coordinators for more information. AP and IB exams must be taken for weighted credit. All students who take courses for dual credit must pay college tuition. Tuition assistance is available for students who qualify. See dual credit coordinator for more information.

Courses taken in the Advanced Studies and Recognition Program receive extra **weightedness** in the grading system.

Students and their parents should meet with a school counselor to investigate all opportunities and options available through the programs. Please be aware that acceptance of credit through these programs is determined by individual colleges. Students and parents will also find the following brief explanations of each program helpful.

## I. INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAM (IB)

A brochure explaining the entire International Baccalaureate Program in detail is available through the IB Coordinator's office, high school administrative or Counseling Centers. The International Baccalaureate Program (IB) is a coordinated course of study at the junior-senior level linking the humanities, sciences, mathematics, and languages. Students work under the close supervision of teachers trained in IB techniques who work together to monitor the progress of students in the program. The IB program promises a unique handcrafted experience that will hone academic skills and raise awareness of both the history of ideas and their continuing evolution. The IB Diploma requires study of six IB subjects, a course in Theory of Knowledge, an extended essay, and extra-curricular time devoted to Creativity, Activity, and Service (CAS). Diploma program students must take the exam in each of their six courses in order to be eligible for the IB Diploma. Fees for their exams are paid by the district. IB assessments can include completing a portfolio, a written paper, an oral presentation, a notebook, a project, or written exams. Failure to complete required IB assessments and/or core requirements (this includes not completing both years of an HL course or both years of Math AA SL) will result in a loss of weighted credit (from 1.0 to .666) and could result in a failing grade for the course and/or removal from the Diploma program. Students who drop or are removed from the program become responsible for all exam fees. Students who plan to make changes to an IB course during the testing year must arrange to do so by November 15th to avoid additional exam fees.

## II. INTERNATIONAL BACCALAUREATE CAREER-RELATED PROGRAM

The IBCP is a two-year program that incorporates the rigor, vision and values of IB course work with an approved career-related qualification. Students seeking to earn the IB Career-Related Program Certificate must complete both the career education requirement and complete two IB courses from the list above. Students seeking to earn the IB Career-Related Certificate are required to fulfill the IBCP core requirements. The IBCP core consists of a Community and Service requirement, the Personal & Professional Skills course, Language Development, and a reflective project where students evaluate an ethical issue from their career course work. All programs offered at Summit Technology Academy and their prerequisites meet the requirements for students interested in the IBCP Program. Designated courses at each respective high school and courses offered through the Innovation Track and most from Herndon or Southland CAPS may also be considered for IBCP requirements. Other career education course sequences will be considered on an as-needed basis. Career-Related Program students must take two IB exams in order to be eligible for the IBCP certificate. Fees for these exams are covered by the district. IB assessments can include completing a portfolio, a written paper, an oral presentation, a notebook, a project, or written exams. Failure to complete required IB assessments and/or core requirements (this includes not completing both years of an HL course or both years of Math AA SL) will result in a loss of weighted credit (from 1.0 to .666) and could result in a failing grade for the course and/or removal from the IBCP program. Students who drop or are removed from the program become responsible for all exam fees. Students who plan to make changes to an IB course during the testing year must arrange to do so by November 15th to avoid additional exam fees.

## III. INTERNATIONAL BACCALAUREATE (IB) COURSE STUDENTS

Students may choose to take individual IB courses. Students enrolled in IB courses are required to take and pay for the corresponding assessments. Financial assistance is available for students who qualify. See IB coordinator for more information. IB assessments can include completing a portfolio, a written paper, an oral presentation, a notebook, a project, or written exams. Failure to complete required IB assessments (this includes not completing both years of an HL course or both years of Math AA SL) will result in a loss of weighted credit (from 1.0 to .666) and could result in a failing grade for the course. Students who plan to make changes to an IB course during the testing year must arrange to do so by November 15th to avoid additional exam fees.

Below is a list of all IB courses offered by our schools:

### Diploma Core:

IB Theory of Knowledge  
(located in Social Studies section)

### IBCP Core:

IB Personal & Professional Skills  
(located in Social Studies section)

### Group 1:

IB English A1 HL 11-12

### Group 2:

IB Mandarin Chinese V SL  
IB French V SL  
IB French HL 11-12  
IB German V SL  
IB Spanish V SL  
IB Spanish HL 11-12

### Group 3:

IB Business Management SL  
IB History of the Americas HL 11-12  
IB Psychology SL  
IB Psychology HL 11-12  
IB Social and Cultural Anthropology SL

### Group 4:

IB Biology HL 11-12  
IB Chemistry HL 11-12  
IB Environmental Systems & Societies SL  
IB Sports, Exercise & Health Science SL

### Group 5:

IB Mathematics Analysis and Approaches  
SL 11-12  
IB Math Applications and Interpretations  
SL 11<sup>th</sup> or 12<sup>th</sup> Grade

### Group 6:

IB Film SL  
IB Film HL 11-12  
IB Music SL  
IB Music HL 11-12  
IB Theatre Arts SL  
IB Theatre Arts HL 11-12  
IB Visual Arts SL  
IB Visual Arts HL 11-12

## IV. ADVANCED PLACEMENT (AP)

The Advanced Placement Program is essentially a way for schools to provide their students with courses of study appropriate to their abilities and interests. Many colleges and universities offer credit for AP Exam scores. All AP courses culminate in the comprehensive AP examination administered by the College Board, a non-profit organization that administers the program. Most colleges will accept successful completion of the exam for either advanced placement alone or for both dual credit and advanced placement. Up-to-date information concerning university recognition policies can be found at <http://www.collegeboard.com/student/testing/ap/about.html>. Students enrolled in AP courses are required to take and pay for the corresponding examination to receive the 1.0 weighted credit. Financial assistance is available for students who qualify. See AP coordinator for more information. Failure to take the AP examination will result in a reduction of weighted credit (from 1.0 to .666) for both the junior and senior courses. Students who make changes to their AP courses must do so by November 15th or additional exam fees will apply.

**Below is a list of AP courses which may be offered by our schools:** AP Physics 1, AP Physics 2, AP Computer Science A, AP Computer Science Principles

## V. DUAL CREDIT

The Lee's Summit R-7 School District does not set the criteria for students to be eligible for dual credit. Dual credit students must meet or exceed eligibility requirements established by the Missouri Coordinating Board for Higher Education (CBHE). Eligibility is defined as: Those students who meet the minimum grade point average requirements\*, satisfactory scores on subject matter tests, parent permission, and recommendation of the high school principal or counselor. Check availability at each high school. Some courses, such as PLTW classes, offer credit through a partnering post secondary institution. Those institutions set the guidelines and earnable credit based on student class performance and end of course exam score. **Students can elect to enroll in dual credit if they are in one of the IB courses listed below but it is not a requirement.**

**Dual credit classes vary by school and by course.**

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Three courses--College Credit English, Technical English, and College Algebra--are exclusive dual credit courses, meaning that students must have a qualifying placement score and/or appropriate **unweighted GPA** prior to enrollment in the R7 course. If the placement score is the ACT or Accuplacer test, students must make arrangements to take the test and attach the results to the dual credit course application. Students who do not meet the qualifying score or GPA requirement will be enrolled in a different but appropriate course.

\*GPA Requirements: See counselor and/or instructor for requirements regarding your program choice.

### LEE'S SUMMIT R-7 ELIGIBILITY REQUIREMENTS FOR DUAL CREDIT/DUAL ENROLLMENT COURSES

<b>If a student is in the 11<sup>th</sup> or 12<sup>th</sup> grade with a cumulative of 3.0 or higher</b>	Student is eligible for enrollment in dual credit courses with: <ul style="list-style-type: none"><li>• 3.0 GPA</li><li>• *Qualifying ACT score/Accuplacer for institutions that <b>require</b> a score</li></ul>
<b>If a student is in the 11<sup>th</sup> or 12<sup>th</sup> grade with a cumulative GPA of 2.5 to 2.99</b>	Student is eligible for enrollment in dual credit courses with: <ul style="list-style-type: none"><li>• 2.5-2.99 GPA</li><li>• Signed letter of recommendation from counselor or principal</li><li>• Written permission from parent or legal guardian</li><li>• *Qualifying ACT score/Accuplacer for institutions that <b>require</b> a score</li></ul>

**\*An ACT score will be required by some institutions that use placement tests to assess students' readiness for college-level courses. The score will depend upon the accepting institution. See your counselor for details.**

**Additionally:**

- Sophomores with an overall GPA of at least a 3.0 and written permission from a legal guardian.
- Freshman with an overall GPA of at least a 3.0 and written permission from a legal guardian. Note: Freshman must also score at the 90th percentile or above on the ACT or SAT.
- Career or technical courses require a 2.5 or higher unweighted GPA to be eligible.

## VI. HONORS/WEIGHTED CREDIT

Students should be aware that the following criteria must be met for a course to receive Honors recognition:

1. The course must have a prerequisite.
2. Semester honors courses will have a weighted project worth 10% of the semester grade. Year-long honors courses will have a weighted project each semester worth 10% of the semester grade. The project must include **research, exploration and evaluation**. The course utilizes post-secondary materials that are criterion referenced to the course of study (a bibliographical list is required.)
3. The course has an individual study component that promotes critical thinking, problem solving, and is cross-referenced to another course.
4. Sixty-five per cent (65%) of the total course work for an honors course will be at the analysis, synthesis, and evaluation level.
5. The course has homework assigned on a regular basis.

Students should check individual course descriptions to determine which classes are offered in the Honors program.

## VII. PROJECT LEAD THE WAY (PLTW)

\*\* denotes a **Project Lead the Way (PLTW)** course, which is a nationally recognized engineering, computer science, and biomedical curriculum being offered through the Lee's Summit School District. Introduction to Engineering, Principles of Engineering, Civil Engineering and Architecture (CEA), Computer Science Essentials, Computer Science Principles, and Computer Science A are introductory courses offered at all 3 high schools. Principles of Biomedical Sciences and Human Body Systems are introductory biomedical courses offered at all three high schools as well. **Students can advance these studies through Digital Electronics/Computer Integrated Manufacturing/Aerospace Engineering, Engineering Design and Development or Medical Interventions/Biomedical Innovations offered at Summit Technology Academy.** PLTW students have exclusive access to a variety of dual credit opportunities. Some postsecondary institutions recognize PLTW students with course credit. To receive this undergraduate credit from participating universities, students must successfully complete any of the eligible PLTW courses, earn the post-secondary institution's required grade in the class, and have a score on the end-of-course exam that meets the postsecondary institution's requirements. Participating university requirements vary so check with your counselor for information on participating post-secondary institutions. For additional information regarding PLTW, ask your counselor or go to [www.pltw.org](http://www.pltw.org). Courses marked with double asterisk (\*\*) are approved Project Lead the Way courses.

## VIII. ARTICULATED CREDIT AND CREDIT BY CERTIFICATION

Articulation agreements and credit by certification are set up for certain career, technical or occupational courses that are offered through a post-secondary institution such as the Metropolitan Community Colleges. Articulated credit is earned by successfully completing a career, technical, or occupational course with an 80% or higher. Enrollment for articulated credit must be made while the student is enrolled in the high school equivalent course. The college credit will appear on a college transcript once a student graduates high school and earns 15 hours of college credit through the post-secondary institution. There is no cost to the student for articulated credit. If you hold a current industry certification you can request credit by certification at any MCC campus. A current list of accepted certifications can be found on the MCC website. Many of the R-7 Career and Technical programs offer one or more Industry Recognized Credentials.

## IX. OTHER CREDIT OPTIONS

### **R7 Online Academy and Missouri Course Access and Virtual School Program (MOCAP)**

In addition to courses provided through R-7 Online Academy, the Missouri Course Access and Virtual School Program (MOCAP) offers online courses for students statewide. MOCAP courses are available to students in the R-7 District. See page 13 of this guide for details.

## X. COLLEGE CREDIT COURSES

College courses that do not qualify for dual credit or dual enrollment are subjected to the 2 units of credit limit as mentioned in the correspondence section above.

## **X. SUMMIT TECHNOLOGY ACADEMY - MISSOURI INNOVATION CAMPUS PROGRAM**

Summit Technology Academy has been recognized in the national spotlight as an innovative model to prepare juniors and seniors in high school for high wage, high demand, and professional careers. STA provides rigorous programs of study that blend classroom instruction with real-world, hands-on experiences with over 270 business partners. Many schools, businesses, and organizations from the U.S. and from around the world visit STA each year, including visits from a U.S. President and a Missouri Governor, commending the programs and unique educational experience it provides for students. STA has been highlighted by the United States Chamber of Commerce as part of their national Talent Forward campaign for talent pipeline management and workforce development. Additionally, all of STA's courses are aligned to college-level curriculum. More details can be found on page 164 of this booklet.

## **XI. EARLY COLLEGE PROGRAM – METROPOLITAN COMMUNITY COLLEGE - LONGVIEW CAMPUS**

The Early College Program is a dual enrollment program that provides a guided pathway for students to complete up to 15 hours of college credit per semester while still in high school. Through a partnership between the Lee's Summit R-7 School District and MCC Longview, classes will be available in the following pathways: Business, Education, Engineering Technology, Health Science, Hospitality and General Education. This program provides high school juniors and seniors a flexible schedule while earning college credit at limited or no cost to the students' families. Classes will be offered online and in the morning and afternoon on the campus of MCC-Longview. Tuition, and textbook assistance is available for those students who qualify. Courses taken through the Early College Program count for college and high school credit. College credits taken through MCC Longview have ease of transferability to all Missouri public two-and four-year institutions of higher education per CORE 42 (MO Department of Higher Education)

Program application, details, course offerings and course descriptions can be found in the Early College Program section under Off Campus Programs and at [ecp.lsr7.org](http://ecp.lsr7.org)



## MISSOURI SEAL OF BILITERACY

The Missouri Seal of Bilingual Education is an award granted by a local district to recognize a student who has attained proficiency in English and one or more other world language(s) before high school graduation. The recognition of attaining biliteracy becomes a part of the high school transcript for these students and serves to certify attainment of biliteracy for the community, employers and universities.

The Missouri Seal is meant to:

- encourage the study of a second language;
- recognize, promote, and praise students for their accomplishment;
- value diversity;
- provide employers with a means of identifying bilingual employees;
- provide universities with a method to recognize and give credit to applicants;
- prepare students with 21st century skills that will benefit them in a global economy and society; and
- strengthen relationships and honor the cultures and languages in a community.

### Benefits to Earning the MO Seal of Bilingual Education

- Certifies attainment of biliteracy to employers, universities, and the community
- Provides for possible university incentives
- Provides official documentation on high school transcript
- Offers recognition at high school awards ceremony
- Gives special recognition from the district including a certificate and a diploma seal

### Seal of Bilingual Education Eligibility

The Missouri Seal is intended to be earned by graduating high school students as well as awarded and celebrated at the culmination of the students' senior year. Native English-speaking students may acquire the second language through traditional world language classrooms, community-based programs, at home, worldly experiences or any other method attempted by the student. English learners (ELs) and other heritage language learners are also eligible. It is important to emphasize that ALL students acquiring any language in addition to English is a potential awardee. As the Missouri Seal is intended to promote not only the acquisition of a second language but also the participation in a global society and economy, a measure of sociocultural competency is required of all students earning the Missouri Seal.

### Steps to Obtain the MO SOBL within LSR7

1. Student attends Lee's Summit High School, Lee's Summit North High School or Lee's Summit West High School and is in the 12th grade.
2. Student has reviewed the criteria to obtain the MO Seal of Bilingual Education.
3.
  - A. Demonstrate English Language Proficiency

Students only need one standardized measure of English proficiency.		
Criteria	Seal of Bilingual Education	Distinguished Seal of Bilingual Education
English II EOC	Proficient/Advanced	Proficient/Advanced
ACCESS	4.0	4.7
ACT (Reading portion)	18	21

B. Demonstrate Proficiency in one or more languages other than English

Students only need one standardized measure of languages other than English proficiency.		
Criteria	Seal of Biliteracy	Distinguished Seal of Biliteracy
IB Language B Standard Level (SL)	4 or higher	6 or higher
IB Language B Higher Level (HL)	4 or higher	5 or higher
STAMP4S	Intermediate Mid in each domain	Advanced Low in each domain

C. Demonstrate sociocultural competence

Students will also be required to submit an essay demonstrating high levels of sociocultural competence as it relates to English and the LOTE no later than March 1<sup>st</sup>. Student work must score an average of 3.0 or greater on the Scoring Rubric when weighting four evaluators scores: high school site sponsors and the district coordinators will appraise the student work. In this essay students will

***“Describe ways in which your language skills have helped you connect to and improve your local and global community. and/or Describe how your language skills can help you continue to connect with and improve your local and global community in the future.”***

4. Student submits an online Seal of Biliteracy Application to apply for the Seal of Biliteracy on or before November 1st.
5. Student will be contacted to schedule to take the STAMP 4S test in his/her second language or his/her native language. **(Languages offered: Arabic, French, German, Hebrew, Hindi, Italian, Japanese, Korean, Mandarin Chinese (Simplified and Traditional), Polish, Portuguese, Russian, Spanish)** All other languages not offered by the STAMP 4S will be assessed by using a language portfolio.

Upon receiving a passing score on the STAMP 4S test, the student will contact a Seal of Biliteracy Coordinator, modern language teacher, or ELL teacher to discuss a plan of action for a sociocultural competence essay. *Note: Students will be awarded the MO Seal of Biliteracy during the second semester of their senior year.*



### **Eligibility for R-7 Online Academy Courses:**

To be eligible for R-7 Online Academy courses, students must have been successful in their coursework the previous academic semester. The LSR-7 Superintendent's Leadership Team defined the success criteria for this eligibility to be a student must have less than 3 F's per semester to be eligible for online coursework. If a student has 3 F's or more, they must attend in-person learning.

### **Middle School R-7 Online Academy Programming:**

All online middle school students are 'fully online'. Middle school students cannot enroll in a blended or hybrid online schedule. All middle school online students must take the specific program offered to all middle school students at their particular grade-level school program's electives for grades 7 and 8. They must be selected based on the most requests received during the enrollment period in the spring of each year. Those electives are then paired with core classes to make the specific 7th and 8th grade program schedule that each student will enroll during the fall/spring of the following school year. Advanced coursework is available for math only. Other subjects will not be available to online students, however. Yet can move to advanced in-person coursework with a teacher recommendation for the following school year.

The 6th grade is a set program, and the classes listed below in the 'course offerings' section are the courses all online 6th-grade students will take. All middle school students will be required to attend synchronous (live meetings online) core class meetings each week. Most core courses meet synchronously at least twice per week. All elective courses will be asynchronous (not live) learning. Teachers will post work to the learning management platform Schoology each day. Students will need to log in each day to check for their teachers' course instructions and assignments posted. Teachers will be available by appointment for tutoring and extra help.

### **High School R-7 Online Academy Programming:**

High school students can enroll in a blended/hybrid online schedule or a 'fully online' schedule if they meet eligibility (see above for eligibility requirements). All high school courses will be asynchronous (not live) learning. Teachers will post work to the learning management platform Schoology each day. Students will need to log in each day to check for course instructions and assignments assigned by their teachers. Teachers will be available by appointment for tutoring and extra help.

### **Parent/Student Online Expectations:**

Specific R-7 Online Academy Parent/Student expectations and commitments are available on the R-7 Academy website. Parents/Students will be held to these expectations and obligations while enrolled in online coursework. Be sure to read through these expectations and responsibilities by navigating to <http://r7online.lsr7.org>, selecting the Secondary tab, and clicking the Student/Parent Expectations link.

### **The LSR-7 Secondary Online Handbook:**

All other policies and procedures are in the LSR-7 Secondary Online Handbook. The handbook is available at the following link:

<https://sites.google.com/lsr7.net/r7online/secondary/resources/secondary-handbook>.

**R-7 Online Academy Course offerings for 2022-2023 include** (classes created are subject to enrollment request numbers, and if enrollment requests are too low, then those courses may not be offered for the following school year):

R7 Secondary Middle School Sixth-Grade Programming	
Semester 1	Semester 2
<b><u>Core Curriculum*</u></b> 6th-grade level Reading 6th-grade level Writing 6th-grade level Math 6th-grade level Science 6th-grade level Social Studies	<b><u>Core Curriculum*</u></b> 6th-grade level Reading 6th-grade level Writing 6th-grade level Math 6th-grade level Science 6th-grade level Social Studies
<b><u>Required Electives*</u></b> Physical Education	<b><u>Required Electives*</u></b> Quarter 1 - Art Quarter 2 - Music
<b><u>Electives*</u></b> - 6 week courses Introduction to Broadcasting/Video	<b><u>Electives*</u></b> - 6 week courses Exploring Family and Consumer

Technology/Speech/Theatre Introduction to Global Cultures	Science Introduction to Business, Marketing & Informational Technology Introduction to Engineering & Industrial Technology
--	--

\*Required

R7 Secondary Middle School Seventh Grade Programming	
Semester 1	Semester 2
<b><u>Core Curriculum*</u></b> 7th-grade level Language Arts 7th-grade level Math 7th-grade level Science 7th-grade level Ancient World History  <b><u>Required Electives*</u></b> Art Physical Education (Boy/Girls Combined)	<b><u>Core Curriculum*</u></b> 7th-grade level Language Arts 7th-grade level Math 7th-grade level Science 7th-grade level Ancient World History  <b><u>Required Electives*</u></b> Health Music
<b><u>Elective Options</u></b> Computer Explorations Experiencing Family Consumer Science Exploring Language and Cultures Exploring Speech and Theatre Introduction to Engineerings & Industrial Technology	

\*Required

R7 Secondary Middle School Eighth Grade Programming	
Semester 1	Semester 2
<b><u>Core Curriculum*</u></b> 8th-grade level Language Arts Pre-Algebra 8th-grade level Science Early American History  <b><u>Required Electives*</u></b> Physical Education (Boy/Girls Combined)*	<b><u>Core Curriculum*</u></b> 8th-grade level Language Arts Pre-Algebra 8th-grade level Science Early American History  <b><u>Required Electives*</u></b> Music/Art

**Elective Options**

Broadcast & Video Technology  
 Engineering Technology  
 Industrial Technology  
 Foods and Family  
 Speech & Theatre  
 Technology, Innovation and  
 Entrepreneurship 8th-grade French\*\*  
 8th-grade German\*\*  
 8th-grade Spanish\*\*

\*Required

## R7 Online Academy Secondary Courses 9th-12th Grade

### Communication Arts

Course	Credit	Grade Level
Advanced Creative Writing	0.5	10-12
College Credit English 12 - Weighted: 0.667	1.0	12
Advanced Studies English 9 - Weighted: 0.5	1.0	9
English 9	1.0	9
Advanced Studies English 10 - Weighted: 0.5	1.0	10
English 10	1.0	10
English 11	1.0	11
English 11 Honors- Weighted: 0.667	1.0	11
English 12	1.0	12
English 12 Honors- Weighted: 0.667	1.0	12
Creative Writing	0.5	9-12
Reading Strategies	0.5	9-12

Recovery English 9 (Semesters 1/2)	0.5/0.5	9-12
Recovery English 10 (Semesters 1/2)	0.5/0.5	10-12
Recovery English 11 (Semesters 1/2)	0.5/0.5	11-12
Recovery English 12 (Semesters 1/2)	0.5/0.5	12
<b>Modern Language</b>		
<b>Course</b>	<b>Credit</b>	<b>Grade Level</b>
French I	1.0	9-12
French II	1.0	9-12
German I	1.0	9-12
German II	1.0	9-12
Spanish I	1.0	9-12
Spanish II	1.0	9-12
<b>Social Studies</b>		
<b>Course</b>	<b>Credit</b>	<b>Grade Level</b>
Advanced Studies American History- Weighted: 0.5	1.0	9
Advanced Studies World History- Weighted: 0.5	1.0	10
American Government	0.5	11-12
American History	1.0	9
Comparative Government	0.5	11-12
Contemporary Issues	0.5	11-12
Economics- Weighted: 0.667	0.5	11-12
General Psychology	0.5	11-12
Modern Global Issues	0.5	11-12
Non-Western History- Weighted: 0.667	0.5	11-12
Origins of Western Civilization- Weighted: 0.667	0.5	11-12
Sociology I	0.5	11-12

Sociology II	0.5	11-12
World History	1.0	10
<b>Science</b>		
<b>Course</b>	<b>Credit</b>	<b>Grade Level</b>
ACT Preparation		
Advanced Studies Biology- Weighted: 0.5	1.0	9
Advanced Studies Chemistry I- Weighted: 0.5	1.0	10
AP Physics I - Weighted: 1.0 (0.667 non AP test takers)	1.0	11-12
AP Physics II - Weighted: 1.0 (0.667 non AP test takers)	1.0	12
Astronomy	0.5	11-12
Biology I	1.0	9
Biology II- Weighted: 0.667	1.0	11-12
Chemistry I	1.0	10-12
Chemistry II- Weighted: 0.667	1.0	11-12
Fundamentals of Physics and Chemistry	1.0	10
Human Anatomy & Physiology - Weighted: 0.667	1.0	11-12
Meteorology	0.5	11-12
Physics - Weighted: 0.5	1.0	10-12
Science of Nature	1.0	11-12
<b>Mathematics</b>		
<b>Course</b>	<b>Credit</b>	<b>Grade Level</b>
ACT Preparation		
Advanced Studies Algebra II- Weighted: 0.5	1.0	10-12
Advanced Studies Geometry - Weighted: 0.5	1.0	9
Algebra I	1.0	9-12
Algebra II	1.0	10-12

Algebra III	1.0	11-12
Calculus - Weighted: 0.667	1.0	12
College Algebra - Weighted: 0.667	1.0	11-12
College Statistics - Weighted: 0.667	0.5	12
Geometry	1.0	9-12
Intermediate Algebra II	1.0	11-12
Pre-Algebra	1.0	9-10
<b>Fine Arts - Art</b>		
<b>Course</b>	<b>Credit</b>	<b>Grade Level</b>
Foundations of Design	0.5	9-12
Foundations of Drawing	0.5	9-12
Drawing I	0.5	10-12
Graphic & Computer Art I	0.5	10-12
<b>Fine Arts - Music</b>		
<b>Course</b>	<b>Credit</b>	<b>Grade Level</b>
Music Appreciation	1.0	9-12
<b>Practical Arts - Business, Marketing, &amp; Information Technology</b>		
<b>Course</b>	<b>Credit</b>	<b>Grade Level</b>
Accounting I	1.0	9-12
Accounting II - Weighted: 0.667	1.0	10-12
Business Administration- Weighted: 0.667	1.0	11-12
Business Law	0.5	11-12
Computer Business Applications I	0.5	9-12
Computer Business Applications II	0.5	9-12

Computer Hardware & Operating Systems I	0.5	9-11
Computer Hardware & Operating Systems II- Weighted: 0.5	0.5	9-12
Coop Career Education	1.0	12
Coop Work	1.0	12
Entrepreneurship and Social Media	1.0	11-12
Introduction to Business Management	0.5	9-10
Introduction to Web Design	0.5	9-12
Marketing 101	1.0	10-12
Marketing Work Internship	1.0	12
Multimedia	0.5	9-12
Personal Finance	0.5	11-12
AP Computer Science A- Weighted: 1.0 (.667 for non AP test takers)	1.0	10-12
AP Computer Science Principles- Weighted: 1.0 (.667 for non AP test takers)	1.0	9-12
Intro to Computer Science Essentials	0.5	9-12
Supervised Business Experience	1.0	12
<b>Practical Arts - Family &amp; Consumer Sciences</b>		
<b>Course</b>	<b>Credit</b>	<b>Grade Level</b>
Advanced Interior Design	0.5	10-12
Child & Adolescent Development	0.5	11-12
Child Development: Parenting Issues	0.5	11-12
Culinary Foundation	0.5	9-12
Fashion & Interior Design Foundations	0.5	9-12
International Foods	0.5	10-12

Introduction to Hospitality & Tourism	0.5	10-12
Introduction to Human Services	0.5	9-12
Personal Finance	0.5	11-12
Personal Image and Relationships	0.5	9-12
<b>Practical Arts - Engineering &amp; Industrial Technology</b>		
<b>Course</b>	<b>Credit</b>	<b>Grade Level</b>
Introduction to Engineering & Design- Weighted: 0.5	1.0	9-12
<b>Physical Education &amp; Health</b>		
<b>Course</b>	<b>Credit</b>	<b>Grade Level</b>
Concepts in Physical Education	0.5	10-12
Foundations of Fitness	0.5	9-12
Health & Wellness for Life	0.5	9-10
Walking for Fitness	0.5	10-12

Course descriptions are located in the corresponding department sections in this guide.

Online courses follow the same semester calendar as face-to-face classes. Students should keep pace with the assignment due dates set by their course instructor. Continuous communication between the student and the instructor and a commitment to staying on pace with course assignments are necessary to succeed in an online course. An in-person final exam may be a requirement for some classes at the end of the semester.

### **Technology Requirements**

All students taking an R7 Online course must have internet access; the Lee's Summit R-7 School District does not provide access to the internet for students enrolled in online courses. For specific technical requirements, please visit <http://r7online.lsr7.org/getting-started>.

### **Missouri Course Access and Virtual School Program (MOCAP)**

In addition to courses provided through R-7 Online Academy, the Missouri Course Access and Virtual School Program (MOCAP) offers online courses for students statewide. MOCAP courses are available to students in the R-7 District. Please contact your school counselor for more information about MOCAP classes or visit <https://mocap.mo.gov/>

# Lee's Summit A+ Schools Program

The Lee's Summit R-7 A+ Schools Program strives to ensure that students are prepared for and successful in life beyond high school. The A+ Schools Program provides students with continuous, progressive career information throughout the students' years in the Lee's Summit School District. The program focuses on ensuring students have course offerings that are rigorous and relevant to the world outside the classroom that will better prepare them for their paths after high school.

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

- Attend an A+ School for six semesters prior to graduation
- Graduate with an **unweighted** cumulative GPA of 2.5 or higher on a 4.0 scale (no rounding)
- Graduate with at least a 95 percent cumulative attendance record for grades 9-12
- Perform 50 hours of unpaid tutoring to other students in the LS R-7 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)
- Must score proficient or advanced on the state level Algebra I End of Course Exam or ACT Math sub-score of 17.

## **HOW DO YOU BECOME AN A+ STUDENT?**

It is easy to become part of the A+ Schools Program. Simply read the citizen guidelines and complete the Lee's Summit A+ Schools Program Agreement. 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 and receive college and career information from the A+ coordinator. It also allows the coordinator to monitor the students' GPA and attendance.

It is also recommended that students enroll in the A+ Schools Program even if they plan to attend a four-year college or enter the workforce rather than attend college. The Lee's Summit A+ Schools Program is an opportunity for students to access additional education after high school; it does not obligate them to use the A+ tuition reimbursement. The A+ benefits are available to A+ graduates up to four years after high school graduation or for six semesters.

## **WHAT ARE THE BENEFITS OF BEING AN A+ STUDENT?**

- A student graduating with A+ status may be eligible for A+ monies to attend any accredited public Missouri community college or vocational /technical school as a full-time student. Tuition benefits may cover tuition and general fees.
- An A+ student may be eligible for scholarships from four-year colleges and universities.
- The A+ monies 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.

**For Additional Information about the Lee's Summit A+ Schools Program contact the A+ coordinator in your building.**

**Lee's Summit R-7 School District**  
**A+ SCHOOLS PROGRAM AGREEMENT**

Last Name \_\_\_\_\_ First \_\_\_\_\_ Middle Initial \_\_\_\_\_

Street Address \_\_\_\_\_ City \_\_\_\_\_ Zip Code \_\_\_\_\_

Student ID Number \_\_\_\_\_ Anticipated Graduation Year 20 \_\_\_\_\_

Name & City/State of other high schools attended: \_\_\_\_\_

Lee's Summit R-7 students who graduate with A+ status may be eligible to receive reimbursement for the cost of tuition and general fees while attending a Missouri public community college or vocational/technical school on a full-time basis. The A+ program may provide these educational incentives provided state funds are appropriated by the legislature. This funding may be for the unpaid balance of the cost of tuition and general fees, subject to legislative appropriation. **Eligible A+ students must meet ALL the requirements below:**

1. **Attend a designated A+ high school for at least two (2) years prior to high school graduation**
2. Graduate from a designated A+ high school with an unweighted cumulative GPA of 2.5 or higher on a 4.0 scale (Notice: The Department for Higher Learning WILL NOT ROUND UP this GPA requirement.)
3. Graduate with a cumulative 95% ADA (Average Daily Attendance) record
4. Perform and document fifty (50) hours of unpaid tutoring connected to the Lee's Summit R-7 School District, coordinated through the A+ Office at each high school, and supervised by a District employee
5. Maintain a record of good citizenship and avoid the unlawful use of drugs and alcohol (citizenship guidelines detailed on the back of this agreement)
6. Complete a FAFSA (Free Application for Federal Student Aid) during the student's senior year
7. Register for selective service, if applicable.
8. Must score proficient or advanced on the state level Algebra I End of Course Exam or ACT Math sub-score of 17.

Once A+ funding has been activated, the student must meet the following criteria to maintain A+ eligibility:

1. Attend a Missouri public community college or vocational-technical school as a full-time, degree-seeking student.
2. Maintain a grade point average of 2.5 or higher on a 4.0 scale.

By signing this agreement, the student and parent/guardian are indicating they have been informed by the Lee's Summit R-7 School District of the criteria for student participation in the A+ Schools Student Financial Incentive Program, and further understand and agree to the **A+ Citizenship Guidelines** listed on the reverse side of this agreement. Permission is hereby given for the release of A+ Schools Program information, including student records, to the institutions chosen by the student as well as to DESE, as required by law.

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

\_\_\_\_\_  
Date

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

\_\_\_\_\_  
Date

*The Lee's Summit R-7 School District does not discriminate on the basis of age, race, color, national origin, sex, sexual orientation, or disability. This policy regards admission/access to treatment/employment in its programs and activities.*

## **Lee's Summit R-7 School District**

### **A+ Schools Program Citizenship Guidelines**

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To be eligible to participate in the A+ Schools Program requires certain behaviors and attitudes. Specifically, students who participate in the A+ Schools Program must be good citizens and be judged so by the proper school authority.

A student whose character or conduct is such as to discredit him/herself or his/her school is not considered a good citizen. His/her conduct shall be satisfactory in accordance with the standards of good discipline. Students who participate in the A+ Schools Program should remember not only the financial rewards, but also the individual discipline and responsibilities that come with it.

The following criteria regarding the school's discipline policy will serve as a measurable indicator of respect for self, school, and good citizenship:

**1. Criminal Activity:** Students who are convicted of a felony will not qualify.

**2. Substance Abuse:** Students shall not possess or use alcoholic beverages or controlled substances. Any violation (possession, use, manufacture, sale or transportation) that results in suspension (ISS or OSS) will result in immediate and permanent removal from the program.

**3. Violations of Safe Schools Act:** Students who are disciplined in accordance with the Safe Schools Act of 1996 will lose eligibility for the A+ Schools Program. These violations include, but are not limited to assault, weapons possession, and drug distribution.

**4. Suspension:** Students will lose eligibility for the program if they accumulate fifteen (15) days of suspension (ISS or OSS) during their high school career for offenses other than alcohol/drugs or violations of the Safe Schools Act.

**Due Process:** Students, (other than those removed for numbers 1, 2, or 3 as explained above), who feel that they have been declared ineligible for the A+ Program unfairly may appeal to the A+ Schools Appeals Committee. In cases of appeal the student/parent/guardian must notify the A+ Schools Coordinator in writing of his/her intent to appeal. The A+ Schools Coordinator shall then convene a committee for consideration of the appeal. The committee shall hear the appeal and return its decision to the student. The decision of the committee will be final. The A+ Schools Appeal Committee will consist of the following individuals: Assistant Principals in charge of A+ Schools at each high school, each A+ Schools Coordinator, and one at-large faculty member from each school. The A+ Coordinator from the school at which the student in question is enrolled will facilitate the appeal, but will not be involved in the voting process. Appeals will be considered at semester or the end of the school year when the student is declared ineligible.

Students may appeal the A+ Appeals Committee's decision to the Superintendent of Schools or his/her designee.

By signing below, the student and parent/guardian are indicating they understand and agree to the A+ citizenship guidelines listed above.

Student Signature

Date

Parent/Guardian Signature

Date

# EXPLORING CAREER PATHS

Career paths provide a plan for ALL students, regardless of their interests, skills, aptitudes, personality or desired levels of education. With career paths, ALL students can focus on an area to help make decisions regarding course selection and see the relevance to their selected sources. Finding career path connections helps students do better in school.

## Career Path



**What is a Career Path?** The state of Missouri has identified six Career Paths as a way to help students become aware of and explore careers in a logical and meaningful way. They include Arts and Communication; Business, Management and Technology; Health Services; Human Services; Industrial and Engineering Technology; and Natural Resources and Agriculture.





## Career Cluster

**What is a Career Cluster?** Missouri uses 16 Career Clusters as a way of organizing occupations and careers to assist educators in tailoring rigorous coursework and related activities for all students. The Career Clusters include all occupations, even those not usually found in career and technical education.

## Career Pathway

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

Career Path	Description	Career Clusters	Sample Careers
<b>Arts and Communication</b> 	<b><i>Creative Path</i></b>  Are you a creative person? Do you like to perform for others or create a work of art? Are you imaginative and innovative?	Arts, A/V Technology and Communications	Architect Audio Technician Film or Video Editor Interior Designer Journalist/Broadcaster Language Interpreter Makeup Artist Music Teacher Photographer Public Relations Writer/Author
<b>Business, Management, and Technology</b> 	<b><i>Business Path</i></b>  Are you a leader? Do you like to organize meetings or projects? Are you able to talk to people and communicate your idea or a vision? Can you carry out a project to	Information Technology  Marketing  Finance  Business Management and Administration	Accountant CyberSecurity Specialist Database Administrator Financial Manager Human Resources Manager Loan Officer Network Architect Sales Manager Social Media Manager

	completion?		Software Developer Stockbroker Web Applications Developer
<b>Health Services</b> 	<b>Health Path</b> Do you like helping people get well or even stay well? Are you interested in diagnosing a health issue in a patient? Are you interested in the human body and how it functions?	Health Science	Biomedical Engineer Dental Hygienist Emergency Med Tech Nurse Nutritionist Personal/Athletic Trainer Pharmacist Physician Speech Pathologist Surgical Technician Veterinarian
<b>Human Services</b> 	<b>Helping Path</b> Do you like to problem solve and make things better for others? Are you open to new ideas or opinions? Do you have a friendly and helpful personality?	Human Services Hospitality and Tourism Government and Public Administration Law, Public Safety, Corrections, and Security Education and Training	Attorney Caterer Chef Child Care Administrator Counselor Hotel Manager Paralegal Park Ranger Police Officer Politician Principal/Superintendent Social Worker Teacher
<b>Industrial and Engineering Technology</b> 	<b>Building and Fixing Path</b> Do you like building things? Are you interested in determining how things work?	Manufacturing Transportation, Distribution and Logistics Science, Technology, Engineering and Mathematics Architecture and Construction	Automotive Technician Carpenter CNC Programmer/Operator Drafting Designer Electrician Engineer Heavy Equipment Tech HVAC Landscape Architect Machinist Pilot Robotic Technician Surveyor Welder
<b>Natural Resources and Agriculture</b> 	<b>Nature Path</b> Do you like nature and the outdoors? Do you like to be physically active? Would you like to determine the cause of environmental problems?	Agriculture, Food and Natural Resources	Arborist Biochemist Conservation Agent Environmental Engineer Fish & Wildlife Tech Florist Landscaper Microbiologist Sports & Turf Manager Zoologist

# Career PATHS, Career CLUSTERS, and Career PATHWAYS





LSR7 High School Courses that Support the...

## Arts & Communication Path

### *Creative Path*

Art Department	English & Language Arts Department	Music Department
Graphic & Computer Art I/II/III Painting I/II/III Drawing I/II/III Ceramics I/II/III IB Visual Arts Portfolio I/II	Advanced Broadcasting Advanced Video Technology Competitive Dramatics Debate/Adv. Debate IB Film IB Theatre Arts Intro/Adv. Creative Writing Intro to Broadcasting/Video Tech News for Print and Online I/II Repertory Theatre Speech Communication Sports Broadcasting Stagecraft/Adv. Stagecraft Theatre Arts I/II Yearbook/Adv. Yearbook	Concert Band Concert Choir Concert Orchestra Digital Media and Tech (STA) IB Music Mixed Choir Music Appreciation Percussion Philharmonic Orchestra Symphonic Band Symphony Orchestra Tenor-Bass Choir Treble Choir/Adv. Treble Choir

Business, Marketing & Info Tech Department	Family Consumer Science Department	Engineering & Industrial Technology Department
Advanced Web Design Entrepreneurship and Social Media Marketing 101 Multimedia Introduction to Web Design Sports & Entertainment Marketing	Capstone: Fashion/Interior Design Adv Fashion Design & Construction Adv Fashion/Interior Design & Merchandising Advanced Interior Design Fashion & Interior Design Foundations	Creative Design and Technology Advertising and Graphic Design (Herndon)
Modern Language Department	Early College Program	
French I/II/III/IV IB French V SL IB French IV/V HL German I/II/III/IV IB German V SL Mandarin Chinese I/II/III/IV IB Mandarin Chinese V SL Spanish I/II/III/IV IB Spanish V SL IB Spanish IV/V HL Spanish for Heritage Speakers I/II	ART108 Survey of Art COMM100 Fundamentals of Speech MUSI108 Music Appreciation THEA106 Theater Appreciation	



LSR7 High School Courses that Support the...

## Business, Management, & Technology Path

### Business Path

Business, Marketing, and Information Technology Department			
Accounting I/II AMPED on Business Business Administration Business Finance and Fintech (STA) Business Law Computer Business Applications I/II Cooperative Career Education IB Business Management SL/HL International Studies Academy (STA) Introduction to Business Management Personal Finance Supervised Business Experience	Adv Network and Cyber Concepts (STA) AP Computer Science A AP Computer Science Principles Computer Hardware & OS I/II CyberSecurity Fundamentals I/II Cyber Operations (STA) Cyber Security (STA) DevSecOps (STA)	Intro to Computer Science Essentials Software Dev - Applications (STA) Software Dev - Data & AI (STA) Software Dev - Java(STA) Software Dev - Python (STA) Internship in STEM (STA)	Advanced Web Design Introduction to Web Design Multimedia Entrepreneurship and Social Media Marketing 101 Marketing Work Experience Sports & Entertainment Marketing

Engineering & Industrial Technology Department	Art Department	Family Consumer Sciences Department
Creative Design and Technology Advertising and Graphic Design (Herndon)	Visual Arts Foundations of Drawing and Design Graphic & Computer Art I/II/III	Hospitality and Tourism Management Program Introduction to Hospitality

English and Language Arts Department	Music Department	Social Studies Department
Technical Writing	Digital Media Technology (STA) Any Performance based Band/Orchestra/Choir course	Economics General Psychology IB Personal and Professional Skills IB Psychology SL

Math Department	Early College Program	
AMPED on Algebra Algebra I/II/III Statistics	ACCT101 Accounting Principles I ACCT102 Accounting Principles II BUSN105 Business Communications BUSN270 Legal Environment of Business CSIS115 Computer Concepts & Applications COMM100 Fundamentals of Speech ECON210 Macroeconomics ECON211 Microeconomics MATH115 Statistics	PHIL100 Intro to Philosophy PSYC140 General Psychology SOCI160 Sociology Business Degree Pathway BUSN200 Business Management BUSN 160 Field Experience BUSN 240 Human Resource Management BUSN 107 Organizational Behavior BUSN 220 Project Management BUSN 209 Strategic Management
AFJROTC Department		
Aerospace Science and Leadership		



LSR7 High School Courses that Support the...

## Health Services Path

*Health Path*

Science Department		Physical Education & Health Department
Biology I/II Chemistry I/Adv. Studies Chemistry I Chemistry II Human Anatomy & Physiology Human Body Systems IB Chemistry 11/12 Principles of Biomedical Science Science of Nature	Allied Health (STA) Medical Interventions/Biomedical Innovations (STA) Professional Nursing (STA)	Essentials of Athletic Training and First Aid Foundations of Fitness Health and Wellness IB Sports Exercise and Health Science

Programs @ Cass	Programs @ Southland CAPS	Programs @ Herndon
Emergency Medical Technician Basic EMT Veterinary and Equine Science	Animal Health Science	Emergency Medical Technician Intro to Physical Therapy & Sports Medicine Foundations of Nursing

Early College Program Department
BIOL101 General Biology COMM100 Fundamentals of Speech W105 Introductory Chemistry for Health Science CHEM111 General College Chemistry PHIL100 Intro to Philosophy PSYC140 General Psychology SOCI160 Sociology



LSR7 High School Courses that Support the...

## Human Services Path

*Helping Path*

Family Consumer Sciences Department		
Child & Adolescent Development Cooperative Career Education Intro to Human Services Parenting Personal Image & Interpersonal Relationships Pre-School Teacher Educator Academy (STA)	Culinary Arts I Culinary Arts II Culinary Foundations Food Science International Foods  Hospitality Tourism Management Program Introduction to Hospitality	Advanced Fashion Design & Construction Advanced Fashion/Interior Design & Merchandising Advanced Interior Design Fashion & Interior Design Foundations

Physical Education & Health Department	Social Studies Department	Business, Marketing, & Info Tech Department
Mentoring in Physical Education	Comparative Government Contemporary Issues General Psychology IB Psychology Sociology I/II	Business Administration Business Law Marketing 101 Entrepreneurship and Social Media Sports & Entertainment Marketing

Programs @ Cass	Programs @ Herndon	Early College Program
Emergency Medical Technician Basic EMT Firefighter I/II Criminal Justice/Crime Scene Investigation	Cosmetology Culinary Arts II Law Enforcement/Police Science I	COMM100 Fundamentals of Speech CRJU101 Introduction to Criminal Justice CRJU165 Criminology CRJU168 Juvenile Delinquency CRJU223 Criminal Law EDUC200 Foundations of Ed. in a Diverse Society EDUC270 Educational Psychology EDUC280 Educational Technology EDUC285 Education of Exceptional Learners PHIL100 Intro. to Philosophy POLS136 Intro. to American Politics PSYC140 General Psychology SOC1160 Sociology

Fine Arts Department
Any performance based Band/Orchestra/Choir course



LSR7 High School Courses that Support the...

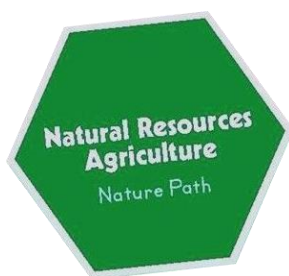
## Industrial & Engineering Technology Path

*Building and Fixing Path*

Engineering & Industrial Technology Department		Programs @ Herndon
Adv Materials and Processing Technology Auto and Home Care Basic Electricity and Electronics Cooperative Career Education Creative Design and Technology Furniture Making Geometry in Construction Material and Processing Technology Machine Tool Technology (LSHS) Metal Technology Power and Energy Technology Small Engine Repair Woodworking Technology	Advanced Concepts in CAD Aerospace Engineering (STA) Civil Engineering and Architecture Computer Integrated Mfg (STA) Digital Electronics (STA) Engineering Design & Development (STA) Introduction to Engineering and Design Principles of Engineering	Advertising and Graphic Design Auto Collision and Repair Tech I/II Automotive Technology I/II Construction Technology Diesel, Industrial & Agricultural Mechanics I/II HVAC Industrial Maintenance I/II Welding/Metal Fabrication I/II

Science Department	English and Language Arts Department	AFJROTC Department
Science of Manufacturing	Technical Writing	Aerospace Science and Leadership

Early College Program
MATH120 College Algebra MATH130 Trigonometry MATH150 Precalculus MATH180 Analytic Geometry & Calculus I



LSR7 High School Courses that Support the...

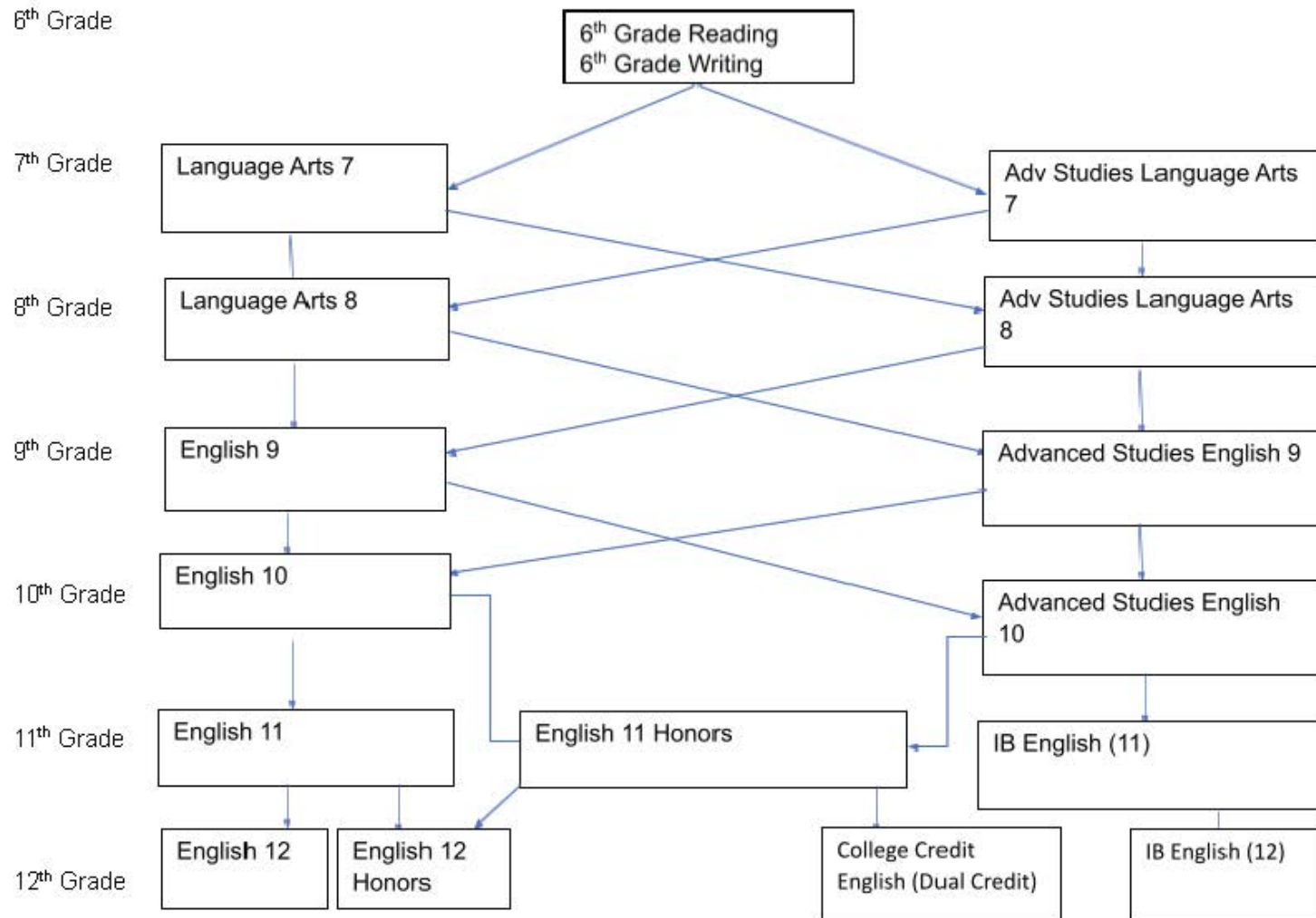
## Natural Resources Agriculture Path

*Nature Path*

Science Department	Programs @ Cass
Astronomy Biology I/II Environmental Studies at Paradise Park IB Biology 11/12 IB Environmental Systems and Societies Meteorology Science of Nature	Advanced Livestock Management Agribusiness Management - Economics and Sales Agricultural Construction I/II Agricultural Power and Mechanization Technology Agricultural Science I - Plant & Animal Technology Agricultural Science II - Mechanized Agriculture Agricultural Structures I/II Conservation of Natural Resources Landscape Design & Turf Management Supervised Agricultural Experience Veterinary and Equine Science
Programs @ Southland CAPS	Early College Program
Animal Health Science Turf Management & Horticulture	BIOL101 General Biology GEOG105 World Geography GEOL101 Physical Geology

# **COMMUNICATION ARTS**

Typical Course Progression: Communication Arts



### **Middle School Electives**

Grade 6:

Introduction to Broadcasting and Video Technology, Speech, and Theatre

Grade 7:

Exploring Broadcasting and Video Technology

Exploring Speech and Theatre

Grade 8:

Speech and Theatre

Broadcasting and Video Technology

### **High School Electives**

Speech Communication (9-12)

News for Print and Online I (9-12)

News for Print and Online II (10-12)

Yearbook (9-12)

Adv. Yearbook (10-12)

IB Film (11-12)

Debate (9-12)

Adv. Debate (10-12)

Competitive Dramatics (9-12)

Intro to Creative Writing (9-12)

Adv. Creative Writing (10-12)

Mass Media in a Modern Society (9-12)

Intro. To Broadcasting/Video Tech (9-12)

Sports Broadcasting (10-12)

Adv. Video Technology (10-12)

Adv. Broadcasting (10-12)

## **READING STRATEGIES**

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** Teacher approval, department recommendation and qualifying test scores

This course is recommended for students who need to improve their reading skills to achieve success in reading grade level texts. The course will focus on vocabulary development and using reading strategies to comprehend & evaluate text and includes small group exercises, individual, computer-assisted learning, and independent reading. Students enrolled in Reading Strategies will be concurrently enrolled in a core English class. Students may not enroll in this course without a qualifying test score AND a teacher recommendation.

## **READING LAB**

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** Teacher approval, department recommendation and qualifying test scores

This course is designed to assist students who are reading significantly below grade level in the acquisition of skills necessary to become successful, life-long readers. The class uses small group exercises, individual, computer-assisted and iPad learning, and independent reading. Students enrolled in Reading Lab will be concurrently enrolled in a core English class. Students may not enroll in this course without a qualifying test score AND a teacher recommendation.

## **ENGLISH 9**

Grade: 9

Credit: 1 unit

Students will read closely and think critically about various literary genres, including fiction and informational texts. They will write for different real-world purposes, applying effective language skills for authentic audiences. This course works to deepen their understanding of relationships and help them develop a sense of belonging. Students will develop depth and stamina through independent reading. They will improve grammar, usage, and vocabulary through sustained practice.

## **ADVANCED STUDIES ENGLISH 9**

Grade: 9

**WEIGHTED: 0.5**

Credit: 1 unit

**PREREQUISITE:** Teacher approval

This course utilizes an accelerated, analytical approach to literature, grammar, composition, and vocabulary. Students will read closely and think critically about various literary genres, including fiction and informational texts. Students will write for different real-world purposes, applying effective language skills for authentic audiences. Students will read a variety of texts to deepen their understanding of relationships and help them develop a sense of belonging. Students will develop depth and stamina through independent reading. They will improve grammar, usage, and vocabulary through sustained practice.

## **ENGLISH 10**

Grade: 10

Credit: 1 unit

**PREREQUISITE:** Teacher approval; students must have attempted a freshman English class.

Students will read closely and think critically about various literary genres, including fiction and informational texts. They will write for different real-world purposes, applying effective language skills for authentic audiences. This course helps students develop a global understanding through the evaluation of a variety of texts. Students apply grammar, vocabulary, and writing skills in varied writing projects and compositions. Students will reinforce skills in reading comprehension, current research methods, oral presentations, independent study, and effective listening. Students will complete the state-required End-of-Course exam at the conclusion of this course.

## **ADVANCED STUDIES ENGLISH 10**

Grade: 10

**WEIGHTED: 0.5**

Credit: 1 unit

**PREREQUISITE:** Teacher approval; strongly recommend B average in freshman English class.

This course utilizes an accelerated, analytical approach to literature, grammar, composition, and vocabulary. Students will read closely and think critically about various literary genres, including fiction and informational texts. Students will write for a variety of purposes, applying effective language skills for authentic audiences. This course helps students develop a global understanding through the evaluation of a variety of texts. Students improve grammar, usage, and vocabulary through sustained practice. Students engage in critical thinking, literary analysis, clear and concise writing, and authoritative oral communication. Students will complete the state-required End-of-Course exam at the conclusion of this course.

## **ENGLISH 11**

Grade: 11

Credit: 1 unit

**PREREQUISITE:** Teacher approval; must have attempted freshman and sophomore English

Students will read closely and think critically about various literary genres, including fiction and informational texts. Students will write for a variety of purposes, applying effective language skills for authentic audiences. This course focuses on thematic units that explore the modern human experience. Students learn to examine the texts and literacy practices of everyday life, with special attention to mass media, digital media, and popular culture.

**ENGLISH 11 HONORS**

Grade: 11

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** Teacher approval; strongly recommend B average in sophomore English

This course utilizes an accelerated, analytical approach to literature, grammar, composition, and vocabulary. Students will read closely and think critically about various literary genres, including fiction and informational texts. Students will write for a variety of purposes, applying effective language skills for authentic audiences. This course focuses on thematic units that explore the modern human experience. Thematic units provide a basis for extensive literary analysis and multiple writing projects. Students complete oral and written presentations as well as a grammar and vocabulary study.

**ENGLISH 12**

Grade: 12

Credit: 1 unit

**PREREQUISITE:** Teacher approval; must have attempted junior level English

This course prepares students for post-secondary pursuits by providing seniors with the opportunity to become competent writers and analytical readers. Students learn to examine the texts and literacy practices of everyday life, with special attention to mass media, digital media, and popular culture. Vocabulary and usage are emphasized in papers.

**ENGLISH 12 HONORS**

Grade: 12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** Teacher approval; strongly recommend at least a B in Junior English Honors

This course is intended for college-bound students who either do not wish to enroll in a dual credit English course or who do not meet the requirements for it. Students learn to examine the texts and literacy practices of everyday life, with special attention to mass media, digital media, and popular culture. Students will develop the reading and writing skills needed to read college-level texts and to succeed in post-secondary writing courses. Vocabulary and usage are emphasized in papers.

**TECHNICAL ENGLISH**

Grade: 12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** Teacher approval; strongly recommend a B in a junior level English class; completed application with parent approval

This course provides the literary analysis/writing skills and basic forms of professional communication that students will encounter in post-secondary/career pursuits. During the first semester students complete English 101, a writing intensive college credit course in which students move from reflective comparison to critical analysis through writing. In semester 2 students complete English 215, a technical writing course in which students use a writing process to research and produce various professional documents including proposals, research reports/papers, user documentation, and customer communications. Additional emphasis will be on collaboration and oral presentations. A tuition fee is required for each semester of this course. Students must enroll for the full year. **Course will be open only to students seeking dual credit. Dual credit information can be found under the Advanced Studies section.**

**COLLEGE CREDIT ENGLISH 12**

Grade: 12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** Teacher recommendation and selection; at least a B in English 11 Honors; completed application with parent approval

This class requires students to read extensively and to write a number of long-term projects including personal and critical essays as well as a research paper. During the first semester students complete English 101, a writing intensive college credit course in which students move from reflective comparison to critical analysis through writing. In the second semester students complete English 102, a college credit course which develops research skills and requires students to create multiple documented essays/research products that reflect critical thinking and logical argument. A tuition fee is required for each semester of this course. Students must enroll for the full year. **Course will be open only to students seeking dual credit. Dual credit information can be found under the Advanced Studies section.**

**IB ENGLISH A1 HL 11th grade**

Grade 11

**WEIGHTED: 1.0**

Credit: 1 unit

**IB ENGLISH A1 HL 12th grade**

Grade 12

**WEIGHTED: 1.0**

Credit: 1 unit

**PREREQUISITE:** Teacher approval

This class is a two-year program that follows the International Baccalaureate Language A syllabus. Students study literature to understand writers' craft and global issues. Students develop written and oral communication skills. Over the two years, the IB assessment requires oral presentation, one paper, and two written exams in May of senior year. **Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements.**

The following courses DO NOT count toward fulfilling the Communication Arts graduation requirement:

## COMMUNICATION ARTS ELECTIVES

### INTRODUCTION TO CREATIVE WRITING

Grade: 9-12

Credit: 0.5 unit

**PREREQUISITE:** Strongly recommend B average in English

**NOTE:** Also offered through R-7 Online Academy

This course is designed to introduce students to the skills and concepts that are the basis for various genres of creative writing including creative nonfiction, fiction, drama, and poetry. Students will be encouraged to develop a personal style as well as experiment with other writing methods. Students will examine the work of professional writers, complete daily writing exercises, give and receive feedback from peers, revise and edit their writing, and submit finished pieces in each genre.

### ADVANCED CREATIVE WRITING

Grade: 10-12

Credit: 0.5 unit

**PREREQUISITE:** Teacher recommendation; student must have passed Creative Writing with a C or better

Advanced Creative Writing is designed to allow students to pursue interests developed in previous writing classes. Each student will work collaboratively with the teacher to develop and meet a set of personal writing goals and build a portfolio in their chosen area(s) of creative writing.

### DEBATE

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** Strongly recommend C average or higher in English courses

Debate 1 is for students who have never participated in a debate program before. Students are introduced to logical principles of argumentation and analysis, research, persuasive speaking skills, and debate format and rules. As an activity, debate is time intensive, and students must be willing to commit to after school practice sessions and weekend competitions as prescribed by the director of debate. Students will also be expected to assist with hosting an invitational tournament.

### ADVANCED DEBATE

Grade: 10-12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** Teacher approval; at least a B- in Debate

This course is an advanced, college preparatory class that provides instruction on varsity level strategies for debate and argumentation. Students will further their knowledge and skills of research, analysis, persuasive speaking, and debate theory learned in Debate 1. Requirements for the course include after school practice sessions and weekend tournament competitions as prescribed by the director of debate. All students will be required to assist with hosting an invitational tournament.

### SPEECH COMMUNICATIONS

Grade: 9-12

Credit: 0.5 unit

**PREREQUISITE:** Teacher approval

This course is designed as an introduction to public speaking. Students will develop their oral presentation skills for a variety of situations. They will research, organize, rehearse, and deliver speeches to inform, persuade, and entertain. In addition, students will utilize presentation technology such as Power Point, LCD projectors, and interactive video to improve their speeches.

### NEWS FOR PRINT AND ONLINE I

Grades: 9-12

Credit: 1 unit

**PREREQUISITE:** Teacher approval with application; strongly recommend B average in English

This course provides students with the foundational skills of journalism including media literacy, law, ethics, writing, photography and design both for print and on-line production. Students will assist in the production of the school newspaper and develop materials for the student news website. Students have the opportunity to attend national conventions, enter contests, and earn a journalism letter. Class is taken for elective credit.

### NEWS FOR PRINT AND ONLINE II

Grades: 10-12

Credit: 1 unit

**PREREQUISITE:** Teacher approval; must have completed Introduction to Newspaper; strongly recommend B average in English

This course expands the skills presented in the Introduction to Newspaper class as students produce the newspaper and maintain an on-line presence. Students receive in-depth training in news and feature writing, layout and design, advertising, and advanced photography and production techniques. Each student is expected to take responsibility for a staff position and work as part of a team to complete all aspects of developing and producing editorial content, advertising sales, marketing and distribution of the student publications. Students have the opportunity to attend national conventions, enter contests, and earn a journalism letter. **Class may be taken for elective credit or practical art credit.**

### INTRODUCTION TO YEARBOOK

Grades: 9-12

Credit: 1 unit

**PREREQUISITE:** Teacher approval; strongly recommend B average in English; recommend previous or concurrent Journalism course

This course helps students produce the school yearbook using professional publishing software on Macintosh computers. Journalists' interview, photograph, write, complete page layout and design, sell advertising and meet deadlines. Students have the opportunity to attend national conventions, enter international contests, and earn a journalism letter.

### **ADVANCED YEARBOOK**

Grades: 10 –12

Credit: 1 unit

**PREREQUISITE:** Teacher approval; must have completed Introduction to Yearbook; strongly recommend B average in English; recommend previous or concurrent Journalism course

This course expands students' knowledge of school yearbook production and focuses on in-depth training for feature writing, advanced layout and thematic design, advertising, and photography techniques. Students will also refine Indesign techniques. Students will continue to sell advertising and meet deadlines necessary to produce the school yearbook. Advanced Yearbook students will be trained for leadership roles within the yearbook staff. Students will have an opportunity to attend national conventions, enter international contests, and earn a journalism letter. **Class may be taken for elective credit or practical art credit.**

### **INTRODUCTION TO BROADCASTING/VIDEO TECHNOLOGY**

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** Teacher approval with application; strongly recommend B average in English; 95% attendance record

This course introduces broadcast communications skills, processes of production and operation of video lab equipment. Students plan and organize elements of production including storyboarding, script writing, camera use, sound and video editing.

### **SPORTS BROADCASTING**

Grade: 10-12

Credit: 1 unit

**PREREQUISITE:** Introduction to Broadcasting/Video Tech. OR Teacher Recommendation

In this course, students will continue to focus on broadcast communications skills, processes of production and operation of video lab equipment for the purpose of producing live sports broadcast and sports studio shows. Students will work behind and in front of the camera, in production and on-air roles. Additionally, students will interview coaches and players, gather statistics and research, create a run-down, and produce graphics and other content for live streaming. **Class may be taken for elective credit or practical art credit. Students may choose to take this course for dual credit. Dual credit information can be found under the Advanced Studies section.**

### **ADVANCED VIDEO TECHNOLOGY**

Grade: 10-12

Credit: 1 unit

**PREREQUISITE:** Teacher approval with application. Must have completed Introduction to Video Technology/Broadcasting; strongly recommend B average in English; 95% attendance record.

Students focus on video technology skills acquired in Introduction to Video Technology/Broadcasting. Students gain hands-on experience by writing, directing, and editing their own digital projects. The course is designed to give each student an opportunity to specialize and experience collaboration while creating various productions such as short films, documentaries, PSAs, animation, advanced graphic design. Students can expect to learn through lecture, though critiquing the work of other video makers including fellow classmates, and through hands-on production. **Class may be taken for elective credit or practical art credit. Students may choose to take this course for dual credit. Dual credit information can be found under the Advanced Studies section.**

### **ADVANCED BROADCASTING**

Grade: 10-12

Credit: 1 unit

**PREREQUISITE:** Teacher approval with application. Must have completed Introduction to Video Technology/Broadcasting; strongly recommend B average in English; 95% attendance record.

Students focus on news broadcast skills acquired in Introduction to Video Technology/Broadcasting. Students plan and organize a news broadcast which includes brainstorming, storyboarding, script writing, interviewing, camera use, and video editing. **Class may be taken for elective credit or practical art credit. Students may choose to take this course for dual credit. Dual credit information can be found under the Advanced Studies section.**

### **IB FILM SL**

Grade: 11 or 12

**WEIGHTED: 1.0**

Credit: 1 unit

**IB Film Standard Level (SL) is a one-year course students may take either 11<sup>th</sup> or 12<sup>th</sup> grade.**

**PREREQUISITE:** Intro to Broadcast

Students who take SL during 11<sup>th</sup> grade will have the option with teacher approval to **take IB Film Higher Level (HL)** during their 12<sup>th</sup> grade year.

**IB FILM HL 12<sup>th</sup> grade**

Grade: 12

**WEIGHTED: 1.0**

Credit: 1 unit

**PREREQUISITE:** Intro to Broadcast/Video Technology and/or permission of the instructor

The IB film course aims to develop students' skills so they become adept in both interpreting and making film texts. Through the study and analysis of film texts and exercises in film-making, the course explores film history, theory and socio-economic background. The course develops students' critical abilities, enabling them to appreciate the multiplicity of cultural and historical perspectives in film. To achieve an international understanding within the world of film, students are taught to consider film texts, theories and ideas from the points of view of different individuals, nations and cultures. Students also develop the professional and technical skills (including organizational skills) needed to express themselves creatively in film. The course emphasizes the importance of working individually and as a member of a group. In addition, the course is designed to promote: an appreciation and understanding of film as a complex art form, an ability to formulate stories and ideas in film terms, the practical and technical skills of production, critical evaluation of film productions by the student and by others, and a knowledge of film-making traditions in more than one country. **Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements. Class may be taken for elective credit or practical art credit. Additionally, students have the option of taking this course for dual credit. Dual credit information can also be found under the Advanced Studies section.**

**ACT PREPARATION**

Grades: 10-12

Credit: 0.5 Unit

**PREREQUISITE:** None

Students will focus on both academic and test taking skills in preparation for the ACT exam. A focus will be placed on supporting students to reach the standard of college readiness for each of the four subject-area benchmarks. Diagnostic exams will be utilized to monitor progress and to help teachers and students develop plans of action.

# **MODERN LANGUAGE**

## SPANISH I

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** None

This course teaches the fundamentals of Spanish and introduces the cultures of the Spanish-speaking peoples. It emphasizes the basic skills of listening, speaking, reading, and writing; the use of practical vocabulary (greetings, school, leisure activities, family); and elementary grammar. Students listen to and tell stories, write short creative stories, develop reading skills. Active class participation is essential. Because this class emphasizes communication, regular attendance is required. This class is not intended for native speakers.

## SPANISH II

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** C- or above in the previous course or teacher approval

This course continues skill development in listening and speaking, reading and writing. Each thematic unit expands vocabulary and introduces more extensive grammar. Thematic units include traveling, shopping, daily life, and food. Grammar topics include verb tenses, adjectives and pronouns. Students attain more accurate pronunciation and more fluency in conversation, answer questions to show listening and reading comprehension, and write guided compositions and exercises. Active class participation is essential. Because this class emphasizes communication, regular attendance is required. This class is not intended for native speakers.

## SPANISH III

Grade: 10-12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** C- or above in the previous course or teacher approval

In this course students will increase their active vocabulary, use more complex grammar, continue development of listening and speaking skills, and read and write longer passages. Vocabulary themes include health and wellbeing, **housing** and the arts. Students are expected to participate in class discussions, improve their pronunciation and fluency, and improve their reading comprehension. Active class participation is essential. Because this class emphasizes communication, regular attendance is required.

## SPANISH IV

Grade: 11-12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** C- or above in the previous course or teacher approval

Work includes cultures of the Spanish-speaking peoples, longer readings, and more extensive writing. The student should expect to work independently and to speak Spanish as much as possible to strengthen communication skills. Vocabulary topics include the history of the Spanish-speaking world, music, holidays, poetry, leisure activities, Latinos in the US and bilingualism. Active class participation is essential. Because this class emphasizes communication, regular attendance is required. **The class may be offered for dual credit to eligible students. Dual credit information can also be found under the Advanced Studies section.**

## IB SPANISH IV, HL

Grade: 11

**WEIGHTED: 0.666 or 1.0**

Credit: 1 unit

**PREREQUISITE:** Spanish teacher approval AND C- or above in the previous course

**This course is designed to meet the needs of the advanced native Spanish-speaking students as well as other advanced Spanish language students. Advanced students need to demonstrate advanced language proficiency in prior Spanish coursework and have a teacher recommendation for this course.**

Students will review grammatical structures, write compositions, make oral presentations, and read and discuss a variety of texts at an advanced level including poetry, short stories, plays and novels. In class, students are expected to work well both independently and in groups and to speak exclusively the target language. In the examinations, students will be expected to discuss the IBO themes in a group as well as individually; to read with comprehension a wide variety of texts; and to write and speak with grammatical accuracy, displaying a broad range of vocabulary. **Students have the option of taking the IB Spanish HL exam. Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements. The class may meet with and be combined with Spanish V, HL. The class may be offered for dual credit to eligible students. Dual credit information can be found under the Advanced Studies section. 1.0 weighted credit will be awarded retroactively to students who take the IB Spanish HL exam their senior year.**

## IB SPANISH V, SL

Grade: 12

**WEIGHTED: 0.666 or 1.0**

Credit: 1 unit

**PREREQUISITE:** C- or above in the previous course or teacher approval

Students will review grammatical structures, write compositions, make oral presentations, and read and discuss a variety of texts at an advanced level. The thematic units include youth culture education, health, environment, politics, media, and technology. In class, students are expected to work well both independently and in groups and to speak the target language exclusively. In the examinations, students will be expected to discuss the IBO themes in a group as well as individually; to read with comprehension a wide variety of texts; and to write and speak with grammatical accuracy, displaying a broad range of vocabulary. **Students have the option of taking the IB Spanish SL exam. Refer to the Advanced Studies tab section for**

**IB grading and testing requirements. This class may be offered for dual credit to eligible students. Dual credit information can also be found under the Advanced Studies section.**

### **IB SPANISH V, HL**

Grade: 12

**WEIGHTED: 0.666 or 1.0**

Credit: 1 unit

**PREREQUISITE:** Spanish teacher approval AND C- or above in the previous course

**This course is designed to meet the needs of the advanced native Spanish-speaking students as well as other advanced Spanish language students. Advanced students need to demonstrate advanced language proficiency in prior Spanish coursework and have a teacher recommendation for this course.**

Students will review grammatical structures, write compositions, make oral presentations, and read and discuss a variety of texts at an advanced level including poetry, short stories, plays and novels. In class, students are expected to work well both independently and in groups and to speak exclusively the target language. In the examinations, students will be expected to discuss the IBO themes in a group as well as individually; to read with comprehension a wide variety of texts; and to write and speak with grammatical accuracy, displaying a broad range of vocabulary. **Students have the option of taking the IB Spanish HL exam. Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements. The class may meet with and be combined with Spanish IV, HL. The class may be offered for dual credit to eligible students. Dual credit information can also be found under the Advanced Studies section.**

### **SPANISH FOR HERITAGE SPEAKERS I/II**

Grade: 9-12

**WEIGHTED: 0.666 (Spanish for Heritage Speaking II Only)**

Credit: 1 unit

**PREREQUISITE:** Spanish teacher approval

This course is designed to improve Spanish language skills and increase the knowledge and appreciation of Latin American culture for native Spanish-speaking students and students who have previously received bilingual Spanish language instruction. Students will learn to distinguish between and improve the use of colloquial and formal spoken Spanish. Students will also develop more advanced skills in reading comprehension, creative writing styles, and grammatical structures. This course will help the native Spanish-speaking students to further understand their language and therefore, apply these skills to the learning of English as a second language. Differentiated instructional techniques will be employed. **NOTE: Spanish for Heritage Speakers I and II will meet in combined classes.** Course themes will alternate on an A year/B year rotation. Pre-testing results will determine the student's placement. The class may not be offered at every building every year.

### **GERMAN I**

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** None

This course teaches the fundamentals of German and introduces the cultures of the German-speaking peoples. It emphasizes the basic skills of listening, speaking, reading, and writing; the use of practical vocabulary (greetings, school, leisure activities, family, food); and elementary grammar. Students listen to and tell stories, write short creative stories, develop reading skills. Active class participation is essential. Because this class emphasizes communication, regular attendance is required. This class is not intended for native speakers.

### **GERMAN II**

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** C- or above in the previous course or teacher approval

This course continues skill development in listening and speaking, with increased emphasis on reading and writing. Each thematic unit expands vocabulary and introduces more extensive grammar. Thematic units include food, travel, the home, animals and sports. Grammar topics include verb tenses and object cases. Students attain more accurate pronunciation and more fluency in conversation, answer questions to show listening and reading comprehension, and write guided compositions, exercises, and skits. Active class participation is essential. Because this class emphasizes communication, regular attendance is required. This class is not intended for native speakers.

### **GERMAN III**

Grade: 10-12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** C- or above in the previous course or teacher approval In this course students will increase their active vocabulary, use more complex grammar, continue development of listening and speaking skills, and read and write longer passages. Students are expected to participate in class discussions, improve their pronunciation and fluency, and improve their reading comprehension. Vocabulary themes include shopping, health and working. Grammar topics include verb tenses, reflexives and the object cases. Active class participation is essential. Because this class emphasizes communication, regular attendance is required.

### **GERMAN IV**

Grade: 11-12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** C- or above in the previous course or teacher approval

Work includes cultures of the German-speaking peoples, longer readings, and more extensive writing. Thematic units include art, history, the environment, music, German unification and transportation. The student should expect to work independently and to speak German as much as possible to strengthen communication skills. Active class participation is essential. Because

this class emphasizes communication, regular attendance is required. **The class may be offered for dual credit to eligible students. Dual credit information can be found under the Advanced Studies section. The class may meet with and be combined with German V.**

### **IB GERMAN V, SL**

Grade: 12

**WEIGHTED: 0.666 or 1.0**

Credit: 1 unit

**PREREQUISITE:** C- or above in the previous course or teacher approval

Students will review grammatical structures, write compositions, make oral presentations, and read and discuss a variety of texts at an advanced level. The thematic units include the media, the environment, relationships and leisure. In class, students are expected to work well both independently and in groups and to speak exclusively the target language. In the examinations, students will be expected to discuss the IBO themes in a group as well as individually; to read with comprehension a wide variety of texts; and to write and speak with grammatical accuracy, displaying a broad range of vocabulary. **Students have the option of taking the IB German SL exam. Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements. The class may meet with and be combined with German IV. The class may be offered for dual credit to eligible students. Dual credit information can also be found under the Advanced Studies section.**

### **FRENCH I**

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** None

This course teaches the fundamentals of French and introduces the cultures of the French-speaking peoples. It emphasizes the basic skills of listening, speaking, reading, and writing; the use of practical vocabulary (greetings, school, leisure activities, animals, family, food); and elementary grammar. Students listen to and tell stories, write short creative stories, and develop reading skills. Active class participation is essential. Because this class emphasizes communication, regular attendance is required. This class is not intended for native speakers.

### **FRENCH II**

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** C- or above in the previous course or teacher approval

This course continues skill development in listening and speaking, and reading and writing. Each thematic unit expands vocabulary and introduces more extensive grammar. Thematic units include leisure activities, shopping, travel, and **daily routines**. Grammar topics include verb tenses, adjectives and pronouns. Students attain more accurate pronunciation and more fluency in conversation, answer questions to show listening and reading comprehension, and write guided compositions and exercises. Active class participation is essential. Because this class emphasizes communication, regular attendance is required. This class is not intended for native speakers.

### **FRENCH III**

Grade: 10-12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** C- or above in the previous course or teacher approval

In this course students will increase their active vocabulary, use more complex grammar, continue development of listening and speaking skills, and read and write longer passages. Vocabulary themes include food, environment, history, health, daily routines, and artists. Grammar topics include reflexives, and various verb tenses. Students are expected to participate in class discussions; improve their pronunciation and fluency, and improve their reading comprehension. Active class participation is essential. Because this class emphasizes communication, regular attendance is required.

### **FRENCH IV**

Grade: 11-12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** C- or above in the previous course or teacher approval

Work includes cultures of the French-speaking peoples, longer readings, and more extensive writing. The thematic units include identities, experiences, human ingenuity, social organization and sharing the planet. The student should expect to work independently and to speak French as much as possible to strengthen communication skills. Active class participation is essential. Because this class emphasizes communication, regular attendance is required.

**NOTE: French IV may meet in combined classes with French V. This class may be offered for dual credit to eligible students. Dual credit information can be found under the Advanced Studies section.**

### **IB FRENCH IV, HL**

Grade: 11-12

**WEIGHTED: 0.666 or 1.0**

Credit: 1 unit

**PREREQUISITE:** French teacher approval AND C- or above in the previous course

**This course is designed to meet the needs of the advanced French-speaking students. Advanced students need to demonstrate advanced language proficiency in prior French coursework and have a teacher recommendation for this course.**

Students will review grammatical structures, write compositions, make oral presentations, and read and discuss a variety of texts at an advanced level including poetry, short stories, plays and novels. In class, students are expected to work well both independently and in groups and to speak exclusively the target language. In the examinations, students will be expected to discuss the IBO themes in a group as well as individually; to read with comprehension a wide variety of texts; and to write and

speaking with grammatical accuracy, displaying a broad range of vocabulary. **Students have the option of taking the IB French HL exam. Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements. The class may meet with and be combined with French V, HL. The class may be offered for dual credit to eligible students. Dual credit information can also be found under the Advanced Studies section. 1.0 weighted credit will be awarded retroactively to students who take the IB French HL exam their senior year.**

### **IB FRENCH V, SL**

Grade: 12

**WEIGHTED: 0.666 or 1.0**

Credit: 1 unit

**PREREQUISITE:** C- or above in the previous course or teacher approval

Students will review grammatical structures, write compositions, make oral presentations, and read and discuss a variety of texts at an advanced level. In class, students are expected to work well both independently and in groups and to speak the target language exclusively. In the examinations, students will be expected to discuss the IBO themes in a group as well as individually; to read with comprehension a wide variety of texts; and to write and speak with grammatical accuracy, displaying a broad range of vocabulary. **Students have the option of taking the IB French SL exam. Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements. NOTE: The class may meet with and be combined with French IV. This class may be offered for dual credit to eligible students. Dual credit information can also be found under the Advanced Studies section.**

### **IB French V, HL**

Grade: 12

**WEIGHTED: 0.666 or 1.0**

Credit: 1 unit

**PREREQUISITE:** French teacher approval AND C- or above in the previous course

**This course is designed to meet the needs of the advanced French-speaking students. Advanced students need to demonstrate advanced language proficiency in prior French coursework and have a teacher recommendation for this course.**

Students will review grammatical structures, write compositions, make oral presentations, and read and discuss a variety of texts at an advanced level including poetry, short stories, plays and novels. In class, students are expected to work well both independently and in groups and to speak exclusively the target language. In the examinations, students will be expected to discuss the IBO themes in a group as well as individually; to read with comprehension a wide variety of texts; and to write and speak with grammatical accuracy, displaying a broad range of vocabulary. **Students have the option of taking the IB French HL exam. Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements. The class may meet with and be combined with French IV, HL. The class may be offered for dual credit to eligible students. Dual credit information can also be found under the Advanced Studies section.**

### **MANDARIN CHINESE I**

Grade 9-12

Credit: 1 unit

**PREREQUISITE:** Modern Language teacher approval

**NOTE:** Also offered through R-7 Online Academy

This course teaches the fundamentals of Mandarin Chinese and introduces the cultures of the Chinese-speaking peoples. It emphasizes the basic skills of listening, speaking, reading, and writing; the use of practical vocabulary, and elementary grammar. Thematic units include an introduction to the Chinese language, greetings, family, school and friendships. Students listen to and tell stories, write short creative stories, and develop reading skills. Because of the complexity of the written and spoken language, a higher level of dedication and time outside of class are required. Active class participation is essential. Because this class emphasizes communication, regular attendance is required. This class is not intended for native speakers. **NOTE: Chinese I may meet in combined classes with another level of Chinese. This class may not be offered at every building every year.**

### **MANDARIN CHINESE II**

Grade 10-12

Credit: 1 unit

**PREREQUISITE:** C- or above in previous course or teacher approval

This course continues skill development in listening and speaking, with increased emphasis on reading and writing. Each thematic unit expands vocabulary and introduces more extensive grammar. Thematic units include daily routines, relationships & people, pastimes, and visiting the doctor. Students attain more accurate pronunciation and more fluency in conversation, answer questions to show listening and reading comprehension, and write guided compositions and exercises. Because of the complexity of the written and spoken language, a higher level of dedication and time outside of class are required. Active class participation is essential. Because this class emphasizes communication, regular attendance is required. **NOTE: Chinese II may meet in combined classes with another level of Chinese. This class may not be offered at every building every year.**

### **MANDARIN CHINESE III**

Grade: 11-12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** C- or above in previous course or teacher approval

In this course students will increase their active vocabulary, use more complex grammar, continue development of listening and speaking skills, and read and write longer passages. Thematic units include seasons, weather, shopping, food & drink, and directions & transportation. Students are expected to participate in class discussions, improve their pronunciation and fluency, and improve their reading comprehension. Active class participation is essential. Because this class emphasizes communication, regular attendance is required. **NOTE: Chinese III may meet in combined classes with another level of Chinese. This class may not be offered at every building every year.**

#### **MANDARIN CHINESE IV**

Grade: 11-12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** C- or above in previous course or teacher approval

Work includes cultures of the Chinese-speaking peoples, longer readings, and more extensive writing. Thematic units include education, career, media, youth culture, family & society, and health. The student should expect to work independently and to speak Chinese as much as possible to strengthen communication skills. Active class participation is essential. Because this class emphasizes communication, regular attendance is required. **The class may meet with and be combined with another level of Chinese. Due to limited enrollment, this class may not be offered in every building every year. This class may be offered for dual credit to eligible students. Dual credit information can be found under the Advanced Studies section.**

#### **IB MANDARIN CHINESE V, SL ab initio**

Grade: 12

**WEIGHTED: 0.666 or 1.0**

Credit: 1 unit

**PREREQUISITE:** C- or above in previous course or teacher approval

Students will review grammatical structures, write compositions, make oral presentations, and read and discuss a variety of texts at an advanced level. Thematic units include environment, travel, cuisine, modern China, and traditional China. In class, students are expected to work well both independently and in groups and to speak exclusively the target language. In the examinations, students will be expected to discuss the IBO themes in a group as well as individually; to read with comprehension a wide variety of texts; and to write and speak with grammatical accuracy, displaying a broad range of vocabulary. **The class may meet with and be combined with Chinese IV. Due to limited enrollment, this class may not be offered in every building every year. For this course only IBDP candidates have the option of taking the IB Mandarin Chinese Ab initio exam. The IB Mandarin Chinese SL exam may be offered to eligible students and with teacher approval. Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements. This class may be offered for dual credit to eligible students. Dual credit information can also be found under the Advanced Studies section.**

#### **INTERNATIONAL STUDIES ACADEMY**

Grade: 11-12

**WEIGHTED: 0.666**

Credit: 3 units

**For course description, see the Summit Technology Academy section of the Career and Educational Planning Guide under the Off-Campus Career Ed Programs section.**

# **SOCIAL STUDIES**

# LSR7 SOCIAL STUDIES

## Grades 6-12

### 6-11 Pathway

#### 6th Grade

Geography

#### 7th Grade

Ancient World  
History

OR

\*Advanced Studies (AS)  
Ancient World History

#### 8th Grade

Early American History

OR

\*Advanced Studies (AS)  
Early American History

#### 9th Grade

American History

OR

\*Advanced Studies (AS)  
American History

#### 10th Grade

World History

OR

\*Advanced Studies (AS)  
World History

#### 11th Grade

Modern Global Issues  
(Semester)

&

Government  
(Semester)

OR

\*IB History of the  
Americas HI (Year 1 of 2)

&

\*IB History of the  
Americas HI (Year 2 of 2)

### Electives Options

#### Semester Courses

\*Comparative Government

Contemporary Issues

\*Economics

General Psychology

Special Topics in Social Studies

\*Non-Western History

\*Origins of Western Civilization

Sociology I

Sociology II

Student Leadership Development

#### Year-Long Courses

\*AP American History

\*AP European History

\*IB Psychology

\*IB Theory of Knowledge

\*Summit International  
Studies Academy

\*Weighted Course

Completion of both IB HL 11-12 courses fulfills Grade 11  
requirements of American Government and MGI

### LSR7 Online Courses

#### 9th Grade

American History

\*Advanced Studies (AS)  
American History

#### 10th Grade

World History

\*Advanced Studies (AS)  
World History

#### 11th Grade

Modern Global Issues  
(Semester)

Government  
(Semester)

#### Electives

Psychology  
(Semester)



LEE'S SUMMIT  
R-7 SCHOOLS  
*Learning for Life*

**Missouri/R-7 Graduation Requirements – A student must receive a minimum of 3.0 Social Studies credits starting with the graduating class of 2009. As part of this requirement, a student must obtain 1.0 credit of American History, 1.0 credit of World History, .5 credit of American Government and .5 credit of Modern Global Issues. A student must also pass the following tests: Missouri Civics Education Initiative (effective for those who enter 9th grade after July 1, 2017), U. S. Constitution, and Missouri Constitution. A student who successfully completes the two-year (11<sup>th</sup> & 12<sup>th</sup>) IB History of the Americas course does not have to take the semester American Government and Modern Global Issues courses but must still pass both Constitution tests. The Missouri Civics Education Initiative test will be administered in 9th Grade American History (regular and advanced).**

## **AMERICAN HISTORY**

Grade: 9

Credit: 1 unit

Required course for all 9<sup>th</sup> grade students; **1 credit of American History is required for graduation in Missouri**

**PREREQUISITE:** None

**NOTE:** Also offered through R-7 Online Academy

This class provides a broad survey of America's past from Reconstruction and Westward Expansion (late 1800s) to present. It examines the major events and turning points in U.S. History and allows students to identify and explain patterns, processes, and people that have shaped U.S. events. Expectations will be to read text and supplementary material; take class lecture notes; complete study guides and make reports; construct historical timelines; complete map exercises; interpret historical documents, graphs and charts; engage in class discussions and simulations; and analyze historical photos and videos. **Starting with students who enter 9th grade after July 1, 2017, students will take and pass the Missouri Civics Education Initiative Exam during this course to meet state law requirements for graduation. NOTE: High School Graduation Requirement**

## **ADVANCED STUDIES AMERICAN HISTORY**

Grade: 9

**WEIGHTED: 0.5**

Credit: 1 unit

**1 credit of American History is required for graduation in Missouri**

**PREREQUISITE:** Teacher recommendation

The content parallels the standard 9th grade American History course, with more in-depth coverage of selected topics. The course differs from the standard 9th grade American History course in that it is designed to prepare students for IB/AP honors courses offered at the 11th and 12th grade levels. Thus, students are expected to read and write with a high level of proficiency. In addition to textbook and primary source readings, the students will read **multiple novels** and complete **rigorous** written assignments covering a number of outside readings. Course will include both take home papers and **extensive** in-class essay exams. **Starting with students who enter 9th grade after July 1, 2017, students will take and pass the Missouri Civics Education Initiative Exam during this course to meet state law requirements for graduation.**

## **WORLD HISTORY**

Grade: 10

Credit: 1 unit

Required course for all 10<sup>th</sup> grade students

**PREREQUISITE:** None

This class provides a broad survey of world history from the Renaissance to the end of World War II. It examines the major events and turning points in World History and allows students to identify and explain patterns, processes, and people that have shaped World events. Expectations will be to read text and supplementary material; practice historical thinking skills; take class lecture notes; complete study guides and make reports; construct historical timelines; complete map exercises; interpret historical documents, graphs, and charts; engage in class discussions and simulations; and analyze historical photos and videos. **NOTE: High School Graduation Requirement**

## **ADVANCED STUDIES WORLD HISTORY**

Grade: 10

**WEIGHTED: 0.5**

Credit: 1 unit

This course meets the 1 credit of World History required for graduation by the Lee's Summit School District.

**PREREQUISITE:** Teacher recommendation

This class parallels the content of World History through World War II, with more in-depth coverage of selected events. A variety of secondary sources, primary sources, and novels will be used to provide students with greater opportunities for analysis and synthesis of historical periods. Students will be expected to read and write with a high level of proficiency, which will be demonstrated in daily work, essays, reports, and a library research paper.

## **AMERICAN GOVERNMENT**

Grade: 11

Credit: 0.5 unit

Required course for all 11<sup>th</sup> grade students

**PREREQUISITE:** None

**NOTE:** Also offered through R-7 Online Academy

The class provides a foundational understanding of the principles, processes, and functions of the United States government. Students will learn about the structure of the U.S. government and our democratic process through analysis of the U.S. Constitution, Supreme Court cases, and other laws and policies. Expectations will be to read text and supplementary material; practice historical thinking skills; take class lecture notes; complete study guides and make reports; construct historical timelines; complete map exercises; interpret historical documents, graphs, and charts; engage in class discussions and simulations; and analyze historical photos and videos. **NOTE: High School Graduation Requirement. The state of Missouri has mandated that all secondary schools 9-12 require a course in American government concepts. All students are required to pass the American Government course as a graduation requirement. Students will take and pass the two tests required for high school graduation - U.S. Constitution/Government and Missouri Constitution/Government. Additionally, the American Government End-Of-Course exam will be administered to students enrolled in this course. This state-required assessment will contribute to the student's final grade in the course.** This is an introductory course to meet state requirements for the study of U.S. and Missouri governments.

## MODERN GLOBAL ISSUES

Grade: 11

Credit: 0.5 unit

Required course for all 11<sup>th</sup> grade students

**PREREQUISITE:** None

**NOTE:** Also offered through R-7 Online Academy

This course focuses on contemporary issues facing the modern world. Through readings, videos, and discussion, the course will examine the foundations of modern nations, the causes and effects of globalization, the blending of cultures and the impact of technological change. **NOTE: High School Graduation Requirement**

## INTERNATIONAL BACCALAUREATE

This is a two-year program. The student will receive 1 unit of credit for each year. A certificate will be issued at the end of the second year. (2 units of credit)

**IB HISTORY OF THE AMERICAS HL (Higher Level) 11<sup>th</sup> grade** Grade: 11

**WEIGHTED: 1.0**

Credit: 1 unit

**IB HISTORY OF THE AMERICAS HL (Higher Level) 12<sup>th</sup> grade** Grade: 12

**WEIGHTED: 1.0**

Credit: 1 unit

Upon successful completion of IB History 12, the requirements will be met for American Government and Modern Global Issues. If a student fails to pass IB History 11 and 12, he/she must take American Government and Modern Global Issues.

**PREREQUISITE:** Advanced Studies American History/Advanced Studies World History at the 9th and 10th grade levels and teacher approval.

This is a two-year course, designed to prepare students for the higher-level exam in history that is administered by the International Baccalaureate. Course work will cover U.S. history and History of the Americas. The Diploma Programme (DP) history course is a world history course based on a comparative, multi-perspective approach to history and focused around key historical concepts such as change, causation and significance. It involves the study of a variety of types of history, including political, economic, social and cultural, encouraging students to think historically and to develop historical skills. In this way, the course involves a challenging and demanding critical exploration of the past. The DP history course requires students to study and compare examples from different regions of the world, helping to foster international mindedness.

Year – I Year 1 examines the History of the Americas relative to European Contact up to 1899 for the Americas

Year – II Year 2 examines the History of the Americas in the 20th century world

**NOTE: Students must pass a U.S. Constitution test and MO government test, as a state requirement for graduation. Additionally, the American Government End-Of-Course exam will be administered to students enrolled in this course. This state-required assessment will contribute to the student's final grade in the course. Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements. This may be offered for dual credit to eligible students. Dual credit information can also be found under the Advanced Studies section.**

The following courses DO NOT count toward fulfilling the Social Studies graduation requirement:

## SOCIAL STUDIES ELECTIVES

### COMPARATIVE GOVERNMENT

Grade: 11-12

**WEIGHTED: 0.666**

Credit: 0.5 unit

**PREREQUISITE:** Teacher approval

This is a semester course designed to give students a critical perspective on the world's diverse political structures and practices. Topics include the sources of political authority and political power, the functions of government institutions in different countries, and political change. Current issues will be stressed throughout the course. In addition to standard expectations, students must be willing to do extensive reading outside of class.

### CONTEMPORARY ISSUES

Grade: 11-12

Credit: 0.5 unit

**PREREQUISITE:** None

Contemporary Issues is designed for the student who desires to: understand the process of news gathering and reporting by the media; examine and discuss major news events; and investigate issues and people affecting our local community, nation, and world. Requirements include internet research, group activities, and news presentations. Watching and listening to news outside of class is an integral part of this course.

### ECONOMICS

**WEIGHTED: 0.666**

Grade: 11-12 Credit: 0.5 unit

**PREREQUISITE:** Algebra I and Social Studies teacher approval

Economics sets out to illustrate the basic, microeconomic, and macroeconomic concepts, as well as international concepts necessary to understand the practices and dynamics of the American economic system. Emphasis will be placed on theory, as well as the practical application of economic principles that lead to informed economic decisions as members and future leaders of this economic system.

**GENERAL PSYCHOLOGY**

Grade: 11-12

Credit: 0.5 unit

**PREREQUISITE:** None

NOTE: Also offered through R-7 Online Academy Psychology is designed as an introduction to the field of psychology, its history and its application in our daily lives. Students will observe behavior, study its theories, examine brain functions, evaluate approaches and test new and evolving hypotheses. In addition to standard expectations, students will be required to actively participate in class projects and activities.

**SOCIAL STUDIES TOPICS**

Grade: 11-12

Credit: 0.5 unit

**PREREQUISITE:** None

Social Studies Topics is a semester-long course that provides students in-depth study of a specific topic or subfield in the social sciences. Examples might include, but are not limited to: sports, military weaponry, criminology, study of minority groups, etc. (see building for course focus). Course format will be thematic, considering a single topic or focus through the lenses of economics, geography, government, conflict, and culture.

**NON-WESTERN HISTORY**

Grade: 11-12

**WEIGHTED: 0.666**

Credit: 0.5 unit

**PREREQUISITE:** Teacher approval

This class is designed to provide an understanding of the interaction and global impact of non-western nations with the world and the United States. In addition to standard expectations, students will write several short papers and one longer research project.

**ORIGINS OF WESTERN CIVILIZATION**

Grade: 11-12

**WEIGHTED: 0.666**

Credit: 0.5 unit

**PREREQUISITE:** Teacher approval and a grade of B or above in 10th grade World History class is recommended

This class provides a basic knowledge of the ancient and classical periods of world history, and shows how the past affects the present and future. Students will complete one research project.

**SOCIOLOGY I**

Grade: 11-12

Credit: 0.5 unit

**PREREQUISITE:** None

This class is designed to examine ways people interact; and how society shapes our personalities, beliefs, and behavior. In addition to standard expectations, readings and journal writings are required. Large projects that require outside class time are a part of the class.

**SOCIOLOGY II**

Grade: 11-12

Credit: 0.5 unit

**PREREQUISITE:** Must pass Sociology I with a 70% and teacher approval

This class is designed as a continuation of Sociology I. In addition to standard expectations, students will be required to participate in projects that require outside class time. Projects include observations and journal writing. Field trips are offered.

**AP AMERICAN HISTORY**

Grade: 11-12

**WEIGHTED: 1.0**

Credit: 1 unit

**PREREQUISITE:** American History and teacher approval

**NOTE: Course qualifies for Advanced Placement: accelerated, in-depth course; and preparation for AP exam. AP exam must be taken to receive weighted credit. All students must take the AP exam and pay the examination fee.**

This class is organized around six periods of major emphasis for the AP exam: Revolution/Constitution; Jacksonian Democracy; Civil War/Reconstruction; Populist/Progressive movements; Depression/New Deal; and Foreign/Domestic concerns since WWII. Work includes reading from primary sources, additional college-level readings, and a required research project. Exams include essay questions.

**AP EUROPEAN HISTORY**

Grade: 11-12

**WEIGHTED: 1.0**

Credit: 1 unit

**PREREQUISITE:** World History teacher approval**NOTE: Course qualifies for Advanced Placement: accelerated, in-depth course; and preparation for AP exam. AP exam must be taken weighted credit. All students must take the AP exam and pay the examination fee.**

This class is organized around 20 periods of major emphasis for the AP exam: Rise of Europe; Greek/Roman Heritage; Europe in the Middle Ages; End of Medieval Worlds/Renaissance; Reformation; English Reformation/Catholic Counter Reformation; Age of Exploration; Religious Wars; Age of Absolute Monarchs; Scientific Revolution/Age of Enlightenment; French Revolution/Napoleon; reaction and advent of the "isms"; Revolutions of 1848/Marxism; Europe late 19<sup>th</sup> Century; Europe's World Supremacy; WWI; Russian Revolution; Europe between wars/origin of WWII; and Postwar World.

**INTERNATIONAL BACCALAUREATE ELECTIVES IB HISTORY OF THE AMERICAS****WEIGHTED: 1.0****HL (Higher Level) 11<sup>th</sup> grade** (from European Contact to 1899)

Credit 1 unit

**IB HISTORY OF THE AMERICAS HL (Higher Level) 12<sup>th</sup> grade****WEIGHTED: 1.0**

(From 1899 to Present)

Credit: 1 unit

**PREREQUISITE:** Advanced Studies American History/Advanced Studies World History at the 9th and 10th grade levels and teacher approval.**IB SOCIAL AND CULTURAL ANTHROPOLOGY SL (Standard Level)****WEIGHTED: 1.0**

Grade: 11-12

Credit: 1 unit

This is a one-year program. The student will receive 1 unit of credit for each year. A certificate will be issued at the end of the year.

**PREREQUISITE:** Students must have taken or be enrolled in another IB course or have IB Coordinator approval. The course is designed from the syllabus provided by the International Baccalaureate office.

This IB Diploma Programme social and cultural anthropology course offers an opportunity for students to explore and understand humankind in all its diversity through the comparative study of culture and human societies. Anthropology contributes to the understanding of contemporary issues, such as war and conflict, the environment, poverty, injustice, inequality, and human and cultural rights. **Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements.**

**IB PSYCHOLOGY SL (Standard Level)****WEIGHTED: 1.0**

Grade: 11 or 12

Credit: 1 unit

**IB PSYCHOLOGY (SL) is a one-year course students may take either 11<sup>th</sup> or 12<sup>th</sup> grade.** Students who take SL during 11<sup>th</sup> grade will have the option with teacher approval to **take IB Psychology HL** during their 12<sup>th</sup> grade year. Students who choose this option will not test their junior year.

**IB PSYCHOLOGY HL (Higher Level)****WEIGHTED: 1.0**

Grade: 12

Credit: 1 unit

HL students will be assessed as SL students, as well as comprehension of qualitative research methodology, inferential statistical analysis, and a more in-depth approach than that required of SL students.

**PREREQUISITE:** Students must have taken or be enrolled in another IB course or have IB Coordinator approval

The course is designed from the syllabus provided by the International Baccalaureate office. IB Psychology is a rigorous and challenging course designed to allow college-bound juniors and seniors an intensive study of the field of psychology. The course is both reading and writing intensive and allows students to examine the fundamental influences of biological, cognitive, and sociocultural processes and factors on human behavior. Students will develop an understanding of alternative explanations of behavior and an awareness of how psychological research can be applied for the benefit of humans.

Students are required to replicate a published experiment and, HL students will be required to utilize a complex level of statistical analysis with heavy emphasis on methodology. **Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements.**

**IB THEORY OF KNOWLEDGE****WEIGHTED: 1.0**

Grade: 11-12 (second semester of grade 11 and first semester of grade 12)

Credit: 0.5 unit

**This is a required course for IB Diploma Candidates, and IB Coordinator approval is necessary.** Students will reflect critically on their academic experiences, explored through these areas of knowledge: mathematics, natural sciences, human sciences, history, the arts, and ethics. Students reflect upon their knowledge and experiences both inside and outside the classroom to gain an appreciation of the problems of knowledge, to evaluate the bases of knowledge and experience, and to develop a personal mode of thought based on critical examination of evidence and argument. Since TOK is committed to public dialogue of ideas, class discussion will be an integral part of the course. The IB assessment requires one major essay and a class exhibition. There is no assessment fee for the course, and course enrollment is typically limited to diploma candidates. **NOTE: This course meets as a zero hour.**

**IB PERSONAL AND PROFESSIONAL SKILLS****WEIGHTED: 1.0**

Grade: 11-12 (second semester of grade 11 and first semester of grade 12)

Credit: 0.25 unit

This is a required course for IB Career-related Program students, and IB/IBCP Coordinator approval is necessary. Students will develop skills in intercultural awareness, ethical thinking, and critical thinking. These skills will be applied to various contexts, including technologies, communities, environments, and professional settings. Students will develop personal qualities and values such as responsibility, perseverance, resilience, self-esteem, and honesty. There is no IB examination fee or specific IB assessment for this course, but throughout the course, students will be asked to demonstrate progress toward meeting the IBCP core requirements. Enrollment in this course is typically limited to IBCP students. **NOTE: This course meets as a zero hour.**

**INTERNATIONAL STUDIES ACADEMY****WEIGHTED: 0.666**

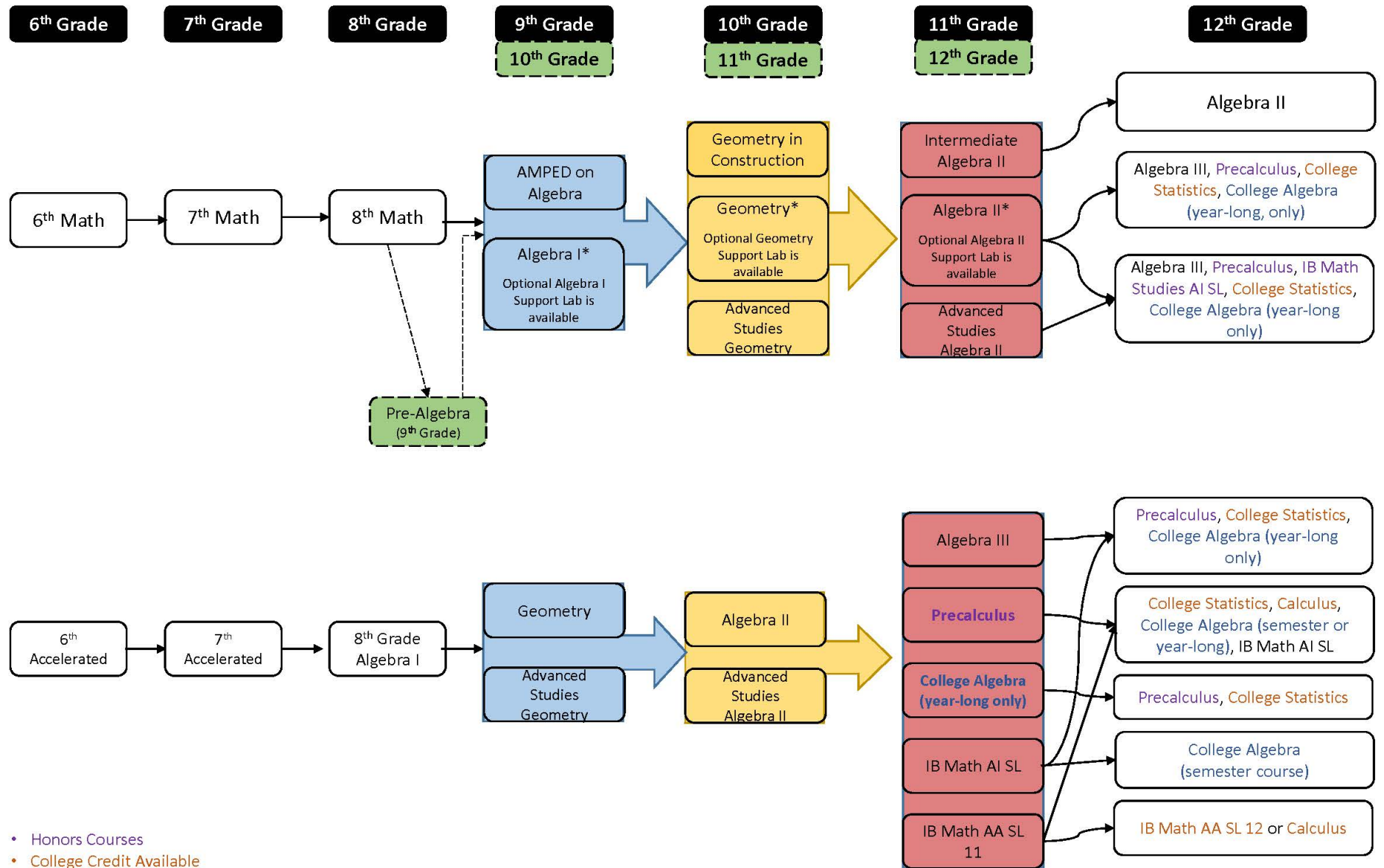
Grade: 11-12

Credit: 3 units

**For course description, see the Summit Technology Academy section of the Career and Educational Planning Guide, under the Off-Campus Career Ed Programs section.**

# MATHEMATICS

# Lee's Summit Secondary Math Flowchart 2024-25



## PRE-ALGEBRA

Grade: 9

Credit: 1 unit

**TEACHER RECOMMENDATION:** Recommendation based on 8th-grade Math performance, NWEA and MAP scores. This course is designed to provide 9th-grade students with a strong foundation in the necessary skills in order to be Algebra-ready. Students will study proportional, algebraic, geometric and statistical relationships. Students will enroll in Algebra I the following year.

## INTERMEDIATE ALGEBRA II

Grade: 11-12

Credit: 1 unit

**PREREQUISITE:** Teacher approval/Strongly recommend C- grade or better in Algebra/Geometry II or earned Algebra I and Geometry credit. This course is designed for students who need more instruction in Algebra topics. An increased level of instruction with teacher assistance will be provided. Topics include solving a variety of equations, inequalities and systems of equations in 2 and 3 variables; graphing a variety of functions and inequalities, polynomials, rationales, properties of exponents, radicals, complex numbers, probability and statistics. Daily homework will be assigned. Graphing calculators are strongly recommended.

## ALGEBRA I

Grade: 9-11

Credit: 1 unit

**PREREQUISITE:** 9th grade recommendation based on 8th-grade Math performance, NWEA and MAP scores. This is the first formalized course involving continuation of fundamental mathematics. Algebra encompasses abstract ideas; the use of patterns and generalizations; solving linear, quadratic, rational and simple radical equations; graphing linear, quadratic and exponential functions; simplifying radicals; and solving word problems. Work includes independent study. Daily homework will be assigned.

## ALGEBRA I LAB

Grade: 9

Credit: 1 elective unit

**TEACHER RECOMMENDATION:** Recommendation based on 8th-grade Math performance, NWEA and MAP scores.

**NOTE: Only available to students enrolled in Algebra I. Must be taken concurrently.**

This course is for students who are Algebra-ready, but may need extra time to process or extra support. The curriculum runs parallel to Algebra I. Pre-teaching of concepts, strengthening of prerequisite skills, and re-teaching are all components of the Algebra I lab.

## AMPED on Algebra

Grade: 9

Credit: 1 unit

**PREREQUISITE:** 9th grade Algebra I recommendation based on 8th-grade Math performance, NWEA and MAP scores. **NOTE:**

**Only available to students enrolled in AMPED on Business and MUST be taken concurrently.** Have you ever asked your math teacher, "When am I ever going to use this?", then this class is for you! Algebra 1 in Manufacturing Processes, Entrepreneurship, and Design (AMPED) will teach students all Missouri Algebra I standards through relevant, interactive, and fun career and technical education projects. Students will learn Algebra concepts through running a "for-profit" t-shirt and printing business and from many other hands-on and real-world activities. The development of 21st-century workplace skills such as attention to detail, critical thinking, communication, and teamwork are also emphasized. Regular attendance is recommended. This is a double-blocked class where students must be concurrently enrolled in AMPED on Business.

## GEOMETRY

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** Teacher approval/Strongly recommend C- grade or better in Algebra I

This course is a combination of plane and solid geometry. Topics include transformations, parallel and perpendicular lines and planes, coordinate geometry, circles, area and volume, right triangle trigonometry, functions and formal proof. Algebraic skills are reviewed as they are applied to problem solving in geometry. Creative thinking skills are explored as well as learning the decision-making processes used in higher level mathematics. Daily homework will be assigned.

## GEOMETRY LAB

Grade: 10

Credit: 1 elective unit Enrollment

Enrollment based on Teacher Recommendation. **NOTE: Only available to students enrolled in Geometry. Must be taken concurrently.** This course is for students who are Geometry-ready, but may need extra time to process or extra support to be successful. The curriculum runs parallel to Geometry. Pre-teaching of concepts, strengthening of prerequisite skills, and re-teaching are all components of the Geometry lab.

## GEOMETRY IN CONSTRUCTION (MATH)

Grade 9-11

Credit 1 unit

**PREREQUISITE:** Earned Algebra I credit. **NOTE: Only available to students enrolled in Geometry in Construction (E&IT) and MUST be taken concurrently.** Enrollment in AMPED on Algebra is NOT required. Do you prefer to learn in a hands-on, real-world environment? Then this class is for you! Students will learn Geometry concepts through building scale models, full-scale capstone projects, such as sheds, doghouses, and greenhouses, for district and community clients. Students will also participate in a service learning project for a local non-profit organization. This course will teach students all Missouri Geometry standards through relevant, interactive, and fun career and technical education projects. The development of 21st-century workplace skills such as attention to detail, critical thinking, communication, and teamwork are also emphasized. Regular attendance is recommended. This is a double-blocked class where students must be concurrently enrolled in Geometry in Construction (E&IT).

## ADVANCED STUDIES GEOMETRY

Grade: 9-10

**WEIGHTED: 0.5**

Credit: 1 unit

**PREREQUISITE:** Teacher approval/Strongly recommend B- grade or better in Algebra I (Advanced Studies Geometry is NOT a requirement for Advanced Studies Algebra II) This course is designed for a rigorous study of Geometric content and is a combination of plane and solid geometry. Topics include transformations, parallel and perpendicular lines, planes, coordinate geometry, area, volume, trigonometry, functions, and formal proof. Students are expected to have a strong background in algebra. Creative thinking is used in problem solving as well as the decision-making processes used in higher level mathematics. Projects are required and tests are cumulative. Daily homework will be assigned.

## ALGEBRA II

Grade: 10-12

**Credit: 1 unit**

**PREREQUISITE:** Teacher approval/Strongly recommend C- grade in Algebra I and Geometry  
This course is a continuation of Algebra I. Topics include functions and transformations, solving and graphing equations and inequalities with 1, 2, & 3 variables; exponents; logarithms; statistics; probability and other advanced topics. Daily homework will be assigned. Students should have an ability to work independently and are expected to continue in areas of advanced math (Precalculus, computer, and statistics). Graphing calculators are strongly recommended.

## ALGEBRA II LAB

Grade: 11-12

**Credit: 1 unit**

**PREREQUISITE:** Enrollment based on Teacher Recommendation. **NOTE: Only available to students enrolled in Algebra II. Must be taken concurrently.**

This course is for students who are Algebra II-ready, but may need extra time to process or extra support to be successful. The curriculum runs parallel to Algebra II. Pre-teaching of concepts, strengthening of prerequisite skills, and re-teaching are all components of the Algebra II lab.

## ADVANCED STUDIES ALGEBRA II

Grade: 10

**WEIGHTED: 0.5**

Credit: 1 unit

**PREREQUISITE:** Teacher approval/Strongly recommend B grade or higher in Algebra I & Geometry or Adv. Studies Geometry  
This course is designed for a rigorous study of Algebraic content. The student will study quadratic, polynomial and rational functions and their transformations, sequences and series, radicals, complex numbers, exponents, logarithms, probability, permutations and combinations, and simple statistics. Students should have an above average knowledge of Algebra I and Geometry. Daily homework will be assigned. Graphing calculators are strongly recommended.

## IB MATHEMATICS: APPLICATIONS AND INTERPRETATIONS (AI) SL

Grade: 11-12

**WEIGHTED: 1.0**

Credit: 1 unit

**PREREQUISITE:** AS Algebra II or Algebra II/Teacher approval/**Offered to those students pursuing the IB Diploma.**

**NOTE:** The IB DP Mathematics Applications and Interpretation course recognizes the increasing role that mathematics and technology play in a diverse range of fields in a data-rich work emphasizes the meaning for mathematics in context by focusing on topics that are often used as application or in mathematical modeling. All external assessments involve the use of technology. The internally assessed exploration allows students to develop independence in mathematical learning.

Students will study right triangle trigonometry, sinusoidal models, regression analysis, Chi Square test, t-test, normal distribution, normal curve, derivatives, anti-derivatives, and area enclosed by a curve. Daily homework will be assigned with the extensive usage of graphing calculations. Projects are required.

The course is weighted with 1.0 for students who complete the one-year program and sit for the IB exam; otherwise, weight will be set at 0.666. **Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements.**

## ALGEBRA III

Grade: 11-12

**Credit: 1 unit**

**PREREQUISITE:** Teacher approval/Passed both semesters of Algebra II and Geometry

This course is designed for the student who has struggled with Algebra II concepts and needs additional work with algebra to be prepared for College Algebra courses at the university/college level. The curriculum will focus on polynomials; graphical analysis of functions and relations; rational, exponential and logarithmic functions; matrices, sequences and series; and conics. Daily homework will be assigned. Graphing calculators will be helpful for some topics.

**PRECALCULUS**

Grade: 11-12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** Teacher approval/Strongly recommend C grade or better in Algebra II**NOTE: This is an honors course.**

This course of study includes transformation of functions, circular functions and their graphs, the Laws and properties associated with Trigonometric functions and vectors; complex numbers; power, exponential and logarithmic functions; sequences and series; polynomial functions; quadratic relations; and binomial distributions. Students are expected to have a strong algebraic and geometric background. Students should have an ability to work independently and are expected to continue in areas of advanced math. Daily homework will be assigned. Graphing calculators are used extensively in this course. Projects are required.

**COLLEGE ALGEBRA (two-semester course)**

Grade: 11- 12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** Teacher approval/Strongly recommend C- grade or better in Algebra II; completed application with parent approval**NOTE: This is an honors course.**

This course focuses on various types of equations and inequalities, functions and their inverses, theory of higher degree equations and their graphs, systems of equations, determinants, logarithms, exponentials, binomial theorem, sequences, series, complex numbers and applications. The curriculum is designed for university level. Daily homework will be assigned. Graphing calculators are used extensively in this course. Projects are required. **Course will be open only to students seeking dual credit. Dual credit information can be found under the Advanced Studies section.**

**COLLEGE ALGEBRA (one-semester course)**

Grade: 12/Teacher Recommendation

**WEIGHTED: 0.666**

Credit: 0.5 unit

**PREREQUISITE:** Teacher approval/Strongly recommend B grade or better in Precalculus; completed application with parent approval**NOTE: This is an honors course.**

This course focuses on various types of equations and inequalities, functions and their inverses, theory of higher degree equations and their graphs, systems of equations, determinants, logarithms, exponentials, binomial theorem, sequences, series, complex numbers and applications. The curriculum is designed for university level. Daily homework will be assigned. Graphing calculators are used extensively in this course. Projects are required. **Course will be open only to students seeking dual credit. Dual credit information can be found under the Advanced Studies section.**

**COLLEGE STATISTICS (one-semester course)**

Grade: 12

**WEIGHTED: 0.666**

Credit: 0.5 unit

**PREREQUISITE:** Teacher approval/Strongly recommend C- grade or better in Algebra II; completed application with parent approval required for dual credit**NOTE: This is an honors course.**

Course topics include data distributions, relationships between data sets, sampling and experimental designs, sampling distributions, inference for proportions and means, and testing hypotheses. The curriculum is designed for university level. Daily homework will be assigned. Graphing calculators are used extensively in this course. Projects are required. **This course may be offered for dual credit to eligible students. Dual credit information can be found under the Advanced Studies section.**

**CALCULUS**

Grade: 12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** Teacher approval/Strongly recommend C grade or higher in Precalculus or IB Math I**NOTE: This is an honors course.**

This course focuses on the fundamental concepts of differential and integral calculus. Topics include the study of limits; techniques and applications of derivatives; the anti-derivative and definite integral, with applications, as they relate to all functions. The curriculum is designed for university level. Students are expected to have excellent knowledge of algebra, geometry, and trigonometry. Daily homework will be assigned. Graphing calculators are used extensively in this course. Projects are required. Students will be prepared for the AP Calculus AB exam and will be given the opportunity to take this exam. Students completing the exam will earn a 1.0 weighted. **May be offered for dual credit for eligible students. Dual credit information can be found under the Advanced Studies section.**

**IB MATHEMATICS: ANALYSIS AND APPROACHES (AA) SL 11<sup>th</sup> grade**

Grade: 11

**WEIGHTED: 1.0**

Credit: 1 unit

**PREREQUISITE:** Teacher Approval/Offered only to those students in Advanced Studies Algebra II as 10th graders**IB MATHEMATICS: ANALYSIS AND APPROACHES (AA) SL 12<sup>th</sup> grade**

Grade: 12

**WEIGHTED: 1.0**

Credit: 1 unit

**PREREQUISITE:** Teacher approval/Offered only to students in IB Mathematics: AA SL as 11th graders**Two-year program:** Certificate will be issued at the end of the second year.

The IB DP mathematics: analysis and approaches course focuses on mathematical concepts in a comprehensive, coherent, and rigorous way where students are encouraged to apply their mathematical knowledge to solve abstract problems as well as those set in a variety of meaningful contexts. This course has a strong emphasis on the ability to construct, communicate, and justify correct mathematical arguments. The internally assessed exploration allows students to develop independence in mathematical learning.

In year one, students will study the statistical concepts of variance, regression, and normal and binomial distribution; absolute value, piecewise, power, exponential, and logarithmic functions; graphs of rational and trigonometric equations. In year two, students will study the fundamental concepts of calculus: limits, differentiation, anti-differentiation, graphs of functions, differential equations, transcendental functions, and areas of regions enclosed by two curves. Daily homework will be assigned with the extensive usage of graphing calculations. Projects are required.

The course is weighted with 1.0 for students who complete the two-year program and sit for the IB exam; otherwise, weight will be set at 0.666. **Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements.**

**ACT PREPARATION**

Grades: 10-12

**Credit: 0.5 Unit****PREREQUISITE:** None

Students will focus on both academic and test taking skills in preparation for the ACT exam. A focus will be placed on supporting students to reach the standard of college readiness for each of the four subject-area benchmarks. Diagnostic exams will be utilized to monitor progress and to help teachers and students develop plans of action.

# SCIENCE

# LSR7 Science Pathways



Middle School Science  
 7th Grade / AS 7th Grade  
 8th Grade / AS 8th Grade

9th  
Grade

*Introduction to Environmental Studies #*

*Biology I*  
 (meets Biology grad requirement)

*Advanced Studies Biology I*  
 (meets Biology grad requirement)

*Principles of Biomedicine (PLTW)*

10th  
Grade

*Science of Manufacturing*  
 (meets Chemistry grad requirement)

*Fundamentals of Chemistry and Physics*  
 (meets Chemistry grad requirement)

*Chemistry I*  
 (meets Chemistry grad requirement)

*Advanced Studies Chemistry*  
 (meets Chemistry grad requirement)

Physics

*Human Body Systems (PLTW)*

11th  
Grade

*Environmental Studies 1 & 2 @ PP*

*Astronomy (semester)*

*IB Environmental Systems and Societies*

*Biology II*

*IB Biology 11*

*Chemistry II*

*IB Chemistry 11*

*AP Physics 1*

*Human Anatomy & Physiology*

*Medical Interventions / Biomedical Innovations (PLTW) @STA*

*Allied Health @ STA*

12th  
Grade

*Science of Nature*

*Meteorology (semester)*

*IB Biology 12*

*IB Chemistry 12*

*AP Physics 2*

*Professional Nursing @ STA*

**BIOLOGY I**

Grade: 9

Credit: 1 unit

**PREREQUISITE:** None**NOTE:** Also offered through R-7 Online Academy

This course investigates the interconnections of life between organisms and their environments. Science and engineering practices engage students in the study of the interdependence of organisms, energy flow, the cell, heredity, how ecosystems affect species over time, and the relationships between structure and function. Biology is a course that teaches students how to apply basic concepts and principles of life science to better understand the environment.

**ADVANCED STUDIES BIOLOGY I**

Grade: 9

**WEIGHTED: 0.5**

Credit: 1 unit

**PREREQUISITE:** Teacher recommendation from 8<sup>th</sup> grade Science course.

This course is an accelerated, in-depth study of first year Biology. This course investigates the interconnections of life between organisms and their environments. Science and engineering practices engage students in the study of the interdependence of organisms, energy flow, the cell, heredity, how ecosystems affect species over time, and the relationships between structure and function. Biology is a course that teaches students how to apply basic concepts and principles of life science in order to better understand the environment. In addition, each semester students will complete the rigorous requirements focused around the application of scientific concepts.

**FUNDAMENTALS OF PHYSICS AND CHEMISTRY**

Grade: 10-12

Credit: 1 unit

**PREREQUISITE:** Completion of Biology I or Adv. Studies Biology I**NOTE:** Also offered through R-7 Online Academy

This course is required for all 10th grade students (unless enrolled in Chemistry I or Advanced Studies Chemistry I) and must be passed prior to enrollment in another science course. It is a laboratory-based course in which students explore fundamental chemistry, physics, and related earth and space science concepts and principles. Students enrolled in this course will develop problem solving skills and strategies while investigating the structure and properties of matter, chemical reactions, forces, motion, and the interactions between energy and matter. Working in a laboratory environment, students investigate the basics of chemistry and physics in solving real-world problems. After successful completion (C or better), student may enroll in Chemistry I as an elective their junior/senior year

**SCIENCE OF MANUFACTURING**

Grade: 10 - 12

Credit: 1 unit

**PREREQUISITE:** Completion of Biology I or Adv. Studies Biology I

This course is the study of basic manufacturing skills needed in the science manufacturing industry. The class addresses the core technical competencies required for skilled production occupations in all sectors of manufacturing. These competencies include 1) Math and measurement, 2) Manufacturing technology and spatial reasoning, 3) Basic chemistry, 4) Basic physics and 5) Business acumen and quality. It is recommended that the student completes Introduction to Engineering & Design prior to this course and Computer Integrated Manufacturing (STA) following this course. This course will prepare students to complete the MT1 Certification, a certification which qualifies students to work in some of the largest industries in the Midwest. The three courses together allow students to successfully find employment in highly skilled jobs in Science and Technology firms. After successful completion (C or better), student may enroll in Chemistry I as an elective their junior/senior year

**CHEMISTRY I**

Grade: 10-12

Credit: 1 unit

**PREREQUISITE:** Biology I or Adv. Studies Biology I. One unit of credit in Algebra I ; strongly recommend minimum C- each semester in both Biology or AS Biology I AND Algebra I**NOTE:** Also offered through R-7 Online Academy

This class is the study of the composition, structure, and properties of matter and the changes it undergoes. Topics include atomic structure, scientific measurement, periodicity, mass-mole relations, chemical reactions, gas laws, acid-base, and fundamentals of organic chemistry. The student must understand algebra to solve word problems and to use formulas and exponential notation; problem solving in a practical context.

**ADVANCED STUDIES CHEMISTRY I**

Grade: 10

**WEIGHTED: 0.5**

Credit: 1 unit

**PREREQUISITE:** Science teacher approval, Biology I or Adv. Studies Biology I and one unit of Algebra I or higher; strongly recommend minimum B- average in both Biology or AS Biology I AND Algebra I

This course is an accelerated, in-depth study of first year chemistry. Topics include atomic structure, scientific measurement, periodicity, mass-mole relationships, chemical reactions, gas laws, acid-base and pH studies, and fundamentals of organic chemistry with selected physical science topics and applications. Students will develop competence in the laboratory and demonstrate the relationships between theory and practical applications. This course is designed for the student with a science focus, intending to enroll in advanced science courses in Biology, Chemistry, or Physics. It is a prerequisite for IB Biology, IB Chemistry and AP Physics.

**Biology I or Advanced Studies Biology I and either Fundamentals of Physics and Chemistry, Advanced Studies Chemistry I, or Chemistry I MUST BE PASSED to enroll in any of the following electives.**

**ONE ADDITIONAL SCIENCE COURSE IS REQUIRED FROM THE FOLLOWING ELECTIVES FOR GRADUATION REQUIREMENTS**

<b>SCIENCE ELECTIVES</b>
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**Life Sciences****BIOLOGY II**

Grade: 11-12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** 2 credits of required science; Biology I/AS Biology I AND Chem 1/AS Chem /FPC; strongly recommend B- above or average

This course provides a more detailed look at topics encountered in Biology I, particularly providing an in-depth study of microbiology, genetics, taxonomy and classification, and animal anatomy. The course requires good note taking skills, extensive lab work involving microscopes and dissections, and unit exams. A research project is required each semester.

**HUMAN ANATOMY/PHYSIOLOGY\*\***

Grade: 11-12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** 1 unit of credit required in Biology I or Adv. Studies Biology I and 1 unit of credit required in Chemistry/Adv. Studies Chemistry I; may be taken concurrently; strongly recommend B- or above average in science coursework.

**NOTE:** Also offered through R-7 Online Academy

This course is designed to prepare students to pursue post-secondary education and careers in the biomedical sciences. Students will explore each system of the human body with a detailed focus on anatomy and physiology. Models and diagrams will be used to learn components of each system. Laboratory work will include a cat dissection and extensive organ dissections. Medical terminology will be emphasized in each system and application of knowledge will be necessary to solve difficult problems related to the human body. May be offered for dual credit for eligible students. Dual credit information can be found under the Advanced Studies section.

**IB BIOLOGY HL 11th grade**

Grade: 11

**WEIGHTED: 1.0**

Credit: 1 unit

**PREREQUISITE:** B- average in Biology I/Adv. Studies Biology I and Chemistry I/Adv. Studies Chemistry I with teacher recommendation

Coursework builds upon knowledge gained in Biology and Chemistry studies. Students follow the syllabus provided by the International Baccalaureate Organization. The course requires commitment to a rigorous two-year biology program. The student is required to complete an Internal Assessment, showing competence in using scientific methodology for problem solving that will be submitted to the IB examiner. A mandatory Group 4 project will be completed during the two-year period. **Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements. May be offered for dual credit for eligible students. Dual credit information can also be found under the Advanced Studies section.**

**IB BIOLOGY HL 12th grade**

Grade: 12

**WEIGHTED: 1.0**

Credit: 1 unit

**PREREQUISITE:** IB Biology 11th

Two-year program: The student will receive a unit of credit for each year. Coursework builds upon knowledge gained in Biology and Chemistry studies. Students follow the syllabus provided by the International Baccalaureate Organization. The course requires commitment to a rigorous two-year biology program. The student is required to complete an Internal Assessment, showing competence in using scientific methodology for problem solving that will be submitted to the IB examiner. A mandatory Group 4 project will be completed during the two-year period. **Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements. May be offered for dual credit for eligible students. Dual credit information can also be found under the Advanced Studies section.**

**PROFESSIONAL NURSING**

Grade: 12

**WEIGHTED: 0.666**

Credit: 3 units

For course description, see Summit Technology Academy section of the Career and Educational Planning Guide, under the Off-Campus Career Ed Programs section.

**ALLIED HEALTH ACADEMY**

Grade: 11-12

**WEIGHTED: 0.666**

Credits: 3 units

For course description, see Summit Technology Academy section of the Career and Educational Planning Guide, under the Off-

Campus Career Ed Programs section.

**Physical Sciences****CHEMISTRY II**

Grade: 11-12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** 2 credits of required science; Biology I/AS Biology I AND Chem 1/AS Chem I/FPC; strongly recommended minimum B average.

This class provides a more detailed look at topics encountered in first-year chemistry as well as additional topics in thermochemistry; reaction rates, chemical thermodynamics and equilibrium are included. This course is for academically aggressive and highly motivated chemistry students. Higher algebra skills are used. Written laboratory reports are required and a research project is required each semester.

**IB CHEMISTRY HL 11th grade**

Grade: 11

**WEIGHTED: 1.0**

Credit: 1 unit

**PREREQUISITE:** B- average in Biology I/Adv. Studies Biology I and Chemistry I/Adv. Studies Chemistry I with teacher recommendation

Coursework builds upon knowledge gained in Biology and Chemistry studies. Students follow the syllabus provided by the International Baccalaureate Organization. The course requires commitment to a rigorous two-year chemistry program. The student is required to complete an Internal Assessment, showing competence in using scientific methodology for problem solving that will be submitted to the IB examiner. A mandatory Group 4 project will be completed during the two-year period.

**Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements. May be offered for dual credit for eligible students. Dual credit information can also be found under the Advanced Studies section.**

**IB CHEMISTRY HL 12th grade**

Grade: 12

**WEIGHTED: 1.0**

Credit: 1 unit

**PREREQUISITE:** IB Chemistry I

Two-year program: Certificate will be issued at the end of the second year. Coursework builds upon knowledge gained in Biology and Chemistry studies. Students follow the syllabus provided by the International Baccalaureate Organization. The course requires commitment to a rigorous two-year chemistry program. The student is required to complete an Internal Assessment, showing competence in using scientific methodology for problem solving that will be submitted to the IB examiner. A mandatory Group 4 project will be completed during the two-year period. Coursework is equivalent to one full year of university inorganic chemistry. A minimum of 25% of instructional time is spent in the laboratory. The student is expected to reason from and apply chemical principles, appropriately choose and manipulate numerous mathematical formulas, demonstrate competence in the laboratory, show understanding of the relationships between theory and practical laboratory applications, and do some planning of laboratory procedures in entirety. **Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements. May be offered for dual credit for eligible students. Dual credit information can also be found under the Advanced Studies section.**

**PHYSICS**

Grades: 10-12

**WEIGHTED: 0.5**

Credit: 1 unit

**PREREQUISITE:** Completion of Algebra I (B- or better)

Students in Physics focus on traditional concepts in physics, and are encouraged to explore new discoveries in this field of science. The course includes an overview of science and engineering practices, which will lead students toward a clearer understanding of motion, energy, electricity, magnetism, and the laws that govern the physical universe, including our own Earth. As students refine and expand their understanding of physics, they will apply their knowledge in experiments that require them to ask questions and create hypotheses. Throughout the course, students solve problems, reason abstractly, and learn to think critically.

**AP PHYSICS I**

Grades: 11-12

**WEIGHTED: 1.0 (0.666 non AP Test takers)**

Credit: 1 unit

**PREREQUISITE:** Concurrent enrollment in Algebra II

AP Physics 1 is a full-year course that is the equivalent of a first-semester introductory college course in algebra-based physics. Students cultivate their understanding of Physics through inquiry-based investigations as they explore these topics: kinematics; dynamics; circular motion and gravitation; energy; momentum; simple harmonic motion; torque and rotational motion. College credit is possible via the AP Physics 1 examination. College credit is possible via the AP Physics 1 examination. The policies for acceptance of AP Physics Exam Credit vary from college to college.

**AP PHYSICS II**

Grades: 12

**WEIGHTED: 1.0 (0.666 non AP Test takers)**

Credit: 1 unit

**PREREQUISITE:** AP Physics 1

AP Physics 2 is a full-year course that is the equivalent of a second-semester introductory college course in algebra-based physics. Students cultivate their understanding of Physics through inquiry-based investigations as they explore these topics: fluids; thermodynamics; electrical force, field, and potential; electric circuits; magnetism and electromagnetic induction; geometric and physical optics; and quantum, atomic, and nuclear physics. College credit is possible via the AP Physics 2 examination. The policies for acceptance of AP Physics Exam credit vary from college to college.

**Earth Sciences****SCIENCE OF NATURE**

Grade: 11-12

Credit: 1 unit

**PREREQUISITE:** 2 credits of required science; Biology I/AS Biology I AND Chem 1/AS Chem I/FPC**NOTE:** Also offered through R-7 Online Academy

This course incorporates the many different aspects of the world around us. Units include the science of survival, natural disasters, ecology, flow of energy through ecosystems, endangered plants and animals (world wide as well as Missouri species), identification of Missouri plants and animals, national parks, landscape design and greenhouse work. Students will apply practical knowledge to create several different products: disease pamphlet, endangered species newsletter, biome travel guide, landscape development and design, as well as collection and identification of Missouri plants. Greenhouse work will be expected. If grounds permit, students may help design and implement landscaping projects on school grounds.

**METEOROLOGY**

Grade: 11-12

Credit: 0.5 unit

**PREREQUISITE:** 2 credits of required science; Biology I/AS Biology I AND Chem 1/AS Chem I/FPC**NOTE:** Also offered through R-7 Online Academy

Meteorology will be a research/project/activity-based course, which requires attention to detail, good organization and self-motivating skills. Students will be expected to write, make presentations and communicate information about the study of weather and the atmosphere. Meteorology begins with a look at the atmosphere followed by a discussion of wind, clouds, air masses and sometimes catastrophic weather events. Many resource aids are obtained from outside sources. By the end of the Meteorology course, students will understand and use the atmospheric concepts and weather to predict and forecast approaching conditions. Students will download data from weather satellites and from the Internet to observe the patterns and real time data of meteorology. Students will do research throughout this course to advance their understanding of meteorology. Students will distinguish between local, regional, national, hemispheric, and global weather and climatic systems and conditions.

**ASTRONOMY**

Grade: 11-12

Credit: 0.5 unit

**PREREQUISITE:** 2 credits of required science; Biology I/AS Biology I AND Chem 1/AS Chem I/FPC**NOTE:** Also offered through R-7 Online Academy

Astronomy is a research/project/activity-based course, which requires attention to detail, good organization and self-motivating skills. Students will be expected to research, write, make presentations and communicate what they have learned. There will be several readings that are highly technical. Night viewing labs may be required as a part of the course. Astronomy is designed to give the students a basic understanding of the universe around them. Students will compare and contrast the planets and their characteristics. A study of the natural satellites and their characteristics will also be a part of the curriculum. A general introduction to stars will be presented with a detailed study of our own star, the sun. Students taking this course should have a high level of interest in the universe and atmospheric conditions around them.

## **IB ENVIRONMENTAL SYSTEMS AND SOCIETIES SL**

Grade: 11-12

**WEIGHTED: 1.0**

Credit: 1 unit

**PREREQUISITE:** 2 credits of required science; Biology I/AS Biology I AND Chem 1/AS Chem I/FPC; strongly recommend B- or above average.

One-year program: This course will provide students with a coherent perspective of the relationship between environmental systems and societies. Understanding this relationship allows students to adopt an informed personal response to the wide range of pressing environmental issues. Students' attention can be constantly drawn to their own relationship with their environment and the significance of choices and decisions that they make. It is intended that students develop a sound understanding of the interrelationships between environmental systems and societies beyond the purely journalistic appreciation of environmental issues. This course allows students to evaluate the scientific, ethical and socio-political aspects of issues relating to the environment. **Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements.**

## **INTRODUCTION TO ENVIRONMENTAL STUDIES (ONLINE ONLY)**

Grade: 9 - 11

Credit: .5 unit

**PREREQUISITE:** None

**NOTE:** Offered through R-7 Online Academy

**This course will be online only with a hybrid hands-on lab portion. The course will require students to provide their own transportation to 4-5 before or after school lab experiences on-site at the Paradise Park Campus Wildlife Center.** Students will explore various aspects of agriculture and environmental studies including plants, animals, natural resources, and agricultural mechanics. Students will be introduced to potential career pathways and post-secondary opportunities in these fields. Through practical applications and projects, students will develop employability skills such as problem-solving, research, data analysis, teamwork, and personal responsibility. Students will investigate and experiment in areas like soil science, water systems, animal science, plant science, energy, technology, lab skills, and research methods. An important co-curricular component of the course is participation in FFA and FFA activities, which are also in-person.

## **ENVIRONMENTAL STUDIES @ Paradise Park (AM-ONLY)**

Grade: 11-12

**WEIGHTED: 0.666**

Credits: 3 units **PREREQUISITE:**

GPA: 2.5 cumulative or better; Attendance: 90% or better; Math: Algebra I, B- or better; Science: Biology I & Chemistry I, B- or better; Reading/Writing: 10th grade level; home internet access is required. Recommended: Algebra II, B- or better.

**May be offered for dual credit for eligible students. Dual credit information can also be found under the Advanced Studies section.** *An important co-curricular component of the course is participation in FFA and FFA activities, which are also in-person.*

**For course description, see Summit Technology Academy section of the Career and Educational Planning Guide, under the Off-Campus Career Ed Programs section.**

## **PLTW Biomedical Pathway**

### **PRINCIPLES OF THE BIOMEDICAL SCIENCES (PBS)**

Grade: 9-12

**WEIGHTED: 0.5**

Credit: 1 unit

**PREREQUISITE:** None

Introductory course in the Project Lead the Way Biomedical Sciences Program. Student work involves the study of human medicine, research processes and an introduction to bioinformatics. Students investigate the human body systems and various health conditions including heart disease, hypercholesterolemia, diabetes, sickle-cell disease, and infectious diseases. A theme throughout the course is to determine the factors that led to the death of a fictitious person. Key biological concepts taught include: homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease. Engineering principles include: the design process, feedback loops, fluid dynamics, and the relationship of structure to function. May be offered for dual credit for eligible students. Dual credit information can be found under the Advanced Studies section.

### **HUMAN BODY SYSTEMS (HBS)**

Grade: 10-12 (Grade 10 upon successful completion of PBS & teacher recommendation)

**WEIGHTED: 0.666**

Credit: 1 unit **PREREQUISITE:** 1

unit of credit required in Biology I or Adv. Studies Biology I and taking concurrently with Chemistry I/Adv. Studies Chemistry I; strongly recommend B- or above average in science coursework.

This course follows the curriculum set by the Project Lead the Way Biomedical Sciences Program. It serves as a foundation for STEM-centered or specialized academies. The course is designed to prepare students to pursue a post-secondary education and careers in the biomedical sciences. Students that take this course are encouraged to continue the PLTW Biomedical Path offered at Summit Technology Academy and consider the IBCP certificate. Students will explore human body systems by function through inquiry-based learning projects including student-led research, presentations, and posters.

May be offered for dual credit for eligible students. Dual credit information can be found under the Advanced Studies section.

### **MEDICAL INTERVENTIONS (MI)/BIOMEDICAL INNOVATION (BI) PLTW**

Grade: 11-12

**WEIGHTED: 0.666**

Credit: 3 units

**For course description, see Summit Technology Academy section of the Career and Educational Planning Guide, under the Off-Campus Career Ed Programs section.**

## **Miscellaneous Science Electives**

### **ACT PREPARATION**

Grades: 10-12 Credit: 0.5 Unit **PREREQUISITE:** None

Students will focus on both academic and test taking skills in preparation for the ACT exam. A focus will be placed on supporting students to reach the standard of college readiness for each of the four subject-area benchmarks. Diagnostic exams will be utilized to monitor progress and to help teachers and students develop plans of action.

# **FINE ARTS**

# **ART**

## High School Courses

### Middle School Courses

6th grade  
Art  
quarter

7th grade  
Art  
semester

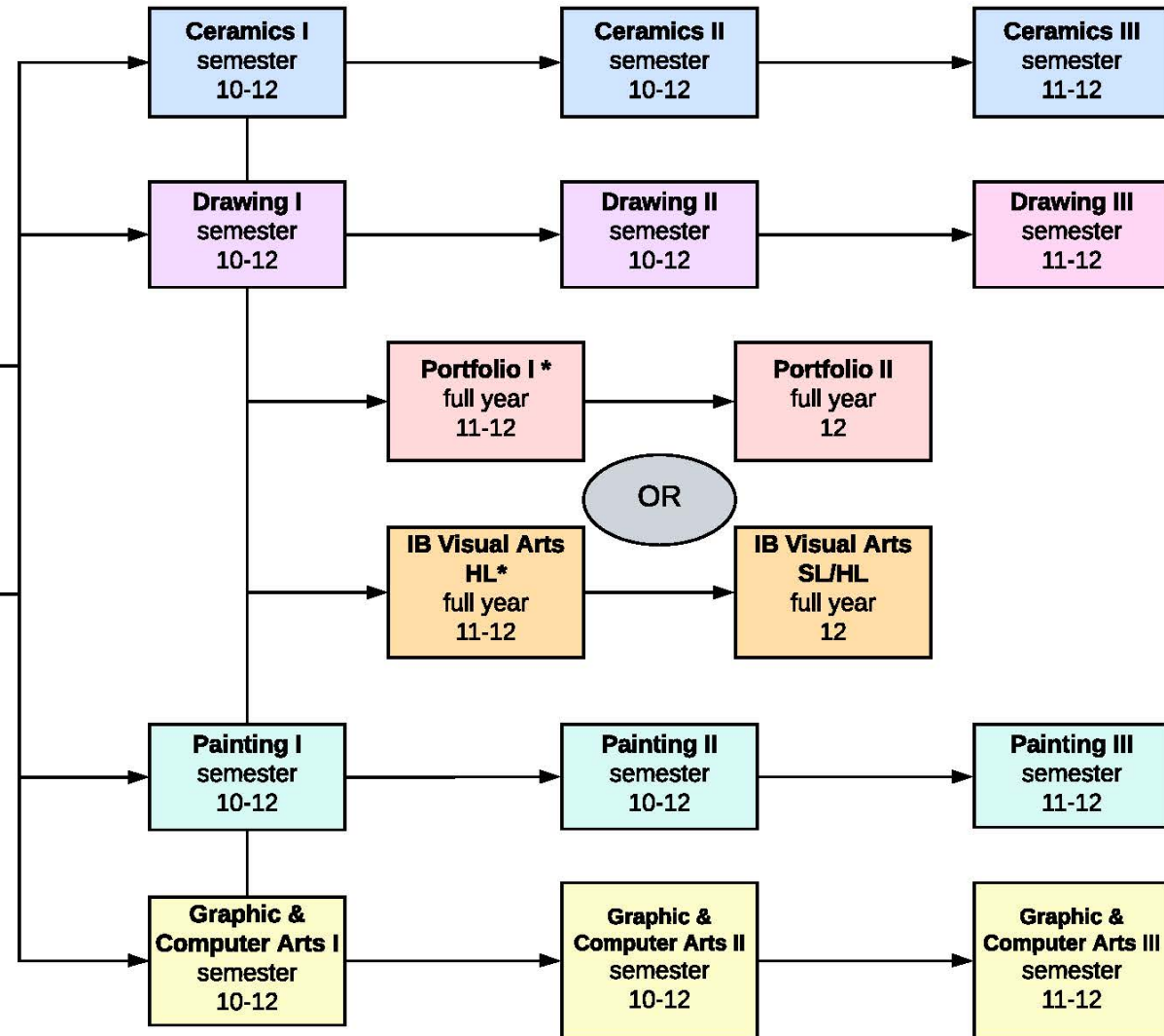
8th grade  
Art I  
semester

8th grade  
Art II  
2nd semester  
(Follows 8th  
grade Art I.)

**Foundations of  
Drawing  
and  
Foundations of  
Design**  
Semester each  
9-12

**Visual Arts**  
(Recommendation  
required from 8th Art  
I or 8th Art II)  
Full year  
9-10

### Lee's Summit School District Grades 6-12 Sequence of art courses



After completing the art prerequisites of BOTH Foundations of Drawing AND Foundations of Design or Visual Arts, students can take any of the one (I) level art classes: Drawing I, Painting I, Ceramics I, Graphic and Computer Arts I.

\*It is recommended that both Drawing I and Painting I be completed before enrolling in either Portfolio I or IB Visual Arts.

Students may need to provide supplies or a small fee for individual and/or class projects for any or all of the following classes.

### **FOUNDATIONS OF DRAWING**

Grade: 9-12

Credit: 0.5 unit

**PREREQUISITE:** None

This course is designed for the beginning drawing student. Students will learn to see and draw accurately from direct observation. Students will study contour line, shading, proportion and perspective. Emphasis will be placed on accurately drawing basic forms from different angles and eye levels. Foundations of Drawing along with Foundations of Design is a prerequisite for Painting I, Drawing I, Graphic and Computer Arts I and Ceramics I courses.

### **FOUNDATIONS OF DESIGN**

Grades: 9-12

Credit: 0.5 unit

**PREREQUISITE:** None

This beginning level studio course is designed to develop the student's personal approach to problem solving while exploring basic principles of design. A variety of media will be used to create two and three-dimensional art. Foundations of Design along with Foundations of Drawing is a prerequisite for Painting I, Drawing I, Graphic and Computer Arts I and Ceramics I courses.

### **VISUAL ARTS**

Grades: 9-10

Credit: 1 unit

**PREREQUISITE:** Teacher recommendation from 8th Grade Art I or II (middle school) or teacher approval

Visual Arts is a year-long studio class that replaces both Foundations of Drawing and Foundations of Design for advanced incoming art students recommended by their middle school art teacher. Art concepts are taught through hands-on projects, discussions, and activities. Visual Arts students should have an interest in creative art making, a desire to grow as an artist, the ability to work independently and meet deadlines. This course is a prerequisite for Painting I, Drawing I, Ceramics I, and Graphic & Computers Arts I.

### **PAINTING I**

Grade: 10-12

Credit: 0.5 unit

**PREREQUISITE:** B- in BOTH Foundations of Drawing and Foundations of Design or Visual Arts or teacher approval

This is an introductory course where students learn basic painting techniques in watercolor and acrylic mediums. Color theory and art history are taught to develop creativity in various subject matter. A solid drawing foundation is important for success in this class. Painting I is strongly recommended for students who plan to take Portfolio I or IB Visual Arts.

### **PAINTING II**

Grades: 10-12

Credit: 0.5 unit

**PREREQUISITE:** B- in Painting I or teacher approval

Painting II students continue to use watercolor and acrylic to explore various subject matter, such as still life, landscapes, and portraits. Students will engage with 20<sup>th</sup> Century artists and art movements by applying multiple transparent and opaque painting techniques on various surfaces. Color theory and mixing are emphasized. The Advanced Painting Student is expected to develop a higher level of engagement and investigation of artistic processes.

### **PAINTING III**

Grades 11-12

Credit: 0.5 unit

**PREREQUISITE:** B- in Painting II or teacher approval

Students will build on previous painting skills and explore more advanced color theories and concepts using creativity and personal expression. This course emphasizes advanced art production through idea development, artist research, presentation, and critique. The Advanced Painting Student is expected to continue to further develop a higher level of engagement and investigation of artistic processes both inside and outside of the classroom studio.

### **DRAWING I**

Grades: 10-12

Credit: 0.5 unit

**PREREQUISITE:** B- in BOTH Foundations of Drawing and Foundations of Design or Visual Arts or teacher approval

This course emphasizes the elements of art and principles of design as they apply to drawing. Students will work on advancing technical drawing skills and media exploration with the majority of subject matter being from life. Drawing I is strongly recommended for students who plan to take upper level art courses including Portfolio and IB Visual Arts.

**DRAWING II**

Grades: 10-12

Credit: 0.5 unit

**PREREQUISITE:** B- in Drawing I or teacher approval

Students will explore a variety of media while improving skills in composition development, creating the illusion of depth, showing correct proportion and scale, and creating dimension through value. Students will utilize a research workbook/sketchbook to experiment through the creative process and research art history. A strong drawing foundation is essential for success in this course.

**DRAWING III**

Grades 11-12

Credit: 0.5 unit

**PREREQUISITE:** B- in Drawing II or teacher approval.

Students will build on previous drawing skills, emphasizing advanced art production through conceptual idea development, artist research, presentation, and critique. Art history will be an integral part of the class as students research and experiment through the creative process. The Advanced Drawing Student is expected to develop a higher level of engagement and investigation of artistic processes both inside and outside of the classroom studio.

**CERAMICS I**

Grades: 10-12

Credit: 0.5 unit

**PREREQUISITE:** B- in BOTH Foundations of Drawing and Foundations of Design or Visual Arts or teacher approval. Students will use hand-building clay construction methods of pinch, coil and slab to create functional and decorative artwork. Wheel throwing will be introduced. Students will learn clay vocabulary and various methods of decoration. An emphasis is placed on craftsmanship and creativity. This class may require a small class fee.

**CERAMICS II**

Grades: 10-12

Credit: 0.5 unit

**PREREQUISITE:** B- in Ceramics I or teacher approval

In Ceramics II there is a continued emphasis on design and craftsmanship while focussing on creative problem solving. Students will use advanced techniques in handbuilding, wheel throwing and mixed media to create both functional and decorative artwork. This class may require a small class fee.

**CERAMICS III**

Grades 11-12

Credit: 0.5 unit

**PREREQUISITE:** B- in Ceramics II or teacher approval

Ceramics III is a continuation of Ceramics II. Students will develop more complex wheel thrown and/or hand-built pieces. Emphasis is on independent research, project development and a thematic approach to their portfolio. This class may require a small class fee.

**GRAPHIC and COMPUTER ARTS I**

Grades: 10-12

Credit: 0.5 unit

**PREREQUISITE:** B- in BOTH Foundations of Drawing and Foundations of Design or Visual Arts or teacher approval. This course is an exploration of digital design skills using the elements of art and principles of design. Students will create artwork using multiple digital platforms.

**GRAPHIC and COMPUTER ARTS II**

Grades 10-12

Credit: 0.5 unit

**PREREQUISITE:** B- in Graphic and Computer Arts I or teacher approval.

This course is a continuation of visual problem solving and creating artwork using multiple digital platforms. Students will build upon artist exploration and foundational design skills learned in Graphic and Computer Arts I.

**GRAPHIC and COMPUTER ARTS III**

Grades 11-12

Credit: 0.5 unit

**PREREQUISITE:** B- in Graphic and Computer Arts II or teacher approval.

This course is a continuation of visual problem solving and creating artwork using multiple digital platforms. Emphasis is on artist exploration, independent research and project development.

**PORTFOLIO I**

Grade 11 and/or 12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** Must have teacher approval; at least a B- in Painting I and Drawing I.

This course is designed for students planning a career in the visual arts. Students research artists and their cultures while developing concepts for individual studio projects. Students will curate a digital portfolio to be utilized when applying for post-secondary opportunities. **May be taken for dual credit for eligible students through MCC. Dual credit information can be found under the Advanced Studies section.**

**PORTFOLIO II**

Grade 12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** Must have teacher approval; B- in Portfolio I.

This course is designed for students planning a career in the visual arts. Students will expand on the skills and concepts learned in Portfolio I to strengthen their portfolio. Students will explore media, develop an understanding of the artistic process while gaining a better appreciation for how art impacts our global culture and society. Students will curate a digital portfolio to be utilized when applying for post-secondary opportunities. **May be taken for dual credit for eligible students through MCC. Dual credit information can be found under the Advanced Studies section.**

**IB VISUAL ARTS SL or HL**

Grade: 11-12

**WEIGHTED: 1.0**

Credit: 1 unit

**PREREQUISITE:** B- in Drawing I, Painting I AND Portfolio review with teacher approval

The IB Visual Arts course encourages students to challenge their own creative and cultural expectations and boundaries. This studio-based course develops analytical and independent thinking skills while cultivating technical proficiency. Students will investigate and apply visual arts methods from different perspectives and in different contexts. Students will engage in, experiment with and critically reflect upon a wide range of contemporary practices and media. Students are responsible for IB specific assignments; including comparative study, process portfolio and exhibition. The course is designed for the self-directed, upper level student who wants to go on to study visual arts in higher education or a career in the visual arts.

IB Visual Art can be taken as a 1-year Standard Level (SL) course or as a 2-year Higher Level (HL) course.

HL = 2 year course taken BOTH junior and senior year and may be taken for dual credit BOTH YEARS through MCC for eligible students

SL = 1 year course, **only available to seniors** and may be taken for dual credit through MCC for eligible students.

**Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements. Dual credit information can also be found under the Advanced Studies section.**

# **FINE ARTS THEATRE**

## STAGECRAFT

Grade: 10-12

Credit: 0.5 unit

**PREREQUISITE:** Teacher approval

The students will learn the technical aspects of theatre arts and entertainment industry by building sets for plays, working with lighting and sound systems for plays and other programs in the Performing Arts Center. Students will have the opportunity to also do some design work for scenery, lighting and sound. The class has a light homework load with most activities taking place during class time. **Class may be taken for elective credit, or if it is combined with Advanced Stagecraft it can count as practical art credit.**

## ADVANCED STAGECRAFT

Grade: 10-12

Credit: 0.5 unit

**PREREQUISITE:** Teacher approval; must have completed Stagecraft

This course provides advanced training for students interested in technical theatre. In-depth instruction is provided for current methodologies or new technologies that are changing the art of technical theatre. Students will also study the history and development of stagecraft; advanced stagecraft students will be trained for leadership positions within the technical theater. **Class may be taken for elective credit, or if it is combined with Advanced Stagecraft it can count as practical art credit.**

## THEATRE ARTS I

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** None

This is a general survey course that will give the students a chance to study the full range of the theatre arts. Topics/skills to be taught will include: acting and improvisation, theatre literature, theatre history, and stagecraft. This class has a moderate homework load that consists mostly of preparing and practicing for performances in class. **Class may be taken for elective credit or fine arts credit.**

## THEATRE ARTS II

Grade: 10-12

Credit: 1 unit

**PREREQUISITE:** Teacher approval; completion of Theatre Arts I with a B- or better

This course allows the students to study the areas of acting, directing and playwriting in more depth than the Theatre Arts I course. The students will participate in major acting and directing projects and do in-depth study on plays and playwrights. The class has a moderate homework load that consists mostly of preparing and practicing for performances in class. **Class may be taken for elective credit.**

## REPERTORY THEATRE

Grade: 11-12

Credit: 1 unit

**PREREQUISITE:** Teacher approval; completion of Theatre Arts II with a B- or better

This course offers students an opportunity to create fully realized theatre productions using skills previously learned in Theatre I & II. Students will also be able to explore an area of specialization and experience a collaborative process as they create productions. **Class may be taken for elective credit.**

## COMPETITIVE DRAMATICS

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** Teacher approval

This course provides instruction on oral interpretation of drama, prose, and poetry. Students will develop skills in characterization, roles, interpretation, blocking and acting, as well as dramatic reading. Requirements for the course include after school practice sessions and weekend tournament competitions. Students will also be required to assist with hosting an invitational tournament. **Class may be taken for elective credit or fine arts credit.**

## IB THEATRE ARTS SL or HL

Grade: 11-12

**WEIGHTED: 1.0**

Credit: 1 unit

**PREREQUISITE:** Theatre Arts I and/or permission of the instructor. This course is offered for one (SL) or two (HL) year(s).

IB Theatre Arts is an advanced level course for juniors and seniors. It is taught within the Theatre Arts II course. The student will participate in all lessons in Theatre Arts II (see that course description) as well as individual projects in theatre production, literature, and study of special topics. Writing skills will be utilized extensively in this course, as well as performance skills. **Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements.**

# **FINE ARTS MUSIC**

## **PERCUSSION**

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** Ability grouped by department through audition:

NOTE: This group combines with Symphonic Band and Concert Band to form marching band during 1st quarter of school year. Marching band fees are required. This class is designed to further develop instrumental music skills in tone production, rhythm study, music notation, dynamics and articulation. A more in-depth study of musical style and expression will be explored. Performances are a major part of this course. The marching band appears at all home football games and competes in marching competitions. Attendance is required at all rehearsals and performances. The purchase of concert attire is required for this class. **A district activity fee of \$50.00 applies to this course.**

## **BAND 1: WIND ENSEMBLE (LSW, LSN/ SYMPHONIC BAND LSHS)**

Grade: 9-12

Credit: 1 unit

**Prerequisite:** Ability grouped through a spring audition process

This class is designed around highly advanced musical content and requires quality musicianship and self-discipline. The course refines skills in tone production, rhythm study, music notation, dynamics, articulation, musical style and expression. Performances are a major part of this course. The members of this band combine with the other Band courses to make up the Marching Band. The marching band appears at all home football games and competes in marching competitions. Select wind players also perform with Symphony Orchestra. Attendance is required at all rehearsals and performances. Formal concert attire purchase or rental is required for this class. A district activity fee of \$50 applies to this course.

## **BAND 2: SYMPHONIC BAND (LSW, LSN/ CONCERT BAND (LSHS)**

Grade: 9-12

Credit: 1 unit

**Prerequisite:** Ability grouped through a spring audition process

Note: This class is designed around intermediate musical content and requires skills in tone production, rhythm study, music notation, dynamics, and articulation. A more in-depth study of musical style and expression will be explored. Performances are a major part of this course. This class combines with other Band courses to make up the marching band. The Marching Band appears at all home football games and competes in marching competitions. Attendance is required at all rehearsals and performances. Formal concert attire purchase or rental is required for this class. A district activity fee of \$50 applies to this course.

## **BAND 3: CONCERT BAND (LSW, LSN/ CAMPUS BAND LSHS)**

Grade: 9-12

Credit: 1 unit

**Prerequisite:** Ability grouped through a spring audition process

Note: This class is designed to continue the development of skills in tone production, rhythm study, music notation, dynamics, and articulation. The study of various musical styles will be explored. Performances are a major part of this course. This class combines with other Band courses to make up the marching band. The Marching Band appears at all home football games and competes in marching competitions. Attendance is required at all rehearsals and performances. Formal concert attire purchase or rental is required for this class. A district activity fee of \$50 applies to this course.

## **CONCERT ORCHESTRA**

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** Middle school strings and ability grouped by department:

This class is designed as a separate performing group. This class will concentrate on the development of instrumental skills. Some individual performance will be done. The performance schedule is limited but participation is required in all performances. Formal dress purchase or tuxedo rental is required for this class. **A district activity fee of \$50.00 applies to this course.**

## **PHILHARMONIC ORCHESTRA**

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** Ability grouped by department through audition:

This class is designed to concentrate on the continued development of instrumental skills. This class is designed to play moderate to moderately difficult music that requires quality musicianship and self discipline. Performances will be a major part of this course. Attendance is required at all rehearsals and performances. Formal dress purchase or tuxedo rental is required for this class. **A district activity fee of \$50.00 applies to this course.**

## **SYMPHONY ORCHESTRA**

### **Strings students only**

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** Ability grouped by department through audition:

### **Wind and percussion students only**

Grade: 9-12

Credit: 0.5 unit

**PREREQUISITE:** Ability grouped by department through audition:

Students must be in marching band, auditioned by the orchestra director, and approved by the department to participate. This class is designed to play highly advanced music that requires quality musicianship and self-discipline. A more in-depth study of musical style, expression, and orchestral literature will be explored.

Performances are a major part of this course. Attendance is required at all rehearsals and performances. Formal dress purchase or tuxedo rental is required for this class. **A district activity fee of \$50.00 applies to this course. Wind and percussion students will not require an additional activity fee for this class.**

## **TREBLE CHOIR**

Grade: 9

Credit: 1 unit

**PREREQUISITE:** Audition

This class is designed to develop the singing voice, ear training, and competency in reading two, three, and four-part music. Work includes singing exercises to build and strengthen the voice and improve diction, breath support and resonance. Singing in small ensembles, written tests, and singing tests are incorporated. This is a performance-oriented class. Attendance is required at all rehearsals and performances. The purchase and/or rental of matching performance attire will be required. **A district activity fee of \$50.00 applies to this course.**

## **ADVANCED TREBLE CHOIR**

Grade: 10-12

Credit: 1 unit

**PREREQUISITE:** Audition

This class is designed to develop the singing voice, ear training, and competency in reading two, three, and four-part music. Work includes singing exercises to build and strengthen the voice and improve diction, breath support and resonance. Singing in small ensembles, written tests, and singing tests are incorporated. This is a performance-oriented class. Attendance is required at all rehearsals and performances. The purchase and/or rental of matching performance attire will be required.

**A district activity fee of \$50.00 applies to this course.**

## **TENOR-BASS CHOIR**

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** Audition

This class is designed to develop the singing voice, ear training, and competency in reading two, three, and four-part music. Work includes singing exercises to build and strengthen the voice and improve diction, breath support and resonance. Singing in small ensembles, written tests, and singing tests are incorporated. This is a performance-oriented class. Attendance is required at all rehearsals and performances. The purchase and/or rental of matching performance attire will be required.

**A district activity fee of \$50.00 applies to this course.**

## **MIXED CHOIR**

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** Teacher approval

This class is designed to further develop the singing voice and reinforce music fundamentals. Performances, written tests, singing tests, and classroom participation are a part of this class. Attendance is required at performances.

## **CONCERT CHOIR**

Grade: 10-12

Credit: 1 unit

**PREREQUISITE:** Audition

This class is designed as an advanced mixed choral ensemble for the dedicated, serious musician. Work will be done to further develop the singing voice. Performances are a major part of this class. Major compositions and part music will be performed. Singing tests, written tests, and written music theory work will be incorporated. Attendance is required at all rehearsals and performances. There is a robe rental fee with this class. **A district activity fee of \$50.00 applies to this course.**

## **MUSIC APPRECIATION**

Grade: 9-12

Credit: 1 unit

**PREREQUISITE:** None

This class is designed for the study of vocal production, notation of musical elements, and singing. Units of study include musical comedy, opera, rock, orchestral instruments, and periods of music with reference to style. Students will be expected to participate in rehearsals and discussions and complete class projects, papers, and tests.

## **IB MUSIC SL or HL**

Grade: 11-12

**WEIGHTED: 1.0**

Credit: 1 unit

**PREREQUISITE:** Currently enrolled in a major ensemble or teacher approval. This course is offered for one (SL) or two (HL) year(s).

This course is designed to develop solo skills through performance, writing skills through composition, critical analysis through music literature, and perceptual response in the context of history and culture. Because this course will require students to develop extensive literacy in oral, written, and musical contexts, previous musical training is required. **The exam involves a listening examination, involving extensive analysis of audio examples and a prescribed work. Analysis is submitted in written form. Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements.**

## **OPTIONAL CREDIT COURSES**

### **CRIMSON CAMERATA**

**LSNHS Only**

Grade: 11-12

Selected students; 7th course only

**PREREQUISITE:** Must be enrolled in the LSN Concert Choir to audition and participate. Men will purchase tails and the women will purchase an evening gown.

### **SOUNDS OF SUMMIT**

**LSHS Only**

Grade: 11-12

Selected students; 7th course only

**PREREQUISITE:** Must be enrolled in the LSHS Concert Choir to audition and participate. Men will purchase tails and the women will purchase an evening gown.

### **UNA VOCE**

**LSWHS Only**

Grade: 11-12

Selected students; 7th course only

**PREREQUISITE:** Must be enrolled in the LSWHS Concert Choir to audition and participate. Men will purchase tails and the women will purchase an evening gown.

**PRACTICAL ARTS**

**BMIT**

**BUSINESS,  
MARKETING, &  
INFORMATION  
TECHNOLOGY**

**Middle School Business and Marketing**  
Explore Business and Computer Science in 6/7 and Focus on Entrepreneurship in 8th

PLMS - BCMS  
SLMS - ETMS

**Exploring Business, Marketing, and Information Technology**  
GR 6 (6-WEEKS)

**Business, Marketing, and Information Technology**  
GR 7 (QUARTER)

**Technology, Innovation, and Entrepreneurship**  
GR 8 (SEMESTER)

**High School Business and Marketing**  
Choose Courses in Business, Finance, and Marketing

**ALL PATHWAYS**

**Computer Business Applications I & II**  
GR 9-12 (SEM - .5 CREDIT EACH)

**Introduction to Business Management**  
GR 9-12 (SEM - .5 CREDIT)

LSHS - LSN - LSW

**BUSINESS**

**FINANCE**

**MARKETING**

**Business Law**  
GR 11-12 (SEM - .5 CREDIT)

**Business Administration**  
GR 11-12 (YEAR - 1 CREDIT)  
*OR*  
**IB Business Management SL/HL**  
GR 11-12 (YEAR - 1 CREDIT)

**Accounting I**  
GR 9-12 (YEAR - 1 CREDIT)

**Accounting II**  
GR 10-12 (YEAR - 1 CREDIT)  
\*Pre-Requisite: Accounting I

**Marketing 101**  
GR 10-12 (YEAR - 1 CREDIT)

**Sports & Entertainment Marketing**  
GR 11-12 (YEAR - 1 CREDIT)  
\*Pre-Requisite: Marketing 101

**Entrepreneurship and Social Media**  
GR 11-12 (YEAR - 1 CREDIT)  
\*Pre-Requisite: Marketing 101

STA

**International Studies Academy**  
GR 11-12 (SEM - HALF DAY 1.5 CREDIT)

**Business Finance and Fintech**  
GR 11-12 (SEM - HALF DAY 1.5 CREDIT)

## BUSINESS AND MARKETING

### LEE'S SUMMIT R-7 SCHOOL DISTRICT

2024-2025 BUSINESS, MARKETING, AND  
INFORMATION TECHNOLOGY DEPARTMENT



**GRADUATION REQUIREMENT**

**Personal Finance**  
GR 11-12 (SEM - .5 CREDIT)

**INTERNSHIPS**

**Supervised Business Experience (SBE)**  
GR 12 (YEAR - 1 OR 2 CREDITS)  
Requires concurrent enrollment in any Business, Marketing, or Computer Science course (all year)

**Marketing Work Experience**  
GR 12 (YEAR - 1 OR 2 CREDITS)  
Requires concurrent enrollment in a Marketing course

**Cooperative Career Experience (CCE)**  
GR 12 (YEAR - 1 OR 2 CREDITS)  
Requires concurrent enrollment in CCE course

**Middle School Information Technology**  
Explore Business and Computer Science in 6/7 and Focus on Computer Science in 8th

PLMS - BCMS SLMS - ETMS	<b>Exploring Business, Marketing, and Information Technology</b> GR 6 (8-WEEKS)	<b>Business, Marketing, and Information Technology</b> GR 7 (QUARTER)	<b>Introduction to Computer Science</b> GR 8 (SEMESTER)
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## INFORMATION TECHNOLOGY

LEE'S SUMMIT R-7 SCHOOL DISTRICT

2024-2025 BUSINESS, MARKETING, AND  
INFORMATION TECHNOLOGY DEPARTMENT

**High School Information Technology**  
Choose Courses in Media & Web Communications, Software Development, Hardware/Networking, and Cybersecurity

LSHS - LSN - LSW	<b>Multimedia</b> GR 9-12 (SEM - .5 CREDIT)	<b>Intro to Computer Science Essentials</b> GR 9-12 (SEM - .5 CREDIT)	<b>Computer Hardware and Operating Systems I</b> GR 9-12 (SEM - .5 CREDIT)	<b>Cybersecurity Fundamentals I</b> GR 9-12 (SEM - .5 CREDIT)
	<b>Intro to Web Design</b> GR 9-12 (SEM - .5 CREDIT)	<b>AP Computer Science Principles</b> GR 9-12 (YEAR - 1 CREDIT) *Pre-Requisite: Intro to CSE or 8th Grade ICS w/Teacher Recommendation	<b>Computer Hardware and Operating Systems II</b> GR 9-12 (SEM - .5 CREDIT) *Pre-Requisite: CHAOS I	<b>Cybersecurity Fundamentals II</b> GR 9-12 (SEM - .5 CREDIT) *Pre-Requisite: Cybersecurity Fun I
	<b>Advanced Web Design</b> GR 10-12 (YEAR - 1 CREDIT) *Pre-Requisite: Intro to Web Design	<b>AP Computer Science A</b> GR 10-12 (YEAR - 1 CREDIT) *Pre-Requisite: AP Comp. Sci. Principles		



### INTERNSHIPS

#### Supervised Business Experience (SBE)

GR 12  
(YEAR - HALF DAY 1 OR 2 CREDITS BASED ON HOURS WORKED)

Senior Internship for any Business or Computer Science Students.

Available at LSHS, LSN, or LSW

#### Internship in STEM

GR 12  
(SEM OR YR - HALF DAY  
.5 OR 1 CREDITS/SEM BASED ON HOURS)

Senior Internship for any Computer Science or STEM Students.

Available at STA



**Summit Technology Academy - Personalize Your Information Technology Learning Pathway**  
Choose Course Modules in DevSecOps Including Software Development & Cyber Security & Networking Operations

STA	<b>DevSecOps</b> GR 11-12 (SEM - HALF DAY 1.5 CREDIT)	<b>Software Development - Python</b> GR 11-12 (SEM - HALF DAY 1.5 CREDIT)	<b>Software Development - Java</b> GR 11-12 (SEM - HALF DAY 1.5 CREDIT)	<b>Software Development - Data and Artificial Intelligence</b> GR 11-12 (SEM - HALF DAY 1.5 CREDIT)
	<b>Advanced Network and Cyber Concepts</b> GR 11-12 (SEM - HALF DAY 1.5 CREDIT) *Pre-Requisite: DevSecOps	<b>Cyber Operations</b> GR 11-12 (SEM - HALF DAY 1.5 CREDIT) *Pre-Requisite: DevSecOps	<b>Cyber Security</b> GR 11-12 (SEM - HALF DAY 1.5 CREDIT) *Pre-Requisite: DevSecOps	<b>Software Development - Applications</b> GR 11-12 (SEM - HALF DAY 1.5 CREDIT) *Pre-Requisite: SD- Java



## BUSINESS

### **AMPED ON BUSINESS**

Grades: 9-10

Credit: 1.0 unit

**PREREQUISITE:** None

**NOTE: Only available to students enrolled in AMPED on Algebra and MUST be taken concurrently.**

Students will learn about manufacturing processes, entrepreneurship, and design through a student-run for-profit printing business venture that could include t-shirts, posters, banners, stickers, and more. You'll gain exposure to product development and management, graphic design, finance, and marketing through hands-on activities and product orders. The 21st century workplace skills you learn in this class are important to a number of career pathways you could pursue in the future. This is a double-blocked class where students must be concurrently enrolled in AMPED on Algebra.

### **INTRODUCTION TO BUSINESS MANAGEMENT**

Grades: 9-10

Credit: 0.5 unit

**PREREQUISITE:** None **NOTE: Also offered through R-7 Online Academy**

Examine how businesses operate in the American and global economic systems. Other topics include our global economy, social responsibility of business, business structure, entrepreneurship and small business management, leadership, and marketing. Coursework will be enhanced by completing projects that will connect you to real-world business situations.

### **COMPUTER BUSINESS APPLICATIONS I**

Grades: 9-12

Credit: 0.5 unit

**PREREQUISITE:** Keyboarding skills; recommended minimum speed of 25 wpm

**NOTE:** Also offered through R-7 Online Academy

Earn industry-valued Microsoft Office Specialist (MOS) Certificates in Word, Excel, and PowerPoint. Students will learn about the Microsoft Office Suite through simulations to practice a variety of skills including: creating and formatting documents, applying formulas and analyzing spreadsheets, and creating effective presentations.

### **COMPUTER BUSINESS APPLICATIONS II**

Grades: 9-12

Credit: 0.5 unit

**PREREQUISITE:** Completion of Computer Applications I with a C or better or teacher recommendation

**NOTE:** Also offered through R-7 Online Academy

Students will have additional opportunities to earn industry-valued Microsoft Office Specialist (MOS) Certifications and can earn Expert Certifications in Word, Excel, PowerPoint, and Access. This course encompasses advanced competencies to strengthen skills in solving complex business problems through the integration of word processing, database management, spreadsheet analysis, and presentation/multimedia production.

### **BUSINESS LAW**

Grades: 11-12

Credit: 0.5 unit

**PREREQUISITE:** None

**NOTE:** Also offered through R-7 Online Academy

This course will empower students to become active, engaged citizens by equipping them with the knowledge of their rights and responsibilities under the laws. It is designed to introduce the student to the study of law through a brief look at how law developed, the legal system in the United States, the functions of federal and state court systems, and civil, criminal and contract law. Real life examples, case studies, class projects, mock trials and field trips when appropriate enhance classroom instruction.

### **BUSINESS ADMINISTRATION**

Grades: 11-12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** Accounting I, Marketing 101, or Introduction to Business Management, and Teacher Approval

**DUAL CREDIT PREREQUISITE:** Placement Scores: ACT (Composite 18 or above) OR MCC Next Gen – Accuplacer (Reading 248 or above) **NOTE: Also offered through R-7 Online Academy**

Designed to develop students' knowledge and understanding of business management theories as well as their ability to apply a range of tools and techniques, this course covers the key characteristics of business organization and environment including the business functions of human resource management, finance and accounts, marketing, and operations management. Through the exploration of four underpinning concepts (change, ethics, creativity, and sustainability), the course allows students to develop a holistic understanding of today's complex and dynamic business environment. It aims to develop relevant and transferable skills, including the ability to: think critically; make ethically sound and well-informed decisions; appreciate the significance of change; and undertake long-term planning, analysis and evaluation. May be offered for dual credit or articulated credit to eligible students. Check with your building. Dual credit information can be found under the Advanced Studies section.

**IB BUSINESS MANAGEMENT SL**

Grades 11-12

**WEIGHTED: 1.0**

Credit: 1 unit

**PREREQUISITE:** Accounting I, Marketing 101, or Introduction to Business Management, and Teacher Approval DUAL CREDIT PREREQUISITE: Placement Scores: ACT (Composite 18 or above) OR MCC Next Gen – Accuplacer (Reading 248 or above)

Designed to develop students' knowledge and understanding of business management theories as well as their ability to apply a range of tools and techniques, this course covers the key characteristics of business organization and environment including the business functions of human resource management, finance and accounts, marketing, and operations management. Through the exploration of four underpinning concepts (change, ethics, creativity, and sustainability), the course allows students to develop a holistic understanding of today's complex and dynamic business environment. It aims to develop relevant and transferable skills, including the ability to: think critically; make ethically sound and well-informed decisions; appreciate the significance of change; and undertake long-term planning, analysis and evaluation. May be offered for dual credit or articulated credit to eligible students. Check with your building. Dual credit information can be found under the Advanced Studies section.

**IB BUSINESS MANAGEMENT HL**

Grades: 12

**WEIGHTED: 1.0**

Credit: 1 unit

**PREREQUISITE:** IB Business Management SL

DUAL CREDIT PREREQUISITE: Placement Scores: ACT (Composite 18 or above) OR MCC Next Gen – Accuplacer (Reading 248 or above)

Students will expand on knowledge learned in IB Business Management SL by obtaining a deeper understanding of organizational planning tools, corporate culture, employer and employee relations, depreciation of assets, efficiency ratio analysis, net present value investment appraisal, budgeting, sales forecasting, extended marketing mix, international marketing, lean production and quality management, production planning, research and development, as well as crisis management and contingency planning. In addition, primary research skills will be utilized in conducting an internal analysis. IB testing occurs in HL year rather than SL year. Students continue exploring the four underpinning concepts (change, ethics, creativity, and sustainability), encouraging a holistic understanding of today's complex and dynamic business environment. **Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements.**

**INTERNATIONAL STUDIES ACADEMY**

Grades 11-12

**WEIGHTED: 0.666**

Credit: 3 units

For course description, see the [Summit Technology Academy](#) section of the Career and Educational Planning Guide, under the Off-Campus Career Ed Programs section.

**FINANCE****ACCOUNTING I**

Grades: 9-12

Credit: 1 unit

**PREREQUISITE:** None**NOTE:** Also offered through R-7 Online Academy

Accounting will help you obtain a basic understanding of a business's financial side. You will learn the accounting cycle for both service and manufacturing businesses which includes the process of gathering, recording, posting and interpreting financial data for sole proprietorships and corporations. Spreadsheets and other applications are utilized to enhance your accounting skills. **May be offered for articulated credit to eligible students.**

**ACCOUNTING II**

Grades: 10-12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** Required grade of C or better in Accounting I or Algebra II **NOTE:** Also offered through R-7 Online Academy

This advanced level accounting class provides an in-depth study of business finances which include: using financial accounts, creating and analyzing financial statements, preparing journal entries, performing ratio analysis, and accounting for merchandising operations, partnerships and corporations. Spreadsheets are utilized to develop accounting skills. May be offered for articulated credit to eligible students.

**PERSONAL FINANCE**

Grades: 11-12

Credit: 0.5 unit

**PREREQUISITE:** None**NOTE:** Also offered through R-7 Online Academy

Understanding financial management concepts is an important life skill. Students will explore how individual choices directly influence occupational goals and future earnings potential. A thorough understanding of financial concepts, with practical application through activities and projects, will enable students to leave this course making informed personal financial decisions leading to financial independence. Students will design personal and household budgets utilizing checking and saving accounts, gain knowledge in debt and credit management, evaluate and understand insurance and taxes, and compose a resume highlighting their current skills and experience. This step towards financial literacy is the first step in creating a financially secure future. **NOTE:** High School Graduation Requirement.

**BUSINESS FINANCE AND FINTECH**

Grades: 11-12

For course description, see [Summit Technology Academy](#) section of the Career and Educational Planning Guide, under the Off-Campus Career Ed Programs section.

**WEIGHTED: 0.666**

Credit: 3 units

**MARKETING****MARKETING 101**

Grades: 10-12

Credit: 1 unit

**PREREQUISITE:** None **NOTE: Also offered through R-7 Online Academy**

Savvy consumers and businesspeople both benefit from a basic knowledge of marketing. Through hands-on experiences, students will develop innovative marketing strategies in pricing, selling, promotion and advertising, product development, and distribution. This class equips students with marketing skills to be prepared to enter any industry. This course also provides a unique opportunity for you to work at the school store. Students are highly encouraged to join the co-curricular organization DECA (an organization that prepares emerging leaders and entrepreneurs in marketing, finance, hospitality, and management) to gain authentic experiences through leadership conferences, competition, and networking. Membership fees or fundraising may be required for membership.

**SPORTS AND ENTERTAINMENT MARKETING**

Grades: 11-12

Credit: 1 unit

**PREREQUISITE:** Marketing 101 w/ a B average or higher and teacher approval **NOTE: Also offered through R-7**

Online Academy. Build upon your marketing experience by applying concepts and components involved in marketing and operating sports and entertainment events. Through project-based learning and hands-on experience, students are able to explore the full marketing cycle in relation to sports and entertainment. This includes creating content and video board assets for school stadium activities as well as possibly running the videoboard during games. Students are encouraged to be a part of DECA (an organization that prepares emerging leaders and entrepreneurs in marketing, finance, hospitality, and management) allowing them to gain authentic experiences through competition and networking. Membership fees or fundraising may be required. **May be offered for dual credit or articulated credit to eligible students. Check with your building. Dual credit information can be found under the Advanced Studies section.**

**ENTREPRENEURSHIP AND SOCIAL MEDIA**

Grade: 11-12

**WEIGHTED: 0.666**

Credit: 1 unit

**PREREQUISITE:** Marketing 101 w/ a B average or higher and teacher approval**NOTE: Also offered through R-7 Online Academy**

Evaluate your entrepreneurial potential with this advanced course. Extensive application of entrepreneurship and marketing concepts and functions will be provided through project-based curriculum. Students create a food truck business plan which includes consumer behavior, market research, marketing strategies, promotional campaign, and interviewing/hiring practices. Analyze current social media and their trends, as well as how social media can be an integral part of business marketing. Students are encouraged to be a part of DECA (an organization that prepares emerging leaders and entrepreneurs in marketing, finance, hospitality, and management) allowing them to gain authentic experiences through competition and networking. Membership fees or fundraising may be required. **May be offered for dual credit or articulated credit to eligible students. Check with your building. Dual credit information can be found under the Advanced Studies section.**

**INFORMATION TECHNOLOGY****MULTIMEDIA**

Grades: 9-12

Credit: 0.5 unit

**PREREQUISITE:** None**NOTE: Also offered through R-7 Online Academy**

Media skills are highly prized by industry. This one semester course provides a foundation in graphic art, graphic design, audio production, social media marketing, and animation. Students will use creative design skills to develop individual and team projects. Learning these highly valuable media skills can better prepare you for courses and careers in web design, marketing, and others. Final evaluation includes a digital portfolio.

**INTRODUCTION TO WEB DESIGN**

Grades: 9-12

Credit: 0.5 unit

**NOTE: Also offered through R-7 Online Academy**

Learn the language of the web. A heavy focus will be on front-end development learning HTML and CSS, the foundational languages of all websites. You will also learn how to create a responsive website (one that looks good and functions well on any device whether it's a PC, tablet, or phone) by using Bootstrap, a free front-end framework. Other topics include image editing, evaluation of websites, and copyright basics. Upon successful completion of this course, students may enroll in Advanced Web Design and become part of the team that creates and maintains the school's website.

## **ADVANCED WEB DESIGN**

Grades: 10-12

Credit: 1 unit

**PREREQUISITE:** Introduction to Web Design, and Teacher Approval, class limit of 15 students

Advanced Web Design is a project-based course in which you will contribute to the creation and maintenance of pages for the school website. You will explore advanced web design techniques in the areas of HTML, CSS, image creation and manipulation, audio and video, JavaScript, and the WordPress content management system. Expect lots of discussion and collaboration with your peers. This is an advanced level course excellent for the self-motivated, independent learner who loves to explore and guide your own learning. The final project is a website portfolio project. Students are encouraged to join FBLA.

## **COMPUTER HARDWARE & OPERATING SYSTEMS I**

Grades: 9-11

Credit: 0.5 unit

**PREREQUISITE:** Recommend a grade C or better in Algebra I

**NOTE:** Also offered through R-7 Online Academy

Students will study PC configuration, diagnostics and repair, safety and preventative maintenance, and network support. Students will connect computer components to make a working computer and then install a variety of operating systems to make the computers functional. This course is designed to prepare students for technology courses and certifications at Summit Technology. This course, along with Computer Hardware & Operating Systems II, helps students prepare for CompTIA's A+ certification.

## **COMPUTER HARDWARE & OPERATING SYSTEMS II**

9-12

**WEIGHTED: 0.5** Grades:  
Credit: 0.5 unit

**PREREQUISITE:** CHAOS I

**NOTE:** Also offered through R-7 Online Academy

This course helps students prepare for CompTIA's A+ certification. The course presents an in-depth exposure to computer operating systems. Through hands-on activities and lab simulations, students will enhance their PC knowledge through review and reinforcement on how to safely work on and assemble a computer. Students will learn to identify and manage a variety of operating system components, and storage devices. This course includes an introduction to Local Area Networking including wireless options, protocols and connectivity troubleshooting as well as an introduction to network security and system management.

## **INTRO TO COMPUTER SCIENCE ESSENTIALS**

Grades 9-12 Credit: 0.5 unit

**PREREQUISITE:** None

**NOTE:** Also offered through R-7 Online Academy

In this introductory course designed for students new to computer science, students learn how to help people and make the world a better place using the skills, tools, and thinking of creative computing. Students will learn how to code by learning to create apps and games for phones and mobile devices using a beginner-friendly, visual, block-based coding environment called MIT App Inventor. Next students learn more advanced programming concepts to program Self Driving Vehicles to autonomously navigate maps, while using a beginner-friendly Vex block-based programming language. As students gain understanding and confidence with coding in the graphical environment, students will apply their new coding knowledge to learn the power of text-based code. Students will design and create applications using the text-based programming language Python. Finally, students will also learn how to make computers work together to realize their designs. This entry-level course exposes students to a diverse set of computational thinking concepts, fundamentals, and tools and provides a strong foundation to advance to PLTW AP Computer Science, AP Computer Science A and beyond.

## **AP COMPUTER SCIENCE PRINCIPLES (PLTW)**

Grades: 9-12

**WEIGHTED: 1.0 (0.666 non AP Test takers)**

Credit: 1 unit

**PREREQUISITE:** Successful completion of Intro to Computer Science Essentials or 8th grade Intro to Computer Science and Teacher Recommendation

**NOTE:** Also offered through R-7 Online Academy

In this second course in the PLTW Computer Science pathway, students will use creativity and learn Python programming to create animations, interactive stories, and games. Learn how the internet works and learn cybersecurity skills. Use hands-on sensors to gather data and create meaningful visualizations to reveal trends. Explore real-world problem solving with artificial intelligence, simulations, and modeling. Students collaborate in teams throughout the year to create multiple projects for both creative self-expression and real-world problem-solving. This course is designed to prepare students for the AP CSP exam.

## **AP COMPUTER SCIENCE A (PLTW)**

**takers)** Grades: 10-12

**WEIGHTED: 1.0 (0.666 non AP Test**

Credit: 1 unit

**PREREQUISITE:** Successful completion of PLTW AP Computer Science Principles and Teacher Recommendation In this third course in the Computer Science pathway, students further develop computational-thinking and object-oriented programming skills through authentic application development using the Java™ programming language. Students will design solutions to problems, use data structures and algorithms to organize and process large sets of data from our world to discover new information, analyze potential solutions, and analyze the ethical and social implications of solutions and computing systems. This course is designed to prepare students for the AP CSA exam.

**CYBERSECURITY FUNDAMENTALS I**

Grades 9-12

Credit .5 unit

PREREQUISITE: None **NOTE: Also offered through R-7 Online Academy**

This course will lay the foundation for understanding cyber law and policy, Linux, networking technology basics, risk assessment, cryptography, and a variety of cybersecurity tools. Through hands-on activities in a virtual online lab environment, students simulate cybersecurity scenarios as they explore the back-end of IT systems used by today's industries.

**CYBERSECURITY FUNDAMENTALS II**

Grades 9-12

Credit .5 unit

PREREQUISITE: Cybersecurity Fundamentals I

This course will present an in-depth exposure to cybersecurity. Through hands-on activities and lab simulations, students will enhance their cybersecurity knowledge of cyber law and policy, Linux, networking technology basics, risk assessment, cryptography, and using a variety of cyber tools. Completion of Cybersecurity Fundamentals I and II helps prepare students working towards the CompTIA Security+ certification.

**INFORMATION TECHNOLOGY AT SUMMIT TECHNOLOGY ACADEMY****DEVSECOPS**

Grades: 11-12

**WEIGHTED: 0.666**

Credit: 1.5 units

For course description, see Summit Technology Academy section of the Career and Educational Planning Guide, under the Off-Campus Career Ed Programs section.

**ADVANCED NETWORK AND CYBER CONCEPTS**

Grades: 11-12

**WEIGHTED: 0.666**

Credit: 1.5 units

For course description, see Summit Technology Academy section of the Career and Educational Planning Guide, under the Off-Campus Career Ed Programs section.

**CYBER SECURITY**

Grade: 11-12

**WEIGHTED: 0.666**

Credit: 1.5 units

For course description, see Summit Technology Academy section of the Career and Educational Planning Guide, under the Off-Campus Career Ed Programs section.

**CYBER OPERATIONS**

Grade: 11-12

**WEIGHTED: 0.666**

Credit: 1.5 units

For course description, see Summit Technology Academy section of the Career and Educational Planning Guide, under the Off-Campus Career Ed Programs section.

**SOFTWARE DEVELOPMENT - PYTHON**

Grades: 11-12

**WEIGHTED: 0.666**

Credit: 1.5 units

For course description, see Summit Technology Academy section of the Career and Educational Planning Guide, under the Off-Campus Career Ed Programs section.

**SOFTWARE DEVELOPMENT - JAVA**

Grades: 11-12

**WEIGHTED: 0.666**

Credit: 1.5 units

For course description, see Summit Technology Academy section of the Career and Educational Planning Guide, under the Off-Campus Career Ed Programs section.

**SOFTWARE DEVELOPMENT - DATA AND AI**

Grades: 11-12

**WEIGHTED: 0.666**

Credit: 1.5 units

For course description, see Summit Technology Academy section of the Career and Educational Planning Guide, under the Off-Campus Career Ed Programs section.

**SOFTWARE DEVELOPMENT - APPLICATIONS**

Grades: 11-12

**WEIGHTED: 0.666**

Credit: 1.5 units

For course description, see Summit Technology Academy section of the Career and Educational Planning Guide, under the Off-Campus Career Ed Programs section.

## INTERNSHIP OPPORTUNITIES

### **SUPERVISED BUSINESS EXPERIENCE (SBE) INTERNSHIP**

Grade: 12

Credit: .5 unit for 10-19 hours per week supervised employment

1 unit for minimum 20+ hours per week supervised employment

**PREREQUISITE:** Must also enroll in either a year-long business, marketing, or information technology class or two semester long classes, 90% attendance, minimum 2.5 GPA, teacher approval, and appropriate credits earned for graduation

SBE is a workplace learning program providing on-the-job experience in an approved, supervised work position. Students may work in any local business where at least half of their duties involve business or technology type tasks in places like accounting offices, attorneys, banks, dental or medical offices, school offices, technology companies, small business offices, etc. Make the connection and transition from the classroom to the professional world of work and build your network and your interpersonal skills. Employers contribute to the evaluation process, and students may receive assistance from the instructor in finding an approved job. **NOTE: Leaving a place of employment during the year requires approval of employer, coordinator, and administration.**

### **MARKETING INTERNSHIP**

Grade: 12

Credit: .5 unit for 10-19 hours per week supervised employment

1 unit for minimum 20+ hours per week supervised employment

**PREREQUISITE:** Must also enroll in Marketing 101, Entrepreneurship and Social Media, or Sports and Entertainment Marketing, 90% attendance, minimum 2.5 GPA, teacher approval, and appropriate credits earned for graduation.

Cooperative work experience program; job training provided by participating area businesses such as restaurants, general retailers, grocery stores, service retailers, etc. Primary purpose is to provide experience and training in actual work situation. Employer contributes to evaluation. **NOTE: Leaving place of employment during the year requires approval of employer, coordinator, and administration**

### **COOPERATIVE CAREER EXPERIENCE (CCE) INTERNSHIP**

Grade: 12

Credit: .5 unit for 10-19 hours per week supervised employment

1 unit for minimum 20+ hours per week supervised employment

**PREREQUISITE:** Must also enroll in Cooperative Career Experience( CCE) course, good discipline record, 90% attendance, minimum 2.5 GPA, teacher recommendation, obtain and keep employment through the year, and appropriate credits earned for graduation

Cooperative work experience program; job training provided by participating area businesses such as automotive, construction, daycare, drafting, electrical, food service, industrial, maintenance/cleaning, mechanical, medical-related, and warehouse. Primary purpose is to provide experience and training in actual work situation. Employer contributes to evaluation. **NOTE: Leaving place of employment during the year requires approval of the employer, coordinator, and administration**

### **COOPERATIVE CAREER EXPERIENCE (CCE)**

Grade: 12

Credit: 1 unit

**PREREQUISITE:** Must also enroll in CCE Internship, good discipline record, 90% attendance, GPA approval, teacher recommendation, and appropriate credits earned for graduation

This course focuses on career-focused topics related to: employer/employee relations, income tax, payroll deductions, workmen's compensation, safety, economics, human relations, management and leadership, unemployment insurance, job attitudes, communication, problem-solving, presentations, and wages. Work includes both individual and group written and oral assignments in class and individualized help with employment needs. Acquire job entry skills for related CCE Internship. May be offered for articulated credit to eligible students. Check with your building. Dual credit information can be found under the Advanced Studies tab or on page 9 of printed version.

### **INTERNSHIP IN STEM**

Grade: 12

Credit: .5 unit for 10-19 hours per week supervised employment

1 unit for minimum 20+ hours per week supervised employment

**For course description, see Summit Technology Academy section of the Career and Educational Planning Guide, under the Off-Campus Career Ed Programs section.**

**PRACTICAL ARTS**

**FCS**

**FAMILY CONSUMER**

**SCIENCES**

## LSR7 Family & Consumer Science Pathways



***For all courses in Family & Consumer Sciences, students are highly encouraged to join the co-curricular organization FCCLA (Future Career & Community Leaders of America) to gain authentic experiences through leadership conferences, competition, and networking. Membership fees are required for membership as well as possible fundraising efforts. Assistance is available if fees present a hardship.***

### **PERSONAL FINANCE**

Grades: 11-12

Credit: 0.5 unit

**PREREQUISITE:** None

**NOTE:** Also offered through R-7 Online Academy and is a high school graduation requirement.

Understanding financial management concepts is an important life skill. Students will explore how individual choices directly influence occupational goals and future earnings potential. A thorough understanding of financial concepts, with practical application through activities and projects, will enable students to leave this course making informed personal financial decisions leading to financial independence. Students will design personal and household budgets utilizing checking and saving accounts, gain knowledge in debt and credit management, evaluate and understand insurance and taxes, and compose a resume highlighting their current skills and experience. This step towards financial literacy is the first step in creating a financially secure future.

### **INTRODUCTION TO HUMAN SERVICES**

Grades: 9-12

Credit: 0.5 unit

**PREREQUISITE:** None

**NOTE:** Also offered through R-7 Online Academy

This career development course introduces students to the qualifications and information necessary to succeed within this growing industry. Students cultivate skills of communication, cooperation, leadership and critical thinking while developing their knowledge of lifespan development and the impact of societal conditions. Students explore controversial subject matter such as economic disparity, mental illness and its stigma, gender, etc. to recognize how to best work with a variety of populations. This course would be beneficial for students considering a career in public service, social work, counseling, nursing, massage therapy, teaching, training, etc.

### **INTRODUCTION TO HOSPITALITY AND TOURISM**

Grades: 9-12

Credit: 0.5 unit

**PREREQUISITE:** None

Join us for a course that will guide you in discovering the world of hospitality and tourism! In this course, you will learn all about the amazing opportunities that await you in event planning, recreation management, hotel and restaurant operations, tourism and travel. Experience hands-on activities, engaging lessons, and exciting projects that will give you a sneak peek into the possibilities for your future. This is the start to experience our Hospitality, Tourism and Recreation management program at the new Paradise Park.

### **PERSONAL IMAGE AND RELATIONSHIPS**

Grades: 9-12

Credit: 0.5 unit

**PREREQUISITE:** None

**NOTE:** Also offered through R-7 Online Academy

This course prepares students to develop skills that make the most of individual characteristics and the significance within human relationships. Through the instruction of the establishment and maintenance of relationships, students will work through self analysis, self-esteem, communication, goal setting, conflict resolution, stress management, and differentiate ethical behavior in family, workplace and community settings

### **CHILD DEVELOPMENT: PARENTING ISSUES**

Grades: 11-12

Credit: 0.5 unit

**PREREQUISITE:** None

This course focuses on three major areas of parenting: caring for, nurturing and guiding children. Students develop an awareness of the myths and realities of parenting throughout the lifespan. Topics include readiness to parent; developmental changes in families; balancing work and family; the value of play; developing communication; family concerns and crisis; and decision-making skills. The primary focus of Child Development: Parenting Issues cover pregnancy, prenatal development, birth, the first years of life and parenting practices. This class includes sex education following the comprehensive guidelines (including consent, human reproduction, sexually transmitted infections and contraceptive methods).

**CHILD DEVELOPMENT: PRESCHOOL EXPERIENCES**

Grades: 11-12

Credit: 0.5 unit

**PREREQUISITE:** None

Students will explore career opportunities working with children through planning and running an on-site preschool program. This course includes an overview of the principles of human development, with a focus on the preschool years. Additional areas of focus include curriculum planning, guiding children, and health and safety. Students will obtain their CPR certification in this course. This class would be beneficial to any student planning to pursue a career in education, child care, human service and health science professions.

**CHILD AND ADOLESCENT DEVELOPMENT**

Grade: 12

Credit: 0.5 unit (Weighted 0.666)

Dual Credit: UCM CFD 1220 (3 credit hours for eligible students)

**PREREQUISITE:** Required completion of biology and 2.5 GPA

Students will focus on a comprehensive introduction to developmental psychology utilizing up to date research. This course is designed to help students clearly understand the complex, dynamic process of development in children from birth through adolescence. Students should expect extensive reading at a collegiate level. This course would be beneficial to any student planning to pursue a career in education, child care, human service and health science professions. Highly recommended for students taking Teacher Educator Academy.

**TEACHER EDUCATOR ACADEMY @ SUMMIT TECHNOLOGY ACADEMY**

Grade: 12

**WEIGHTED 0.666**

Credit: 3 units

**This course requires an application for admission to Summit Technology Academy. For detailed information on admission requirements and the application process, please refer to the Summit Technology section of this guide.**

This year-long class is designed for students who are seriously considering the elementary or secondary teaching profession or corporate educator. The course offers students the opportunity to put theory into action through classroom work and the practicum. Students will develop skills and professionalism needed to succeed as an educator as they work directly with students/adults in the practicum. Each student is assigned to a district school within the high school attendance boundaries or to a corporate education department. A blended instructional model of classroom and online learning is used to deliver instruction and to provide opportunities for students to develop their beliefs and philosophy of education. Students will participate in Educators Rising as part of the course requirements.

**FASHION AND INTERIOR DESIGN FOUNDATIONS**

Grade: 9-12

Credit: 0.5 unit

**PREREQUISITE:** None

This course is designed for the student interested in fashion apparel, textiles or interior design. In this beginner level course, students will obtain a foundation in the knowledge needed for the advanced fashion and interior courses. Principles, elements and goals of design will be applied to various fashion apparel, textiles and interior design concepts. Students will also cover the basics of the physical, psychological, social and cultural reasons for how we dress, where we live, textiles, fabric construction and selection for apparel and interior use, basic sewing skills that are applied in a variety of ways. Self-initiative, motivation, time management, independent work, following directions and self-evaluation are crucial skills in this course where art, communication, mathematics, science and technology are applied

**ADVANCED FASHION DESIGN AND CONSTRUCTION**

Grade: 10-12

Credit: 0.5 unit

**PREREQUISITE:** Fashion and Interior Design Foundations

This course develops a more advanced knowledge and application of sewing skills. It is designed for the student interested in a career in fashion apparel, accessory design, costume design and more. This course utilizes more advanced garment construction techniques, basic pattern-making/draping and an expansion of applied textiles knowledge. Several garments and skills examples will be constructed during the semester. Successful completion of this class provides students with an understanding of textile application and construction with an emphasis on quality. Self-initiative, motivation, time management, planning, independent work, following directions and evaluating are crucial skills in this course in which art, communication, mathematics, science and technology are applied.

**ADVANCED INTERIOR DESIGN**

Grades:10-12

Credit: 0.5 unit

**PREREQUISITE:** Fashion and Interior Design Foundations

This course develops a more advanced knowledge and application of interior design skills. Projects on the following may be explored: housing/furniture styles, design and architecture, hand drawn floor plans, computer-aided design (CAD), remodeling and career related occupations. Self-initiative, motivation, time management, planning, independent work, following directions and evaluating are crucial skills in this course in which art, communication, mathematics, science and technology are applied.

**CAPSTONE: FASHION/INTERIOR DESIGN AND MERCHANDISING**

Grades 11-12

Credit: 0.5 unit

**PREREQUISITE:** Adv Fashion Design and Construction or Adv Interior Design

Learn the various creative and business functions of the fashion and interior design industries. Students learn the dynamics of the industry including trending, textiles, designers, the design process, production, promotion and visual merchandising. Students will develop a collection of apparel or interior design textile products by utilizing croquis sketching and/or apparel/interior design construction techniques. Basic planning, independent work, following directions and evaluating are crucial skills in this course in which art, communication, mathematics, science and technology are applied.

**CULINARY FOUNDATIONS**

Grades: 9-12

Credit: 0.5 unit

**PREREQUISITE:** None**NOTE:** Also offered through R-7 Online Academy

Learn the basics of nutrition, food safety, food preparation and meal planning. Learn culinary skills that you will use in daily life, preparing food in each of the food groups. Work in groups to plan, prepare and serve food products in a lab setting. This course is a prerequisite for International Foods and Culinary Arts I. You must earn a B Average or higher to advance to Culinary Arts I.

**INTERNATIONAL FOODS**

Grades: 10-12

Credit: 0.5 unit

**PREREQUISITE:** Culinary Foundations**NOTE:** Also offered through R-7 Online Academy

Travel around the world and the regional areas of the United States learning about world-wide cuisine and culture. Areas explored include: Latin America and the Caribbean, United Kingdom and Ireland, Germany, France, Southern Europe, Asia and Africa. Major religions of the world are also discussed. Experience food preparation, techniques, serving and eating styles of the various cultures around the world.

**CULINARY ARTS I**

Grades: 10 -12

Credit: 1 unit

**PREREQUISITE:** Culinary Foundations with an 70% or higher or teacher recommendation

The first year of the two-year Culinary Arts curriculum, designed by the National Restaurant Association, equips high school students for careers in the dynamic restaurant and food service industry. This course delves into fundamental culinary skills, including cooking methods, soups, stocks, sauces, baking, and food service management. Students focus on recipe development and the art of plate presentation. Students will have the opportunity to earn a ServSafe Food Handler's Certification with the National Restaurant Association.

**CULINARY ARTS II**

Grades: 11-12

Credit: 1 unit

**PREREQUISITE:** Culinary Arts 1 or teacher recommendation

The second year of the two-year Culinary Arts curriculum, designed by the National Restaurant Association, this course delves into the fundamental skills required for restaurant management and culinary expertise, offering valuable experiential learning opportunities and fostering practical competencies. Emphasizing breakfast cuisine, baking, and effective management techniques. Successful completion of this program awards a Certificate of Achievement accredited by the National Restaurant Association. Culinary Arts II students are also eligible for potential college credit hours and scholarships through participation in university hospitality programs and culinary arts schools.

**HOSPITALITY, TOURISM & RECREATION MANAGEMENT @ PARADISE PARK****WEIGHTED 0.666**

Grade: 12

Credit: 3 units

This course requires an application for admission to Summit Technology Academy. For detailed information on admission requirements and the application process, please refer to the Summit Technology section of this guide.

When you plan activities, do you naturally consider the participants' experience, ensuring every detail is just right? If so, a career in Hospitality, Tourism, and Recreation Management could be a good fit for you. Hospitality, Tourism and Recreation is one of the fastest growing industries in the world which includes recreational and corporate travel coordinators, meeting, convention and event planners, entertainment and fitness directors, marketing and sales managers, and more! This Capstone Course meets at Paradise Park. Students will need to provide transportation to job shadowing and internship opportunities throughout the year.

# **PRACTICAL ARTS ENGINEERING & INDUSTRIAL TECHNOLOGY**

**LEE'S SUMMIT SCHOOL DISTRICT – ENG & IND TECH DEPARTMENT**  
**ENGINEERING & INDUSTRIAL TECHNOLOGY**

**MIDDLE SCHOOL**

<b>GRADE 6</b>		<b>GRADE 7</b>	<b>GRADE 8</b>	
Exploring Engineering and Industrial Technology (6-week)		Engineering and Industrial Technology (quarter)	Industrial Technology (semester)	Engineering Technology (semester)

**ENGINEERING & DRAFTING DESIGN TECHNOLOGY**

**HIGH SCHOOL**

<b>DRAFTING DESIGN TECHNOLOGY</b>	<b>ELECTRICITY TECHNOLOGY</b>	<b>ENGINEERING</b>
Introduction to Engineering and Design (full year, 9-12)	Power and Energy Technology (semester, 9-12)	Introduction to Engineering and Design (full year, 9-12)
Civil Engineering and Architecture (full year, 10-12)	Basic Electricity / Electronics (semester, 10-12)	Principles of Engineering (full year, 10-12)
Advanced Concepts in CAD (full year, 11-12)	Digital Electronics (1.5 Credits, 11-12) @ Summit Technology Academy	Civil Engineering and Architecture (full year, 10-12)
		Students need to choose 2 of the three courses to make a full-year selection. @ Summit Technology Academy  <b>Aerospace Engineering</b> (1.5 Credits, 11-12) OR <b>Computer Integrated Manufacturing</b> (1.5 Credits, 11-12) OR <b>Digital Electronics</b> (1.5 Credits, 11-12)
		<b>Engineering Design and Development/EFE</b> (full year, 12) @ Summit Technology Academy
		<b>Aerospace Academy</b> (full year, 11-12) @ Summit Technology Academy

**INTERNSHIPS**

STUDENTS FROM CAREER AND TECHNOLOGY PATHWAYS ARE ENCOURAGED TO PARTICIPATE IN AN INTERNSHIP SENIOR YEAR

**Cooperative Career Experience**  
 Course & Internship  
 (full year, 12)

**LEE'S SUMMIT SCHOOL DISTRICT – ENGR & IND. TECH DEPARTMENT**  
**ENGINEERING & INDUSTRIAL TECHNOLOGY**

**MIDDLE SCHOOL**

GRADE 6	GRADE 7	GRADE 8	
Exploring Engineering and Industrial Technology (6-week)	Engineering and Industrial Technology (quarter)	Industrial Technology (semester)	Engineering Technology (semester)

**INDUSTRIAL TECHNOLOGY**

**HIGH SCHOOL**

MACHINE TOOL TECHNOLOGY	WELDING/METAL FABRICATION	CABINET/FURNITURE MAKING & MILL WORK	CREATIVE TECHNOLOGY	GENERAL TRADES
Advanced Materials and Processing Technology (full year, 10-12)	Material and Processing Technology (semester, 9-12)	Material and Processing Technology (semester, 9-12)	Creative Design and Technology (semester, 9-12)	Power and Energy Technology (semester, 9-12)
Metal Technology (full year, 11-12)	Advanced Materials and Processing Technology (Full year, 10-12)	Advanced Materials and Processing Technology (Full year, 10-12)	Advertising and Graphic Design (full year, 11-12) @ Herndon	Small Engine Repair (semester, 10-12)  OR Basic Electricity / Electronics (semester, 10-12)  OR Auto and Home Care (semester, 10-12)
Machine Tool Technology (full year, 12) @ LSHS & LSW	Welding/Metal Fabrication (Full year, 11-12) @ Herndon	Woodworking Technology (Full year, 10-12)		
		Furniture Making (Full year, 11-12)		

**INTERNSHIP**

STUDENTS FROM CAREER AND TECHNOLOGY PATHWAYS ARE ENCOURAGED TO PARTICIPATE IN AN INTERNSHIP SENIOR YEAR

Cooperative Career Experience Course & Internship (full year, 12)
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Automotive Technology (full year, 11-12) @ Herndon  OR Construction Technology (full year, 11-12) @ Herndon
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**\*\*Project Lead the Way (PLTW) for definition, see Summit Technology Academy section of the Career and Educational Planning Guide, under the Off-Campus Career Ed Programs section.**

## **ENGINEERING PLTW COURSES**

### **INTRODUCTION TO ENGINEERING & DESIGN (IED) PLTW\*\***

**WEIGHTED: 0.5**

Grades: 9-12

Credit: 1 unit

**PREREQUISITE:** Must have a C or better in Alg. 1 or concurrently enrolled in Alg. 1

**NOTE:** Also offered through R-7 Online Academy

Students will employ engineering and scientific concepts in the solution of engineering design problems. The course assumes no previous knowledge, but students should be concurrently enrolled in college preparatory mathematics and science. In addition, students use state of the art 3D solid modeling design software to help them in the design and documentation of their solutions. This class does have a class Fee for take home projects. This course has the potential to allow the student to earn college credit if all requirements are met. **Students are highly encouraged to join the co-curricular organization TSA (an organization that prepares students for careers in engineering, drafting, and skilled service occupations) to gain authentic experiences through leadership conferences, competition, and networking. Membership fees are required for membership as well as possible fundraising efforts. Assistance is available if fees present a hardship.**

### **PRINCIPLES OF ENGINEERING (POE) PLTW\*\***

**WEIGHTED: 0.666**

Grades: 10-12

Credit: 1 unit

**PREREQUISITE:** C or better in Algebra I

This course is designed to help students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes helps students learn how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit people. This course can be used as an elective in either Science or Engineering & Industrial Technology department. This course has the potential to allow the student to earn college credit if all requirements are met. **Students are highly encouraged to join the co-curricular organization TSA (an organization that prepares students for careers in engineering, drafting, and skilled service occupations) to gain authentic experiences through leadership conferences, competition, and networking. Membership fees are required for membership as well as possible fundraising efforts. Assistance is available if fees present a hardship.**

### **CIVIL ENGINEERING AND ARCHITECTURE (CEA) PLTW\*\***

**WEIGHTED: 0.666**

Grades: 10-12

Credit: 1

**PREREQUISITES:** C or better in Introduction to Engineering & Design (IED) or teacher approval

The major focus of this course is a long-term project that involves the development of a local property site. This course covers the Roles of Civil Engineers and Architects, Project Planning, Site Planning, Building Design, Project Documentation, and Presentation. Students will use state of the art 3D design software to help them design and document their designs. CEA is intended to serve as a specialization course in the PLTW sequence. This course has the potential to allow the student to earn college credit if all requirements are met. **Students are highly encouraged to join the co-curricular organization TSA (an organization that prepares students for careers in engineering, drafting, and skilled service occupations) to gain authentic experiences through leadership conferences, competition, and networking. Membership fees are required for membership as well as possible fundraising efforts. Assistance is available if fees present a hardship.**

### **DIGITAL ELECTRONICS/COMPUTER INTEGRATED MANUFACTURING/AEROSPACE ENGINEERING (DE/CIM) PLTW\*\***

**WEIGHTED 0.666**

Grade 11-12

Credit: 3 units

**For course description, see Summit Technology Academy section of the Career and Educational Planning Guide, under the Off-Campus Career Ed Programs section.**

### **AEROSPACE ACADEMY\*\***

**WEIGHTED 0.666**

Grade 11-12

Credit: 3 units

**For course description, see Summit Technology Academy section of the Career and Educational Planning Guide, under the Off-Campus Career Ed Programs section.**

## **PLTW ENGINEERING CAPSTONE COURSE**

### **ENGINEERING DESIGN & DEVELOPMENT PLTW\*\***

**WEIGHTED 0.666**

Grade 12

Credit: 3 units

**For course description, see Summit Technology Academy section of the Career and Educational Planning Guide, under the Off-Campus Career Ed Programs section.**

## INDUSTRIAL TECHNOLOGY COURSES

### MATERIALS AND PROCESSING TECHNOLOGY

Grades 9-12

Credit: 0.5 unit

**PREREQUISITE:** None

This class is designed to introduce students to different techniques of working with woods, metals, and plastics. Hands-on, problem-solving activities help the students develop skills and produce several different finished projects. This class does have a class fee for take home projects.

### POWER AND ENERGY TECHNOLOGY

Grades 9-12

Credit: 0.5 unit

**PREREQUISITE:** None

A variety of past, present and future energy sources will be studied. Hands-on lab activities will accompany classroom instruction in Flight, Aerospace Transportation, Solar Energy, Small Engine Operation, Electricity and Marine Transportation. Students may be required to bring items into class to help construct projects. This class does have a class fee for take home projects.

### CREATIVE DESIGN AND TECHNOLOGY

Grades: 9-12

Credit: 0.5 unit

**PREREQUISITE:** None

In Creative Design and Technology students will learn the principles, techniques, and importance of good design by using industry leading technologies and programs. Students will combine creativity with technology, marketing, and advertising design by producing digital assets such as logos, websites, social media coupled with a variety of hands-on projects like t-shirts, coasters, and stickers. Creative Design and Technology will also introduce students to some of the technologies available throughout the industrial technology department. . This class does have a class fee for take home projects.

### ADVANCED MATERIALS & PROCESSING TECHNOLOGY

Grades: 10-12

Credit: 1 unit

**PREREQUISITE:** C in Materials & Processing Tech and/or teacher approval

Advanced Materials and Processes is an advanced class designed to help a student improve upon skills and knowledge which they gained in their previous classes in the industrial technology area. Materials covered will include: wood, metal, plastics, and composites. Processes covered will include: separating, combining, forming, conditioning, and automating tools. This class does have a shop fee that will be dependent upon what projects the students build and typically runs between \$35.00 and up.

**Students are highly encouraged to join the co-curricular organization SkillsUSA (an organization that prepares students for careers in trade, technical, and skilled service occupations) to gain authentic experiences through leadership conferences, competition, and networking. Membership fees are required for membership as well as possible fundraising efforts. Assistance is available if fees present a hardship.**

### AUTO AND HOME CARE

Grades 10-12

Credit: 0.5 unit

**PREREQUISITE:** None

This course is designed to introduce students to the general operation and basic care necessary to maintain an automobile or home. Automotive maintenance items include: belts, hoses, batteries, tires, fluids, filters and similar items are covered as well as procedures such as jump starting a stalled car and changing a flat tire. Home maintenance items that could be covered would include: basic house construction, interior/exterior walls and coverings, heating/cooling, plumbing, electrical wiring, and general maintenance.

### SMALL ENGINE REPAIR

Grades 10-12

Credit: 0.5 unit

**PREREQUISITE:** None.

Students will study a variety of engine types with an emphasis on 4-stroke cycle. Activities include small engine overhaul, ignition tune-up, and fuel system repair. Manuals or computer software will be used to locate parts and specifications. Each student is required to provide one repairable 4-cycle engine and will be responsible for the cost of any parts, gaskets sets, and repairs. This class does have a class fee.

### BASIC ELECTRICITY/ELECTRONICS

Grades 10-12

Credit: 0.5 unit

**PREREQUISITE:** None **NOTE: Strong math and reading skills are recommended**

Students will design, build, test and troubleshoot electrical and electronic circuits. Actual components as well as computer simulations will be used. AC, DC, Series, and Parallel circuits will be studied. Students will do activities involving soldering, printed circuits, semiconductors, generators, motors, and residential wiring. This class does have a class fee for take home projects.

## METAL TECHNOLOGY

Grades: 10-12

Credit: 1 unit

**PREREQUISITE:** Recommended C or above in Advanced Material and Processing Technology and/or teacher approval. The students will study the many facets of the metal industry and related fields. They will gain experience with sheet metal, bench metal, machining, welding, forging, heat-treating, and foundry. Students will construct individual projects. This class does have a class fee for take home projects. **Students are highly encouraged to join the co-curricular organization SkillsUSA (an organization that prepares students for careers in trade, technical, and skilled service occupations) to gain authentic experiences through leadership conferences, competition, and networking. Membership fees are required for membership as well as possible fundraising efforts. Assistance is available if fees present a hardship.**

## MACHINE TOOL TECHNOLOGY

Grades: 11-12

Credit: 1 unit

**LSHS Only PREREQUISITE:** Recommended C or above in Metal Technology and/or teacher approval

The purpose of this class is to acquaint students to the manufacturing processes that are involved in machine tool technology. In this course students will acquire a variety of skills including: milling, turning, drilling and grinding. Students will also be taught how to use precision measurement tools and the proper safety procedures expected in the machining industry. Students will construct individual projects. This class does have a class fee for take home projects. **Students are highly encouraged to join the co-curricular organization SkillsUSA (an organization that prepares students for careers in trade, technical, and skilled service occupations) to gain authentic experiences through leadership conferences, competition, and networking. Membership fees are required for membership as well as possible fundraising efforts. Assistance is available if fees present a hardship.**

## WOODWORKING TECHNOLOGY

Grades: 10-12

Credit: 1 unit

**PREREQUISITE:** Recommended C or above in Material and Processing Technology and/or teacher approval

Students will be introduced to the basic designs and processes used in woodworking. Planning, constructing and machine safety will be emphasized throughout the year. Each student will have required projects to complete in the first semester and an individually designed and constructed project in the second semester. This class does have a class fee for take home projects.

## FURNITURE MAKING

Grades: 11-12

Credit: 1 unit

**PREREQUISITE:** Recommended C or above in Woodworking Technology or Advanced Material and/or teacher approval. Students will further the development of their woodworking skills, furniture design and project construction. Machine maintenance and care as well as machine safety will be stressed during the course. This class does have a class fee for take home projects.

## ADVANCED CONCEPTS IN CAD

Grades 11-12

WEIGHTED: 0.666

Credit: 1 unit

**PREREQUISITE:** Recommended C or above in Civil Engineering and Architecture (CEA) and/or teacher approval

This course allows students who have taken Introduction to Engineering & Design (IED) and Civil Engineering & Architecture (CEA) to further prepare for a CAD or engineering related field. All students in this class will receive foundational instruction in the use of AutoCAD and the use and interchange of different CAD file types. Further instruction will be tailored to the student's chosen area of specialization. This class does have a class fee for take home projects.

## INTRODUCTION TO CONSTRUCTION

Grade: 9-12

Credit: .05 unit

**PREREQUISITE:** None

**Note:** Only available through R7 Online Academy

The course curriculum will cover various industry safety practices, protocols and practical applications. At the completion of this curriculum, students will have the knowledge base and preparation to complete their OSHA 10 certification test. Along with OSHA 10 Certification, the course will cover seven fundamental areas of construction and industry standards that can be build upon as a Market Value Asset.

## INTERNSHIP OPPORTUNITIES

### COOPERATIVE CAREER EXPERIENCE (CCE)

Grade: 12

Credit: 1 unit

**PREREQUISITE:** Must also enroll in CCE Internship, good discipline record, 90% attendance, GPA approval, teacher recommendation, and appropriate credits earned for graduation

This course focuses on career-focused topics related to: employer/employee relations, income tax, payroll deductions, workmen's compensation, safety, economics, human relations, management and leadership, unemployment insurance, job attitudes, communication, problem-solving, presentations, and wages. Work includes both individual and group written and oral assignments in class and individualized help with employment needs. Acquire job entry skills for related CCE Internship. **May be offered for articulated credit to eligible students. Dual credit information can be found under the Advanced Studies section.**

### COOPERATIVE CAREER EXPERIENCE (CCE) INTERNSHIP

Grade: 12

Credit: .5 unit for minimum 10-19 hours per week supervised employment

1 unit for average 20+ hours per week supervised employment

**PREREQUISITE:** Must also enroll in CCE listed below, good discipline record, 90% attendance, GPA approval, teacher recommendation, and appropriate credits earned for graduation

Cooperative work experience program; job training provided by participating area businesses such as automotive, construction, daycare, drafting, electrical, food service, industrial, maintenance/cleaning, mechanical, medical-related, and warehouse. Primary purpose is to provide experience and training in actual work situation. Employer contributes to evaluation. **NOTE: Leaving place of employment during the year requires approval of employer, coordinator, and administration**

# **PHYSICAL EDUCATION & HEALTH**

## Health/Physical Education Course Sequence

All students must take 2 semester PE courses and one semester of Health for graduation credit. One PE course must be Foundations of Fitness. They would then choose from any of the other courses on the second line of the chart.

### HEALTH

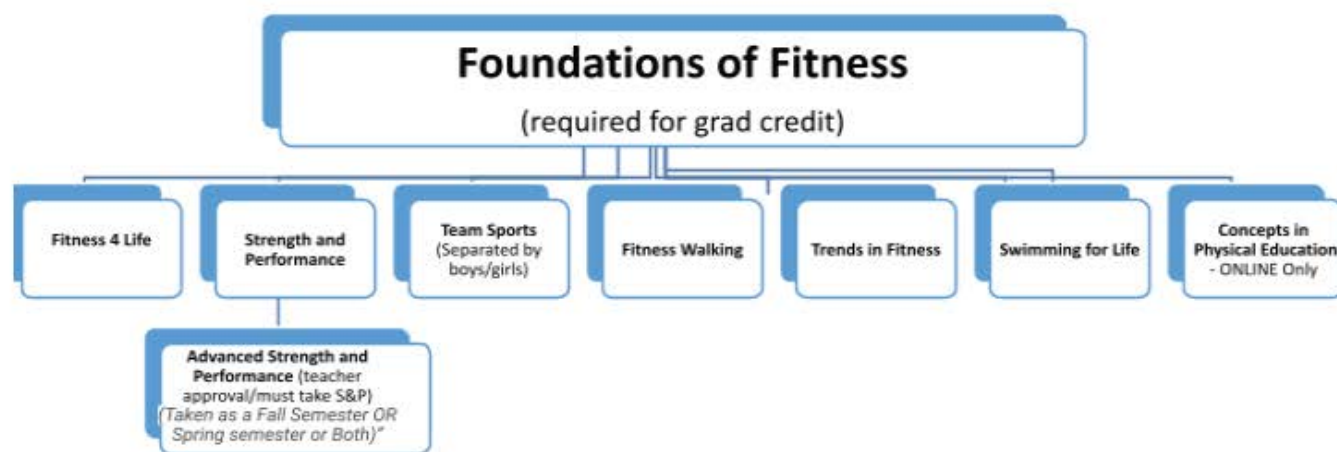
All students must take Health and Wellness for 1 semester for graduation credit or they may substitute the IB Sports Exercise and Health Science course for Health.

**Health and Wellness**  
(Online option available)

**IB Sports Exercise and Health Science**  
(Junior/Senior Only)

### ACTIVITY COURSES

Each student must take **Foundation of Fitness** and one other semester course for graduation.



### ELECTIVES

The courses below are ELECTIVE ONLY. They do not count towards PE or Health graduation credit.

**Essentials of Athletic Training and First Aid**

**Mentoring in Physical Education**

(Application and teacher approval)

**IB SEHS**

(May be taken as an elective or for HEALTH credit)

**All students must earn credit in TWO different Physical Education classes to meet the P.E. graduation requirement. (One of the two classes must be "Foundations of Fitness")**

#### **FOUNDATIONS OF FITNESS**

Grades: 9-12

Credit: 0.5 unit

**PREREQUISITE:** None

This class is designed for students to learn and exhibit personal behaviors and habits that will lead to a healthy, active lifestyle. Students will not only learn to take responsibility for their personal health, but learn to exhibit proper social behavior in all types of settings. A variety of activities taught in class will allow students to assess, interpret, and implement a personal fitness plan. The following activities will be covered in class: aerobic and anaerobic fitness activities, resistance / circuit training, and non-traditional team game activities. (A student CANNOT enroll in Foundations of Fitness if they have already fulfilled their P.E. graduation requirement.) **Foundations of Fitness cannot be repeated. Satisfies graduation requirement for CPR.**

#### **TEAM SPORTS (Boys)**

Grades: 10-12

Credit: 0.5 unit

#### **TEAM SPORTS (Girls)**

Grades: 10-12

Credit: 0.5 unit

**PREREQUISITE:** Foundations of Fitness

This course covers a variety of team activities including softball, flicker ball, ultimate frisbee, soccer, team handball, floor hockey, lacrosse, volleyball and basketball. Physical fitness testing and a variety of fitness activities and lead up games may be included at the teacher's discretion. This class allows students the opportunity to continue to develop their level of skill, as well as apply learned skill, knowledge, and strategies within the context of the class activities.

#### **FITNESS 4 LIFE**

Grades: 9-12

Credit: 0.5 unit

**PREREQUISITE:** None

This course covers a variety of lifetime activities including tennis, golf / disc golf, horseshoes / washers, bocce ball, bowling, handball, badminton and table tennis. Physical fitness testing and a variety of fitness activities and lead up games may be included at the teacher's discretion. This class allows students the opportunity to develop their skill level, as well as apply learned skills, knowledge, and strategies within the context of the class activities. The class will include field trip experiences in some of the activities. Maximum cost of class/\$40.

#### **STRENGTH AND PERFORMANCE**

Grades: 9-12

Credit: 0.5 unit

**PREREQUISITE:** None

This is an introductory level course structured to emphasize proper technique for all lifts and exercises, including safety. Students are provided principles and practice techniques for a beginning strength program. Progression concepts are taught and practiced as students use personal goals to develop and work at their individual performance levels. Nutritional needs, goal setting, and the negative effects of performance enhancing drugs and alcohol are discussed and students will understand their effects. Students will be expected to work in a cooperative environment and model respect for self and others. Class can be repeated and taken both semesters if desired.

#### **ADVANCED STRENGTH AND PERFORMANCE - Fall Semester**

Grades: 10-12

Credit: 0.5 unit

**PREREQUISITE:** Teacher approval and a 'B' or higher in the Strength and Performance course.

This is an advanced level class that builds on techniques and training methods introduced in the Strength and Performance course. Students will establish personal goals and be expected to demonstrate an improved level of muscular strength, endurance, explosive power, agility and flexibility. Nutritional needs and the negative effects of performance enhancing drugs and alcohol are investigated. Students will be expected to work in a cooperative environment and model respect for self and others. Class can be repeated.

#### **ADVANCED STRENGTH AND PERFORMANCE - Spring Semester**

Grades: 10-12

Credit: 0.5 unit

**PREREQUISITE:** Teacher approval and a 'B' or higher in the Strength and Performance course. This is an advanced level class that builds on techniques and training methods introduced in the Strength and Performance course. Students will establish personal goals and be expected to demonstrate an improved level of muscular strength, endurance, explosive power, agility and flexibility. Nutritional needs and the negative effects of performance enhancing drugs and alcohol are investigated. Students will be expected to work in a cooperative environment and model respect for self and others. Class can be repeated

***Advanced Strength and Performance Course may be taken in Fall Semester, Spring Semester, or Both to create a yearlong course.***

## **SWIMMING FOR LIFE**

**(Blended – Class will meet at Aquatic Center M, T, W, Th. Friday class will not meet and assignments will be online.)** This class is taught at the LS Aquatics Center on the campus of Summit Lakes Middle School. Class begins at 7:00 each day and the student MUST provide their own transportation to the Aquatic Center. Transportation back to the home school is available through the school district.

Grades: 9 -12

Credit: .5 unit

**PREREQUISITE:** Foundations of Fitness

This course is designed for students to develop swimming and water safety skills from beginner up to an intermediate/advanced swimmer level. Students do not need to have any swimming ability to enroll in this course. Instruction is provided in survival and basic water safety skills, swimming stroke development, water games, and fitness conditioning/water aerobics, as well as Adult CPR. Lifeguard certification is available for students that meet prerequisites and are interested. If students choose the lifeguard option, they must be 15 years of age during the class to become Lifeguard certified. There is an American Red Cross certification fee (no more than \$50.00) for the Lifeguard certification. Required Swim Gear: Girls 1-piece suits only. Boys trunksonly (no speedos/jammers). Both boys/girls need goggles.

## **WALKING FOR FITNESS**

Grades 10-12

Credit .5 unit

**PREREQUISITE:** Foundations of Fitness

This course is designed for students to increase their fitness level through walking. Recent studies have shown that increasing your physical activity by a small amount can make huge gains in your health. Students will learn about the health benefits of walking and improve their health through fitness walking.

## **TRENDS IN PHYSICAL FITNESS**

Grades 10-12

Credit .5 unit

**PREREQUISITE:** Foundations of Fitness

Trends in Physical Fitness is a course for students that would prefer a higher level of physical fitness without game play. It will emphasize a variety of fitness activities such as yoga, body weight exercises, kickboxing, Pilates, Tabata, HITT, and Bootcamp p type workouts. It is different and separate from our already existing strength and performance class. The proper balance of nutrition and exercise concepts will be incorporated into this class.

## **CONCEPTS IN PHYSICAL EDUCATION – ONLINE**

Grades 10-12

Credit .5 unit

**PREREQUISITE:** Foundations of Fitness

This course will introduce students to various activities that promote an active fitness lifestyle. Students will participate in activities that are current fitness trends such as hiking, biking, pickleball, tennis, ice skating, roller skating, fitness walking, jogging, resistance training, HITT training, yoga etc. Students will utilize current technology, provided by the District for the semester, to track and analyze their heart rate, steps, time engaged in activity and energy expenditure. Students will set personal activity goals and journal their plan and action steps toward those goals. Students will also investigate their community fitness areas such as parks, recreation and fitness centers to determine cost, availability and access as well as activities available at that site. This course may have some on site activity/fitness assessment along with online journaling, tracking and analysis. Students are expected to be self-motivated and disciplined to complete work as scheduled.

# **HEALTH**

## **HEALTH - WELLNESS FOR LIFE**

Grades: 9-10

Credit: .5 unit

**PREREQUISITE:** None

Students will learn about basic health information and services, and use such information in ways that will promote lifetime health and wellness behaviors. Throughout this course you, the student, will be able to put into practice important health skills and fundamentals learned in class. Other topics covered in this course are human growth and development, STDs and HIV/AIDS information

## ELECTIVE ONLY

### ESSENTIALS OF ATHLETIC TRAINING AND FIRST AID

Grades: 11-12

Credit: .5 unit

**PREREQUISITE:** An above average science background is highly recommended and Biology I is also highly recommended. Taking Anatomy previously or concurrently is helpful.

#### **DOES NOT COUNT TOWARD P.E. GRADUATION REQUIREMENT**

The content of this course will focus on orthopedic anatomy, the physiology of healing, and maintenance of common injuries and illnesses. This course is designed to give students preparing for a career in the healthcare industry a general knowledge of athletic injuries and illnesses. The class will cover information needed for the student, upon completion, to give care and first aid to the sick and injured individual that he/she may encounter in their day to day life. Topics that will be covered related to this area include the evaluation, recognition, treatment and rehabilitation of athletic-related injuries. Students will have the opportunity to become certified in Adult CPR/AED. *Class may be taken for elective credit only.*

### IB SPORTS, EXERCISE AND HEALTH SCIENCE (SEHS) SL

Grade: 11-12

**WEIGHTED: 1.0**

Credit: 1 unit

\*IB SEHS is an IB elective course and fulfills the **Health and Wellness graduation requirement.**

**PREREQUISITE:** B- or higher in Biology I / AS Biology I and Chemistry I / AS Chemistry I and / or teacher approval

One-year program: This course incorporates the traditional disciplines of anatomy and physiology, biomechanics, physical activity and health, and nutrition, which are studied in the context of sport, exercise and health. Students will cover a wide range of core and option topics and carry out practical (experimental) investigations in both laboratory and field settings. This will provide an opportunity to acquire the knowledge and understanding necessary to apply scientific principles and critically analyze human performance. Where relevant, the course will address issues of international dimension and ethics by considering sport, exercise and health relative to the individual and in a global context. **Refer to the Advanced Studies section for IB distinctions, grading, testing and exam fee requirements.**

### MENTORING IN PHYSICAL EDUCATION

Grade: 11-12

Credit: .5

**PREREQUISITE:** Teacher Approval/Application - Student must complete graduation requirements in the PE Dept. prior to taking this course (FOF + 1)

Mentoring in Physical Education will give regular education students the opportunity and privilege to serve as a mentor to students with disabilities. This course addresses the unique physical education needs of students with a variety of disabilities in a setting that allows for positive interaction with peers, achieve success, improve social skills and build self-esteem. In this class, mentors will gain and develop valuable post-secondary soft skills such as leadership and problem-solving skills, communication, empathy and teamwork. The experiences and skills gained in this class will serve both groups of students. Peers always need to be encouraging and dress appropriately for activities.

# **AIR FORCE JUNIOR ROTC**

**The Air Force Junior ROTC (AFJROTC) Program provides the opportunity for students to study and apply leadership, develop self-reliance and self-discipline, understand basic values and the elements of character, and participate in a wide range of exciting learning environments. Absolutely no military obligation is incurred as a result of enrollment in the program and expenses are paid by the U. S. Government. Students are required to wear the Air Force uniform one day per week and meet the Air Force grooming standards (uniform supplied and tailored free of charge). By completing two or three years of the four-year AFJROTC program, students can compete for a JROTC scholarship to college and may be eligible to enter the military at a higher pay grade.**

#### **AFJROTC (ASL 1): Aerospace Science and Leadership 100**

Grades 9-12

Credit: 1 Unit

##### **PREREQUISITE: None**

**Aerospace Science 100** - *Milestones in Aviation History 2nd Edition*: This is the recommended first AS course for all new cadets. It is an aviation history course focusing on the development of flight throughout the centuries. It starts with ancient civilizations and flight, then progresses through time to future developments in aerospace, with an introduction into cyber technologies. The intent of this textbook is to bring alive the significant discoveries in flight a reality. The intent is to bring alive the significant discoveries in flight a reality. This book tells the story of why we are so proud of our Air Force heritage — laying the foundation for future Air Force JROTC aerospace science courses.

**Leadership Education 100** - *Traditions, Wellness, and Foundations of Citizenship*: It is intended for students who are entering the AFJROTC program and beginning their high school studies. It will introduce cadets to history, organization, mission, traditions, goals, and objectives of JROTC for all services. It introduces key military customs and courtesies, how to project a positive attitude, and exam the principles of ethical and moral behavior. It provides strategies for effective note taking and study skills for academic success. Lessons will cover how to be emotionally, mentally, and physically healthy. Avoiding and preventing violence in today's society will also be covered. How to recognize types of bullying and how to advocate for prevention of this type of behavior. It will cover healthy living, physical fitness, and how to make safe, drug-free, and responsible decisions. This textbook will also examine the negative effects of air and water pollution, and how to help keep the environment safe. Cadets will be introduced to civics and our national government, including a historical understanding of the American flag and other important national symbols. The final chapter will also cover how the US Constitution protects our rights and freedoms as American citizens.

#### **AFJROTC (ASL 2): Aerospace Science and Leadership 200**

Grades 9-12

Credit: 1 Unit

Elective Science Credit

##### **PREREQUISITE: Aerospace Science and Leadership 100**

**Aerospace Science 200** - *The Science of Flight: A Gateway to New Horizons, 2nd Edition*, course has been completely rewritten to include the latest information and teaching philosophies, incorporating 21st century learning strategies. This new course provides students with up-to-date information on exploring the fundamentals of the science of flight. It all starts with an introduction to the principles of flight. Students will explore aircraft design, flight control, and aircraft power options. In addition, students explore weather concepts, the effects of flight on the human body, and how to navigate during flight. Finally, students will investigate the safety of flight and possible career options in the aviation industry. This textbook is intended for high school students and complements material taught in high school history, science, and social studies courses.

**Leadership Education 200** - *Communication, Awareness, and Leadership, Second Edition*: This is a customized course designed to improve communication, enhance awareness of self and others, and provide fundamentals of leadership and followership. The course focuses on the Air Force Junior Reserve Officer Training Corps (AFJROTC) mission to "develop citizens of character dedicated to serving their nation and community." Woven throughout is the underlying theme of developing personal integrity. The course also emphasizes leadership and values such as service and excellence. This update incorporates 21st century teaching, learning, and skills of critical thinking, communication, collaboration, and creativity.

**Introduction to Global Awareness 220** - *An Introduction to Global Awareness, 2nd Edition*: This new course provides students with up-to-date information on exploring the concept of global awareness and the cultures of other regions throughout the world. It starts with an introduction of what global awareness is and the effects of technology on global culture. Students are then taken on a journey around the world, through different cultures in the Middle East, Asia, Africa, Latin America, Europe, and Australia. Finally, the students will be provided cultural information regarding Canada and Mexico. **The course contents have been correlated using the Common Core State Standards for English Language Arts and Literacy (CCSS. ELA-Literacy) in History/Social Studies, Science, and Technical Subjects developed by the Common Core State Standards Initiative, and the International Society for Technology in Education (ISTE) Standards for Students (listed for technology activities).**

**AFJROTC (ASL 3): Aerospace Science and Leadership 300**

Grades 10-12

Credit: 1 Unit

Personal Finance Credit

**PREREQUISITE: Aerospace Science and Leadership 100**

**Aerospace Science 300** - *Exploring Space, The High Frontier, Second Edition*: This course is typically the third/fourth-year science course in the high school sequence of Aerospace Science courses for AFJROTC. This course has been completely rewritten to include the latest information and teaching philosophies, incorporating 21st - century learning strategies. This new course provides students with the latest information on exploring space and an introduction to cybersecurity and technology. It begins with early astronomy and the basic interest in the universe from the Greeks through the Renaissance and Enlightenment ages. Students will be provided an in-depth view of the solar system, including Earth, the Sun, the Moon, and planets. The text also discusses the history of space travel and more modern space probes and robotics. Students will examine the effects of space on the human body. The text also investigates the history of rockets, launch vehicles, and the coordinated systems required for a successful launch into space. Finally, the text will offer a cybersecurity chapter that outlines the importance of cybersecurity in space and in daily life.

**Leadership Education/Personal Finance 300** - *Leadership Education 300: Life Skills and Career Opportunities, Second Edition* provides an essential component of leadership education for today's high school students. This course is designed to prepare students for life after high school in the high-tech, globally oriented, and diverse workplace of the 21st-century. Students will learn how to save, invest, and spend money wisely, as well as how to avoid credit traps. They learn about real-life issues such as contracts, leases, warranties, legal notices, personal bills, money-saving strategies for grocery shopping, apartment selection, and life with roommates. In addition, students learn how to select a school that is right for them; how to apply for admission to a vocational or technical school, community college, or college/university; and how to succeed in these learning environments. Information is provided on how to conduct the job search for students who wish to enter the workforce right after high school or after additional education and training. They learn how to prepare a winning résumé, and how to develop effective interviewing skills. The text also provides information on working for the federal government to include careers in the military, aerospace industry, and public service. Finally, students will consider the most important elements of life skills for all Americans: civic responsibilities, such as volunteering, registering to vote, jury duty, and draft registration. **Note:** Instructors have district approval to blend this portion of the AFJROTC curriculum with the district's Personal Finance curriculum. To receive credit for Personal Finance, a student must achieve a passing score on the Personal Finance EOC.

**AFJROTC (ASL 4): Aerospace Science and Leadership 400**

Grades 10-12

Credit: 1 Unit

**PREREQUISITE: Aerospace Science and Leadership 100 and 200 or 300**

**Aerospace Science 400** – Management of the Cadet Corps: The cadets should be in a leadership position of managing cadet corps programs by their fourth year in the Air Force Junior ROTC program. Not every leadership position needs to be held by fourth year cadets and AS 400 is intended for 4th year cadets who hold corps management positions. However, if necessary due to low number of 4th year cadets, 3rd year cadets may be placed in corps management positions and enrolled in AS 400. AS 400 is not intended for cadets who do not hold corps management/leadership positions and instructors should ensure only those cadets holding corps management/leadership positions are enrolled in the course. This hands-on experience affords cadets the opportunity to put theories of previous leadership courses into practice. Planning, organizing, coordinating, directing, controlling, and decision-making will be done by cadets. They will put into practice their communication, decision-making, personal-interaction, managerial, and organizational skills.

**Leadership Education 400** – Fundamentals of Management: To analyze management and its application to JROTC. To analyze the elements of project management. To evaluate the importance of formal planning within an organization. To analyze decision making within an organization. To evaluate time management and change management within an organization. To analyze concerns managers must consider in managing individuals and groups. To analyze the factors that make work teams productive. To evaluate the interpersonal skills of delegating, negotiating, and mentoring.

**AFJROTC (ASL 5): Aerospace Science and Leadership 500****WEIGHTED 0.666**

Grades 11-12

Credit: 1 Unit

**PREREQUISITE: Have successfully completed a minimum of 2 years of AFJROTC coursework (to include AS 200: *The Science of Flight: A Gateway to New Horizons*) and maintained a grade of B or better in AFJROTC.**

This course is the foundation for students interested in receiving a private pilot's license. The material covered is an advanced, more in-depth study of aerospace topics. Aviation Ground Honors School (AHGS) is taught as the Aerospace Science component of an AFJROTC class. The intent of the program is to provide AFJROTC an academically challenging course for top achievers in the AFJROTC program. Entry into ground school should be earned by high achievement in other AFJROTC courses and involvement in the cadet corps. The course should receive "honors" (i.e. advanced) credit and must have approval of principal. The student must have written approval from the SASI/ASI prior to registering and must be a junior or senior honor student who has demonstrated potential and aptitude. When the course is completed students should be prepared to take and pass the Federal Aviation Administration (FAA) written examination per requirement of the Federal Aviation Regulations FAR 61-05 Section 61.3.

**DRILL AND CEREMONIES:** The Drill and Ceremonies manual is used to teach the Drill Curriculum (Cumulative) course by providing an in-depth introduction to drill and ceremonies. The course concentrates on the elements of military drill, and describes individual and group precision movements, procedures for saluting, drill, ceremonies, reviews, parades, and development of the command voice. Cadets are provided detailed instruction on ceremonial performances and protocol for civilian and military events and have the opportunity to personally learn drill. Though each class will follow an established lesson plan, most of the work is to be hands-on. Instructors are provided by Air Force Manual (AFMAN) 36-2203 to teach the Drill and Ceremonies course and may download the latest version of AFMAN 36-2203 from Air Force e-pubs website (<https://www.e-publishing.af.mil/>). In addition, instructors may order the Army Field Manual 3-21.5 and the Interservice Cross-Index Drill Manual to supplement the teaching of Drill and Ceremonies.

**WELLNESS PROGRAM:** Wellness is an official and integral part of the Air Force Junior ROTC program. It consists of two exercise programs focused upon individual base line improvements with the goal of achieving a national standard as calculated by age and gender. Wellness curriculum is instrumental in developing citizens of character dedicated to serving our nation and communities. The program is provided as a tool to help you develop individualized fitness programs for your cadets. Cadets will be given the opportunity to put into practice the wellness concepts that are taught in Leadership Education 100. Instructors are encouraged to include team sports to keep the Wellness Program fun and motivating. Team sports also provide cadets the opportunity to develop leadership skills and build esprit de corps. Instructors are also encouraged to utilize sites such as [www.pecentral.org](http://www.pecentral.org) to help develop lesson plans and fitness activities. The Wellness Program also provides a list of 19 exercises with examples that may be utilized in a 36-week program modifiable to help provide variety and meet individual and district/state goals. Instructors should utilize fitness programs that best fit the requirements within their district/ county/state. HQ AFJROTC offers suggested fitness programs that will instructors with developing a comprehensive fitness program. Cadet fitness improvement is rewarded by earning the Health and Wellness Ribbon.

**Cadet Fitness Assessments:** Instructors are expected to complete a pre- and post- Physical Fitness Assessment for cadets in their unit. A pre-assessment will establish a baseline for each cadet, the post assessment will determine whether the cadet has improved. In 2020, the Wellness program changed to mirror the Air Force Physical Fitness Test. In light of this, new guidance for the three required exercises (sit-ups, 1-mile run, and right-angle push-ups) and physical fitness test instructions have been uploaded to the Curriculum SuperStore for instructor use.

## Other Course Options

### LEARNING LAB

Grades: 9-12

Credit: None

#### PREREQUISITE: NONE

This course is offered as a structured study opportunity and is supervised by certified staff.

### LIBRARY/MEDIA CENTER

#### LIBRARY SCIENCE STUDENT ASSISTANT

Grades: 10-12

Credit: 1 unit

Library Media Center

**PREREQUISITE:** Approval by library media specialist.

Excellent attendance is mandatory for acceptance as library assistant.

Students will learn a variety of jobs and work independently. Accuracy, dependability, efficiency of tasks, maintenance of correct shelving, and proper circulation of materials are major factors in determining a student's grade. Students will learn and be assessed on skills in information literacy and library science

### CLERICAL AIDE

Grade: 12

Credit: None

**PREREQUISITE:** Application and approval by counselor/teacher

**PROCEDURE:** (1) Have attendance clerk register number of days absent for current year (to be submitted with request for approval); (2) secure teacher approval; (3) counselor must sign for final approval; (4) community service must be completed. Student works for a department doing various tasks such as grading, filing, compiling, and typing. Clerical Aide follows the same rules/regulations expected of other students. Forms may be picked up in the Counseling Center.

### SPECIAL SERVICES/AT-RISK PROGRAMS

Lee's Summit School District provides programming for students *At-Risk*. Parents and students should seek additional information from the student's Counselor.

### SPECIAL EDUCATION

All special education classes are based on a cross-categorical philosophy and are chosen according to individual student needs.

# **OFF-CAMPUS CAREER EDUCATION PROGRAMS**

# SUMMIT TECHNOLOGY ACADEMY

SUMMIT TECHNOLOGY ACADEMY, Missouri Innovation Campus Bldg., 1101 NW Innovation Pkwy, LSMO sta.lsr7.org

**\*\*** denotes a **Project Lead the Way (PLTW)** course, which is a nationally recognized engineering, biomedical, and computer science curriculum being offered through numerous school districts. Students can advance through a sequence of courses such as Introduction to Engineering Design, Principles of Engineering, Civil Engineering and Architecture (CEA) to access the capstone engineering courses at STA. Likewise, students can advance through Principles of Biomedical Science and Human Body Systems to access the capstone course of Medical Interventions/Biomedical Innovation. Ask your Guidance Counselor about information regarding PLTW or go to [www.pltw.org](http://www.pltw.org). Courses marked with double asterisk (\*\*) are approved Project Lead the Way courses. All STA capstone courses are part of the **International Baccalaureate Career-Related Program** course, which incorporates the educational principles, vision and learner profile of the IB into a unique offering that specifically addresses the needs of students who wish to engage in career-related education. The IBCP encourages students to benefit from an IB education, through a selection of two or more Diploma Programme courses in addition to a unique IBCP core, comprised of a Personal and Professional Skills course (see description in the social studies section of the course guide), a reflective project, language development, and community service.

**All STA programs require home internet access.**

## ENGINEERING ELECTIVE COURSES

**Students need to choose 2 of the 3 courses (DE, CIM, AE) to make a full-year selection**

### **DIGITAL ELECTRONICS™(DE) PLTW\*\***

Grade: 11-12

**WEIGHTED: 0.666**

Credits: 1.5

**DUAL CREDIT:** UCM ENGT 1011, 1050 (7 credits available to eligible students)

**PREREQUISITE:** GPA: 2.5 cumulative or higher; Attendance: 90% or higher; Math: Algebra I, B- or higher; Reading/Writing: 10th grade level

**Recommended:** Average Math and Engineering grade: B- or higher. \*Engineering involves applied mathematics; therefore, students are strongly encouraged to take the most rigorous math course for which they qualify and concurrently with their engineering course.

**HIGHLY RECOMMENDED for PLTW Member Schools:** Introduction to Engineering Design, Principles of Engineering

This fast-paced, college level course in applied logic gives students the opportunity to learn how computers/logic circuits think and control the world around us. Students will use applied math to understand the logic behind the circuits, as well as, computer simulation software to design and test digital circuitry prior to the actual construction of the circuits. Students will have the opportunity to learn everything from basic electronic circuit design, logic circuit design, all the way up to and including programming and interfacing with microcontrollers. Student can expect to use the engineering design process to think critically and independently solve open-ended problems. More information can be found at: <https://sta.lsr7.org/academics/engineering/de>

### **COMPUTER INTEGRATED MANUFACTURING™(CIM) PLTW\*\***

Grades: 11-12

**WEIGHTED: 0.666**

Credits: 1.5

**Dual Credit:** UCM ENGT 1012 (2 credits available to eligible students)

**PREREQUISITES:** GPA: 2.5 cumulative or higher; Attendance: 90% or higher; Algebra I with a B- or higher; Reading/Writing: 10th grade level.

**Recommended:** Average Math and Engineering grade: B- or higher. \*Engineering involves applied mathematics; therefore, students are strongly encouraged to take the most rigorous math course for which they qualify and concurrently with their engineering course. \*Engineering involves applied mathematics; therefore, students are strongly encouraged to take the most rigorous math course for which they qualify and concurrently with their engineering course.

**HIGHLY RECOMMENDED for PLTW Member Schools:** Introduction to Engineering Design, Principles of Engineering

This exciting course provides students with the fundamentals of computerized manufacturing technology in a global perspective. Students will have individual and team projects in the following areas of manufacturing: Computer Modeling-using a three dimensional, solid modeling software package with mass property analysis and design interface tools. Additive & Subtractive Prototyping - converting computer generated geometry into a CNC program to create prototypes - converting computer generated geometry into a program to drive CNC machine tools. Robotics- robotic arm programming and how they are used for materials handling and assembly operations. Flexible Manufacturing Systems - working in teams to design manufacturing work cells and table top factory simulations. The students will interact with industry experts and should expect to be challenged with ideation and creation of projects while working within a set of constraints. There will also be client connected projects that will be done as part of our connections to business partners in the area. More information can be found at: <https://sta.lsr7.org/academics/engineering/cim>

**AEROSPACE ENGINEERING (AE) PLTW\*\*****WEIGHTED: 0.666**

Grades: 11-12

Credits: 1.5

**for PLTW Member Schools:** Introduction to Engineering Design, Principles of Engineering**PREREQUISITES:** GPA: 2.5 cumulative or higher. Attendance: 90% or higher; Algebra II with a B- or higher; Reading/Writing: 10th grade level.**HIGHLY RECOMMENDED for PLTW Member Schools::** Introduction to Engineering Design, Principles of Engineering**Recommended:** Average Math and Engineering grade: B- or higher; Physics (completed or concurrent enrollment).

\*Engineering involves applied mathematics; therefore, students are strongly encouraged to take the most rigorous math course for which they qualify and concurrently with their engineering course.

Ever wonder what makes an airplane fly? Aerospace Engineering will give students the opportunity to understand the physics of flight. This course provides students with the fundamental knowledge and experience to apply mathematical, scientific, and engineering principles to the design, development, and evolution of aircraft, space vehicles and their operating systems. In the classroom, students will engage in creative thinking and problem-solving activities using software that allows students to design, test, and evaluate a variety of air and space vehicles, their systems, and launching, guidance and control procedures. Students will build and test airfoils, gliders and model rockets, as well as fly a plane in a flight simulator program. Students can expect to work with and/or be mentored by professionals in the aviation/aerospace career field from around the Greater Kansas City metropolitan area. What makes things fly? Find out in Aerospace Engineering! More information can be found at: <https://sta.lsr7.org/academics/engineering/ae>

**AEROSPACE ACADEMY****WEIGHTED: 0.666**

Grade: 11- 12

Credits: 3 units, 1.5 Fall Semester, 1.5 Spring Semester

**DUAL CREDIT:** UCM AVIA 1020, 1211, 1212, 1213, 1310, 1903 (11 credits available to eligible students)**PREREQUISITE:** GPA: 2.5 cumulative or higher; Attendance: 90% or higher; Algebra I with a B- or higher; Reading/Writing: 10th grade level.**Recommended:** Average Math and Engineering grade: B- or higher; Aerospace Engineering (AE) and Digital Electronics (DE) are highly recommended for students interested in avionics and aviation maintenance career paths.

Have you ever wanted to design, maintain, or pilot an airplane or rocket? Are you interested in a deeper understanding of what it takes to work in the Aviation and Aerospace fields? The Aerospace Academy Capstone provides advanced level avionics/aviation/aerospace preparation for students pursuing careers in seven aviation/aerospace pathways. This program represents a collaboration between STA, the City of Lee's Summit, the Lee's Summit Economic Development Council, and the Lee's Summit Municipal Airport and includes potential lab opportunities for students at the airport. Students will learn cutting-edge curriculum developed by subject matter experts in aerospace/aviation including acquiring learning targets for a FAA Remote Pilot certification, career exploration for the seven aerospace workforce pathways, hands-on applied learning experiences at the Lee's Summit Airport utilizing industry standard equipment, and a field experience within one or more of the seven aerospace pathways. More information can be found at: <https://sta.lsr7.org/academics/engineering/aa>

## ENGINEERING CAPSTONE COURSE

### ENGINEERING DESIGN AND DEVELOPMENT (EDD) PLTW\*\*

**WEIGHTED: 0.666**

Grade: 12

Credits: 3 units, 1.5 Fall Semester, 1.5 Spring Semester

**PREREQUISITE:** GPA: 2.5 cumulative or higher; Attendance: 90% or higher; Math: Algebra II, B- or higher.

**PREREQUISITE for PLTW Member Schools:** Introduction to Engineering Design (IED), Principles of Engineering (POE), and **one** of the following courses: Digital Electronics (DE), Computer Integrated Manufacturing (CIM), Aerospace Engineering (AE) **or** Civil Engineering/Architecture (CEA).

**Recommended:** Average Math and Engineering grade: B- or higher; Pre-calculus (completed or concurrent enrollment) **OR** Physics with a B or higher. \*Engineering involves applied mathematics; therefore, students are strongly encouraged to take the most rigorous math course for which they qualify and concurrently with their engineering course.

**Fall semester (EDD)** Student design teams work on an open-ended problem in which they research, design, construct and test a solution. Students apply principles developed in the four preceding courses, learn advanced physics and mathematical applications, and are guided by engineering mentors. Design teams must present progress reports, submit a final written report, and defend their solutions to a panel of Kansas City area engineering professionals at the end of the fall semester. There may be opportunities to work with local business partners in helping solve some client-connected projects if the team so chooses. More information can be found at: <https://sta.lsr7.org/academics/engineering/edd>

**Spring Semester (EFE)** Prerequisite: B- or better in EDD, and a B- or better in the mathematical activities as presented by the instructor throughout EDD.

The Engineering Field Experience (EFE) course is designed to provide students with those experiences that are relevant to the day-to-day working environment of professional engineers, independent thinking, problem-solving, teamwork and communication. A project is determined by a local business partner that includes aspects of various engineering fields, such as mechanical, electrical and civil. Engineers will be the subject matter experts and teach relevant topics to the students twice a week to aid in the completion of the project. Students will be divided up into teams based on the needs of the project and will be expected to work as a team to bring the project to fruition. Students will consider all aspects of the planning and design for the project and present their findings at the end of the semester.

\*Students will need to make arrangements for transportation to off-site visits on predetermined dates. Please speak with the administration if you have any transportation concerns.

## COMPUTER SCIENCE

**Students need to choose 2 courses to make a full-year selection.**

**Please note all course prerequisites and recommendations.**

### DEVSECOPS

**WEIGHTED: 0.666**

Grade: 11-12

Credits: 1.5 units

Dual Credit: UCM NET 1060, CYBER 1500 (6 credits available to eligible students)

**PREREQUISITE:** GPA: 2.5 cumulative or higher; Attendance: 90% or higher; Math: Algebra I, B- or higher; Reading/Writing: 10th grade level; Other requirement: Keyboarding, minimum 30 WPM; and a fully functional laptop or desktop system (i.e. not a Chromebook or Mac).

**Recommended:** One of the following courses: PLTW Computer Science Essentials **OR** PLTW Computer Science Principles **OR** Computer Hardware and Operating Systems I (offered in a traditional format or through R7 Online)

Take your first steps in your career in software development! **Development, Security, and Operations (DevSecOps)** is a deep dive into the foundations of network operations by using the lens of security to tie it all together. Hands-on and simulation-based activities in this course assist with implementing network operations cyber security concepts. Students will see how culture, automation, and platform design integrates security as a shared responsibility throughout the entire IT lifecycle. In this course, you will learn about the OSI Model and how that model allows IT to function across CyberSecurity and Network Operations. Specifically, you will learn the principles and structure of IP addressing, LAN and WAN specifications, and network management. This course encompasses 2 additional college classes (6 college credits) in order to prepare the student for the CompTIA Network+ and Cisco CCNA Certification Exam. Learn information the tech industry needs for high-demand, high-wage tech careers. Students interested in the MIC CyberSecurity early bachelor degree program must enroll in this course and Advanced Network and Cyber Concepts. More information can be found at: <https://sta.lsr7.org/academics/computer-science/devsecops>

**ADVANCED NETWORK AND CYBER CONCEPTS****WEIGHTED: 0.666**

Grade: 11-12

Credits: 1.5 units

**Dual Credit:** UCM NET 1061, 2060 (6 credits available to eligible students)**PREREQUISITE:** DevSecOps with a B- or higher or teacher recommendation; GPA: 2.5 cumulative or higher; Attendance: 90% or higher; Math: Algebra I, B- or higher; Reading/Writing: 10th grade level; Other requirement: Keyboarding, minimum 30 WPM; and a fully functional laptop or desktop system (i.e. not a Chromebook or Mac).**Recommended:** One of the following courses: PLTW computer Science Essentials **OR** PLTW Computer Science Principles **OR** Computer Hardware and Operating Systems I (offered in a traditional format or through R7 Online)

This course provides a comprehensive, theoretical, and practical approach to learning the technologies and protocols needed to design, implement, and secure enterprise and wide area networks. This includes functionality, configuration, and troubleshooting of inter-VLAN routing, VLANs, WLANs as well as wide area networking technologies. This course encompasses 2 additional college classes (6 college credits) in order to prepare the student for the Cisco Certified Network Technician certification exam. Students interested in the MIC CyberSecurity early bachelor degree program should enroll in this course after completing DevSecOps.

More information can be found at: <https://sta.lsr7.org/academics/computer-science/advanced-network-and-cyber-concepts>**CYBER SECURITY****WEIGHTED: 0.666**

Grade: 11-12

Credits: 1.5 units

**Dual Credit:** UCM CYBR 1800 (3 credits available to eligible students)**PREREQUISITE:** DevSecOps with a B- or higher or teacher recommendation; GPA: 2.5 cumulative or higher; Attendance: 90% or higher; Math: Algebra I, B- or higher; Reading/Writing: 10th grade level; Keyboarding, minimum 30 WPM

Get the preparation needed for the Cyber Security workforce! This course will give students hands-on experience into network security protection, as well as an understanding of the types of attacks used against networks. The course will cover security policies such as risk management, data privacy, employee management, device management, network management, and business continuity. Students will also learn current technologies such as SSH, AAA, ACLs, IPS/IDS, PKI, and others. Students will develop an understanding of physical, perimeter, network, host, application and data defenses. This course covers the information required for the CompTIA Security+ certification exam.

More information can be found at: <https://sta.lsr7.org/academics/computer-science/cyber-security>**CYBER OPERATIONS****WEIGHTED: 0.666**

Grade: 11-12

Credits: 1.5 units

**Dual Credit:** UCM NET 2061 (3 credits available to eligible students)**PREREQUISITE:** DevSecOps with a B- or higher or teacher recommendation; GPA: 2.5 cumulative or higher; Attendance: 90% or higher; Math: Algebra I, B- or higher; Reading/Writing: 10th grade level; Keyboarding, minimum 30 WPM

Uncovering cybercrime, cyber espionage, and other networking threats are just some of the exciting cyber security jobs spanning across every industry. Learn the skills to join this fast-growing field and take advantage of the opportunities found in security operation centers. In this course students will learn security concepts, security monitoring, host-based analysis, network intrusion analysis, and security policies procedures. This course aligns with the National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework to support consistent communication language for cybersecurity education, training, and workforce development. This course covers the information required for TestOut Ethical Hacker Pro and Certified Ethical Hacker (CEH) certification exams.

More information can be found at: <https://sta.lsr7.org/academics/computer-science/cyber-operations>**SOFTWARE DEVELOPMENT - PYTHON****WEIGHTED: 0.666**

Grade: 11-12

Credits: 1.5 units

**Dual Credit:** UCM CS 1030, 2030 (6 credits available to eligible students)**PREREQUISITE:** GPA: 2.5 cumulative or higher; Attendance: 90% or higher; Math: Algebra II, B- or higher or previous programming knowledge; Reading/Writing: 10th grade or higher; Keyboarding, minimum of 30 WPM.**Recommended:** One of the following courses: PLTW Computer Science Essentials **OR** PLTW Computer Science Principles **OR** Computer Hardware and Operating Systems I (offered in a traditional format or through R7 Online)

Become empowered to program by learning the critical concepts of computer programming through the Python language. Learn Python content currently taught in college curriculum and in industry. Topics include basic computer organization and systems, data representation, algorithms, selections, loops, functions, classes, objects, elementary programming, applications, strings and text I/O, inheritance, lists, dictionaries, scripting, and various Python libraries. Students interested in the MIC Computer Science: Software Development or Software Engineering early bachelor degree program must enroll in this course and Software Development - Java.

More information can be found at: <https://sta.lsr7.org/academics/computer-science/software-development-python>

**SOFTWARE DEVELOPMENT - DATA AND AI**

Grade: 11-12

**WEIGHTED: 0.666**

Credits: 1.5 units

**PREREQUISITE:** Software Development - Python with B- or higher or PLTW Computer Science Principles or teacher recommendation; GPA: 2.5 cumulative or higher; Attendance: 90% or higher; Math; Algebra II, B- or higher or previous programming knowledge; Reading/Writing: 10<sup>th</sup> grade or higher; Keyboarding, minimum of 30 WPM.

**Recommended:** Prior understanding of the Python programming language is recommended.

Do you ever wonder why ads “just so happen” to pop up for you? Data doesn’t lie, and it is being used to make decisions and guide next steps daily. Uncover the mystery behind the data. Students will use the Python programming language to learn the basics of Data Analytics as well as give them hands-on experience working with database tools available. This course, designed with our advanced learners in mind, will continue their understanding and implementation of programming fundamentals and concepts acquired through previous programming courses. We will explore python libraries specific to the field of data manipulation. By the end of the semester, students will understand how Machine Learning fits into Artificial Intelligence and use different methods of Machine Learning including Neural Networks.

More information can be found at: <https://sta.lsr7.org/academics/computer-science/software-development-data-and-artificial-intelligence>

**SOFTWARE DEVELOPMENT - JAVA**

Grade: 11-12

**WEIGHTED: 0.666**

Credits: 1.5 units

**Dual Credit:** UCM CS 1100, 1110 (6 credits available to eligible students)

**PREREQUISITE:** GPA: 2.5 cumulative or higher; Attendance: 90% or higher; Math; Algebra II, B- or higher or previous programming knowledge; Reading/Writing: 10<sup>th</sup> grade or higher; Keyboarding, minimum of 30 WPM.

**Recommended:** One of the following courses: PLTW Computer Science Essentials **OR** PLTW Computer Science Principles **OR** Computer Hardware and Operating Systems I (offered in a traditional format or through R7 Online)

Learn Java, one of the primary languages of software development. Dig into Java content currently taught in college curriculum and in industry. This course teaches essential concepts of computer programming in the structured programming paradigm using a modern high-level programming language. Topics include foundational programming concepts, data types, variables, operators, selections, loops, methods, arrays, classes, objects, strings and text I/O, inheritance, polymorphism, interfaces, GUI basics, graphics, and event-driven programming. Students interested in the MIC Computer Science: Software Development or Software Engineering early bachelor degree program must enroll in this course and Software Development - Python.

More information can be found at: <https://sta.lsr7.org/academics/computer-science/software-development-java>

**SOFTWARE DEVELOPMENT - APPLICATIONS**

Grade: 11-12

**WEIGHTED: 0.666**

Credits: 1.5 units

**Dual Credit:** UCM CS 1820 (3 credits available to eligible students)

**PREREQUISITE:** Software Development - Java or PLTW Computer Science A and a teacher recommendation; GPA: 2.5 cumulative or higher; Attendance: 90% or higher; Math; Algebra II, B- or higher or previous programming knowledge; Reading/Writing: 10<sup>th</sup> grade or higher; Keyboarding, minimum of 30 WPM.

**Recommended:** One of the following courses: PLTW Computer Science Essentials **OR** PLTW Computer Science Principles **OR** Computer Hardware and Operating Systems I (offered in a traditional format or through R7 Online)

If gaming and apps are your thing, this is the course for you! Explore the history of game design while learning and utilizing the phases in the game development cycle. Learn the process of the design and implementation of software applications, including games, from initial research and development to the end goal of implementation. Students will learn what they need to create a functioning application by the end of this course. More information can be found at: <https://sta.lsr7.org/academics/computer-science/software-development-applications>

**ALLIED HEALTH ACADEMY**

Grade: 11-12

**WEIGHTED: 0.666**

Credits: 3 units, 1.5 Fall, 1.5 Spring

**Dual Credit:** OTC HSC 110, 120 (4 credits available to eligible students)**PREREQUISITE:** GPA: 2.5 cumulative or better; Attendance: 90% or better. Other requirements: Algebra I, Biology or Chemistry, with a C or better**Recommended:** Anatomy/Physiology; Psychology**REQUIREMENTS for Internship Placement:** Upon approval in the program, a negative drug screen and TB skin test results (at student expense), background check and proof of immunizations.

This program is for juniors and seniors interested in learning more about Allied Health careers or who would like to enter college healthcare programs after graduation. Students will be engaged in hands-on skills lab work and projects related to Dentistry, Health Information Technology; Occupational Therapy, Paramedic/EMT Physical Therapy/Physical Therapy Assistant, Radiology and Respiratory Care, Surgical Technology, Chiropractic, Athletic Training, Laboratory, Pharmacology, and other allied health careers. This program allows shadowing opportunities in allied health career fields. In addition, students have opportunities to gain

industry credentials such as Basic Life Saver CPR training, OSHA 10-Healthcare and HIPAA credentials. More information can be found at: <https://sta.lsr7.org/academics/health-science/ah>

**Students will have to provide transportation to accommodate outside lab experiences and shadowing.****MEDICAL INTERVENTIONS/BIOMEDICAL INNOVATION PLTW \*\***

Grade: 11-12

**WEIGHTED: 0.666**

Credits: 3 units, 1.5 Fall, 1.5 Spring

**COLLEGE CREDIT:** UCM BIOL 1510 (4 credits) for PLTW Human Body Systems and Medical Interventions. and for any 2 PLTW Biomedical Science courses BIO SCI 1113 General Biology (LEC 3.0) and BIO SCI 1219 General Biology Lab (LAB 1.0) through MO S & T. Scholarships and college credit are available at selected Universities across the U.S.**PREREQUISITE:** GPA: 2.5 cumulative or higher; Attendance: 90% or higher. Home internet access is required.**COURSE PREREQUISITE:** PLTW Principles of Biomedical Science and PLTW Human Body Systems preferred **OR** two of the following science courses: Biology, Chemistry, Anatomy and Physiology, or other related sciences with a B- or higher. Learner Profile: Independent learner; able to apply knowledge to new situations and concepts; strong desire to pursue a career in medicine; ability to read and synthesize college-level materials.

**PLTW Medical Interventions™** Students investigate the variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the lives of the Smith family. Students conduct laboratory experiments while exploring the medical science of how to prevent and fight infection in the human body, how to extract and evaluate the code in human DNA, how to prevent, diagnose and treat cancer, and how to determine and treat organ failure. Students are exposed to a wide range of interventions related to bacterial infections, surgery, genetic engineering, pharmacology, medical devices, and diagnostics. Students study real world medical interventions.

**PLTW Biomedical Innovation™** In this capstone course students design and conduct experiments related to a series of Biomedical science problems including Emergency Medicine, Human Anatomy and Physiology, Environmental Science, Molecular Biology, Forensic Science, and Laboratory Research. Students may work with a mentor or advisor from a university, hospital, or physician's office, as they complete a Team Research Project of their own design.. Students submit their Team Research Project along with other BI students in the metropolitan area to a team of medical professionals. Scholarships are awarded to top winners. Students completing all four PLTW Biomedical courses receive a STA/PLTW embroidered white coat at a white coat ceremony that recognizes them for completing this 4-year program.

More information can be found at: <https://sta.lsr7.org/academics/health-science/mibi>

**PROFESSIONAL NURSING**

Grade: 12

**WEIGHTED: 0.666**

Credits: 3 units, 1.5 Fall, 1.5 Spring

**Dual Credit:** UCM NUR 1700/2710 and NUR 2000 (4 credits available to eligible students)**PREREQUISITE:** GPA: 2.5 cumulative or higher; Attendance: 90% or higher; Math: Algebra I, C or higher; Reading/Writing: 10th grade level; Biology and Chemistry, C or higher**REQUIREMENTS:** for Clinical Placement: Upon approval in the program, a negative drug screen and TB skin test results (at student expense), background check and proof of immunizations; Achievement of Standard on Professional Nursing Scoring Guide.

**Recommended:** Anatomy/Physiology (completed or concurrent enrollment); Chemistry II; Algebra II; College Prep English  
This course is designed to prepare senior students, who have identified nursing as a clear career goal, for a collegiate registered nursing program. Students will learn through classroom instruction and practice in a clinical skills lab. Major units of study include nursing history and career exploration, medical math, CPR/First Aid, nursing skills, and medical terminology. . The course will introduce students to the nursing process, nursing documentation, effective communication skills, medical ethics, and NCLEX-RN style assessment questions. Students will learn and use APA writing style. Earned Certifications include: BLS/ CPR; First Aid and OSHA 10.

More information can be found at: <https://sta.lsr7.org/academics/health-science/pn>

**Students must provide their own transportation for clinical experiences.**

## ARTS & COMMUNICATION

### **DIGITAL MEDIA TECHNOLOGY**

Grade: 11-12

**WEIGHTED: 0.666**

Credits: 3 units, 1.5 Fall, 1.5 Spring

**DUAL CREDIT:** UCM MUS 1480 (2), COMM 1519 (3). (5 credits for available to eligible students)

**PREREQUISITE:** GPA: 2.5 cumulative or higher; Attendance: 90% or higher; Math: Algebra I, C or higher; Reading/Writing: 10th grade level; a total of two (2) credits in any of the following areas: Fine Arts, Practical Arts related to Arts and Communications Career Pathway (e.g. Intro Video Tech/Broadcasting, News for Print and Online I, Visual Arts, Advanced Video Tech, or comparable courses).

**ADDITIONAL REQUIREMENTS:** Applicants are required to submit one (1) audio/visual portfolio artifact such as: a video created and/or edited by the applicant (not to exceed 3 minutes), an audio file created, recorded, and/or mixed by the applicant (not to exceed 3 minutes), a digital photograph captured and edited by the applicant, a video recording of the applicant performing (this could be from a school large or small ensemble or solo performance), OR any similar item of the applicant's choice.

**Recommended:** Computer Applications or Programming; proficiency in keyboarding.

The Digital Media Technology program at Summit Technology Academy prepares students for college and careers in arts, audio/video technology, and communications. Students will focus on the complete video and audio production workflow from pre-production through post-production. They will work in teams to integrate video, sound, music, and motion graphics in entrepreneurial and client-based projects for their schools and/or communities. Students have the opportunity to gain skills towards an industry-recognized certification in Final Cut Pro or Logic Pro.

More information can be found at: <https://sta.lsr7.org/academics/arts-communication/dmt>

## HUMAN SERVICES & FINANCE

### **TEACHER EDUCATOR ACADEMY**

Grade: 12

**WEIGHTED: 0.666**

Credits: 3 units, 1.5 Fall, 1.5 Spring

**Dual Credit:** UCM EDFL 2100 & EDFLDX 2150 (4 credits available to eligible students)

**PREREQUISITE:** GPA: 2.5 cumulative or better; Attendance: 95% or better; Math: Algebra I, C or better; Reading/Writing: 10th grade level; one full credit (preferred) or one-half credit before and one-half credit taken concurrently of child development: preschool and parenting, child and adolescent psychology, or sociology; home internet access is required.

The Teacher Educator Academy is designed for students who are considering the elementary/secondary teaching profession. The course offers students the opportunity to put theory into action through classroom work and internship. Students will develop skills and professionalism needed to succeed as an educator as they work directly with students/adults in the internship. Each student is assigned to a school within their district's attendance boundaries based on their interest. A blended instructional model of classroom and online learning is used to deliver instruction and to provide opportunities for students to develop their beliefs and philosophy of education. Students will participate in Educators Rising as part of the course requirements.

More information can be found at: <https://sta.lsr7.org/academics/human-services-finance/tea>

**Students must provide their own transportation for the internship.**

### **INTERNATIONAL STUDIES ACADEMY**

Grade: 11-12

**WEIGHTED: 0.666**

Credits: 3 units, 1.5 Fall, 1.5 Spring

**Dual Credit:** UCM POLS 2535 (3 credits available to eligible students)

**PREREQUISITE:** GPA: minimum 2.5 GPA cumulative or higher; Attendance: 90% or higher. Completed or enrolled in at least level two Modern Language courses; home internet access is required.

Upon successful completion of the Summit International Studies Academy (SISA), the requirements will be met for Modern Global Issues. If a student drops out of SISA, they must take Modern Global Issues.

This course is designed for students who are passionate about world cultures and languages who need help in taking those first steps towards working internationally or studying abroad. Students will acquire 84 skills considered essential to working and studying internationally, with specific attention given to intercultural communication, international language exploration, project management and collaboration, professionalism, technology, and research. Students will then apply those skills through our student-run cultural consulting firm, Global Prep Squad (GPS). GPS works with international partners on six continents providing professionally-implemented international business tools and solutions which help guide our business clients through the challenges of working within a global context. As a student-run business, GPS has an extensive Corporate Social Responsibility commitment requiring students to work on multiple service projects utilizing international virtual teams based throughout the world. A Rotary Interact club is embedded into the class which helps to facilitate these international projects. Students will also participate in Model United Nations by writing position papers and studying the political/social/economic environments of individual countries. Students should be comfortable using technology, presenting in front of groups, and understand the expectations of professionalism. Students will work extensively in teams both locally and globally. Student grades are determined through a unique system that allows motivated students the flexibility needed to personalize their experience. Students in this program are expected to think for themselves, be able to initiate and manage multiple projects on their own, and are always expected to display the utmost professional behavior. Students will leave this program with an extensive Personal International Network of valuable global connections that will provide the path forward for them to realize their dreams of working internationally. More information can be found at: <https://sta.lsr7.org/academics/human-services-finance/sisa>

**Students will need to make arrangements for transportation to off-site presentations, optional internships, and rides home from STA on predetermined dates. Please speak with the administration if you have any transportation concerns.**

**BUSINESS FINANCE AND FINTECH****WEIGHTED: 0.666**

Grade: 11-12

Credits: 3 units, 1.5 Fall , 1.5 Spring

Dual Credit: UCM ECON 1010, ACCT 1101, CIS 1600 (9 credits available to eligible students)

**PREREQUISITE:** GPA: 2.5 cumulative or better; Attendance: 90% or better; Math: Algebra I, B- or higher; Business: one full credit in Business; Reading/Writing: 10th grade level: Home internet access required.**Recommended:** Accounting, Introduction to Business

This dynamic program is for students interested in learning advanced concepts in finance and financial technology (FinTech) careers and would like to enter college finance programs after graduation with a competitive advantage. Students will be immersed in problem-based and project-based instruction that mirrors the current financial industry related to the following areas: Risk Management, Data Analysis (BIG DATA), Financial Technology (Fintech), Financial Modeling, Understanding Balance Sheets and P&L Statements, Economics, Communication Skills, Corporate Finance, Banking, Investment Management and Insurance. Students also have the opportunity for Microsoft Office expert-level certification in Excel, Word, and PowerPoint. This program allows internship and shadowing opportunities in financial career fields. Students will utilize the best of modern technology with a selection of online coursework, simulations and hands-on learning.

More information can be found at: <https://sta.lsr7.org/academics/human-services-finance/bff>**HOSPITALITY, TOURISM & RECREATION MANAGEMENT****WEIGHTED: 0.666**

Grade: 11-12

Credits: 3 units, 1.5 Fall , 1.5 Spring

**DUAL CREDIT:** MSU HRA 210, 215 5 credits for eligible students)**PREREQUISITE:** GPA: 2.5 cumulative or better; Attendance 90% or better; Math: Algebra 1, B- or better. Reading /Writing on 10th grade level.**RECOMMENDED:** Intro to Human Services (offered traditional or through R7- online), Intro to Hospitality, Foods 1/Culinary Foundations

When you plan activities, do you naturally consider the participants' experience, ensuring every detail is just right? If so, a career in Hospitality, Tourism, and Recreation Management could be a good fit for you. Hospitality, Tourism and Recreation is one of the fastest growing industries in the world which includes recreational and corporate travel coordinator ,meeting, convention and event planners, entertainment and fitness directors, marketing and sales managers, and more. Skills in this area cross multiple industries as companies strive to create unique and memorable customer experiences. The curriculum for this class is industry-driven, therefore matching the needs of hospitality employers across the world. The course will focus on the opportunities available in the Hospitality, Tourism and Recreation industries as well as preparing students to understand and prepare for management roles. Students will hear from industry professionals, participate in job shadowing opportunities and complete a minimum of 100 internship hours through on-site events at the Paradise Park with the go karts, batting cages, and mini golf course as well as outside experiences with business partners, based on student interest. Skills learned in this course are transferable to other opportunities related to the field and will put you on a path to be successful in any career. Students will have the opportunity to enroll in dual credit courses through Missouri State University and will earn the following industry recognized certifications: Certified Guest Service Professional- Tourism(CGSP ©) and Hospitality and Tourism Specialist (HTS ©) ). Other certifications are offered if a student is interested. Students must complete 100 hours of internship experience to receive the HTS certification. More information can be found at: <https://sta.lsr7.org/academics/human-services-finance/htrm>

**Students will need to provide their own transportation to off-site job shadowing and internship experiences as well as rides home from STA on predetermined dates.****Firefighter Academy****WEIGHTED: 0.666**

Grade: 12

Credits: 3 units, 1.5 Fall, 1.5 Spring

**ARTICULATED CREDIT:** Metropolitan Community College (8 credits for eligible students)**PREREQUISITE:** GPA: 2.5 cumulative or better; Attendance: 95% or better; Math: Algebra I, C or higher; Reading/Writing: 10th grade level: Home internet access required.

Do you have career aspirations related to Firefighting and first responding? The FireFighter Academy capstone prepares students to become certified as a Firefighter while completing training in areas like fire suppression, search and rescue and basic first aid. Students will be immersed in the Lee's Summit Fire Department fire training with a certified LSFD FireFighter instructor through drills in the operation of fire hoses for suppressing car and structure fires, extricating victims from car accidents, a burn tower, and learning how to provide emergency first aid to patients. Students will have the opportunity to earn national IFSTA FireFighter I, II and HazMat certifications that are required for firefighters.

More information can be found at: <https://sta.lsr7.org/academics/human-services-finance/ffa>**Students must provide their own transportation for off-campus field/skill training experiences at firefighting training centers in and near Lee's Summit.**

## NATURAL RESOURCES

### **ENVIRONMENTAL STUDIES (at Paradise Park)**

Grade: 11-12

**WEIGHTED: 0.666**

Credits: 3 units, 1.5 Fall, 1.5 Spring

**DUAL CREDIT:** UCM AGRI 1600 (4 credits for eligible students)

**PREREQUISITE:** GPA: 2.5 cumulative or better; Attendance 90% or better, Math: Algebra I, B- or better. Reading /Writing on 10th grade level. Biology I, Chemistry I with a B- or better

Recommended: Math: Algebra II, B- or better

**Students are required to enroll in both Environmental Studies Fall and Spring**

**ENVIRONMENTAL STUDIES FALL** - Are you naturally curious and inspired by nature? Missouri Wildlife Studies lets you learn about the world you live in. This class allows you to develop scientific knowledge and theory about the fauna you encounter in the region. Projects you choose will unveil the world through studying our beautiful Missouri environment. You will be able to build upon your successes in previous science courses and apply those concepts to a living environment working with wild species, including snakes, birds, fish and many other animals native to the region .through direct investigations in nature. Learning about nature through chemistry, biology and statistics will allow you to view your world in new and exciting ways. During this class you can gain valuable college and career experience. Through habitat development and animal care, students will be able to personally improve the lives of animals.

**ENVIRONMENTAL STUDIES Spring**- Are you ready to begin down a path to prepare for a future in environmental science? Scientific studies in the field allow students to not only understand their world, but see how they can make a difference. At Paradise Park Campus, students investigate nature through ecological, cultural, and economic lenses with a hands-on approach in natural habitats. Environmental science students make sense of the science within Missouri ecosystems as they experience Missouri wildlife phenomenon, share questions about the phenomenon and try to answer a class-identified question about a phenomenon. Students use critical thinking skills to develop and monitor live plant life and native animals. Students in this class have a chance to participate using practical and technical skills to make their own meaning of science concepts. This scientific inquiry course allows students to incorporate place-based learning, project-based learning, and problem- based learning, with an emphasis on participation in community conservation leadership.

More information can be found at: <https://sta.lsr7.org/academics/natural-resources/es>

## INTERNSHIPS

### **INTERNSHIP IN MIC**

Grade: 12

**WEIGHTED: 0.666**

Credits: 3 units, 1.5 Fall , 1.5 Spring

**PREREQUISITE: ONLY AVAILABLE TO STUDENTS WHO STARTED IN MISSOURI INNOVATION CAMPUS PROGRAM PRIOR TO THEIR JUNIOR YEAR**

This course is for students who will be completing an internship through one of the MIC business partners. Students will attend STA either first or second semester and will take a dual credit course through MCC as part of this course. Students should enroll in this course for the entire year.

### **INTERNSHIP IN STEM CAREERS**

Grade: 12

Credit: .5 unit for minimum 10-19 hours per week supervised employment

1 unit for average 20+ hours per week supervised employment

**PREREQUISITE:** unweighted GPA of 3.0 or higher; 95% attendance or higher

**REQUIREMENTS FOR PLACEMENT:** Gained technical experience through sending high school programs OR completed an STA program as a junior.

Students interested in an internship such as **Cerner Scholars** should apply for Internship in the STEM Careers program.

Selection of Cerner Scholars is ultimately up to Cerner.

This course/internship offers students a chance to earn high school credit for a unique, problem-based learning experience in a highly competitive work environment in the areas of science, technology, engineering and math (STEM). Students will secure an internship in an area that matches their chosen area of focus. Interns will work collaboratively to solve a variety of relevant problems, as well as participate in real-work and job exploration activities. At the completion of the program, interns will

demonstrate their communication and collaborative skills through a senior exposition. More information can be found at: <https://sta.lsr7.org/internships/internship-in-stem/> **Students must provide their own transportation.**

# THE MISSOURI INNOVATION CAMPUS

## Frequently Asked Questions: <http://ucmo.edu/micprogram>

Crossing the stage and receiving a diploma is an important milestone for a high-school senior. Combine this with an innovative program that accelerates the time it takes to earn a college degree in addition to working in a high-demand internship, and you are left with a well-equipped high school graduate. As a result of participating in one of the Missouri Innovation Campus (MIC) programs, students will be on track to earn a bachelor's degree just two years after graduating from high school. The MIC is a progressive initiative by the University of Central Missouri, Metropolitan Community College, the Lee's Summit R-7 School District, community organizations and business partners, such as the ones shown in the table below. This program is designed to revolutionize the way students learn and work, while bridging the gap between skills and workforce demands. The path for students to be admitted into the MIC program will encompass numerous steps. **It starts with applying to Summit Technology Academy.** Each step of the student's plan towards a baccalaureate degree will include academic support and internship support from the staff of MIC. The students' industry immersion will be structured towards a specific career field that is best matched with each student.

MIC students must meet more rigorous standards. The details below will give students a glimpse into each of the 4 programs. Interested students must meet the following requirements:

- Meet the minimum requirements for MIC programs – 3.0 unweighted GPA and 95% attendance and appropriate ACT (18 on English, 19 on Reading, as well as 20-22 on Math) OR Accuplacer score (must not place in remedial courses)
- Meet the minimum requirements for the appropriate programs at Summit Technology Academy
- Commit to providing own transportation to internship sites and college classes

UCM Bachelor of Science Degree	Junior Year STA Program	Prerequisites	Accuplacer Score	Senior Year with STA
Design and Drafting	PLTW Digital Electronics/CIM	B- or better in IED/POE or CADD classes	MATH 120 (degree requires MATH 180 Calculus); ENGL 101; no required reading courses	Internship in MIC
Computer Science: Software Development	Software Development – Java and Software Development – Python	B- or better in Algebra II or programming classes	MATH 120; ENGL 101; no required reading courses	Internship in MIC
Cybersecurity	DevSecOps and Advanced Network and Cyber Concepts	B- or better in Algebra II CSIS 110 (summer course)	MATH 120 College Algebra; ENGL 101; no required reading courses	Internship in MIC
Software Engineering	Software Development – Java and Software Development – Python	B- or better in Algebra II or programming classes	MATH 120 (degree requires MATH 175 Calculus for Business); ENGL 101; no required reading courses	Internship in MIC
Big Data and Business Analytics	Business Finance and Fintech	B- or better in Algebra I CSIS 110 (summer course) One credit in business; read/write grade 10 level	MATH 120 College Algebra; ENGL 101; no required reading courses	Internship in MIC
Computer Information Systems	Business Finance and Fintech	B- or better in Algebra I CSIS 110 (summer course) One credit in business; read/write grade 10 level	MATH 120 College Algebra; ENGL 101; no required reading courses	Internship in MIC
Data Science	Software Development – Java and Software Development – Python	B- or better in Algebra II or programming classes	MATH 120; ENGL 101; no required reading courses	Internship in MIC

Contact Info:  
Stan Elliott, Director  
[elliott@ucmo.edu](mailto:elliott@ucmo.edu)  
660-543-8256

Karen Dexter, Innovation Coach  
[dexter@ucmo.edu](mailto:dexter@ucmo.edu)  
660-543-8257

Gentry Scavuzzo, Internship Coordinator  
[scavuzzo@ucmo.edu](mailto:scavuzzo@ucmo.edu)  
660-543-8258



# EARLY COLLEGE PROGRAM

Metropolitan Community College- Longview Campus, Campus Center Bldg., 500 SW Longview Rd, LSMO  
ecp.lsr7.org

The Early College Program (ECP) is a dual enrollment program that offers students an authentic college experience and the opportunity to earn up to 15 hours of college credit per semester taken on the Metropolitan Community College, Longview Campus. Courses taken through the ECP count for both high school and college credit.

The program works in partnership with Metropolitan Community College. College credits taken through the ECP provide a seamless transition to MCC following graduation or students can easily transfer credits to all Missouri public two- and four-year institutions of higher education per **CORE 42** (MO Department of Higher Education). Credits also transfer to many out-of-state institutions. The program offers flexible scheduling and is compatible with other off-campus programs and courses offered in the high school.

**Tuition rate of \$60.50 per credit hour plus the cost of textbooks and fees. Tuition and textbook assistance available for qualifying students.**

## Program Requirements

- See Dual Credit Requirements for GPA/testing requisites in Advanced Studies Section
- Students in grades 11 or 12
- 3.0 GPA (non math based courses) 3.3 GPA & Successful completion of ALG II (grade of C or higher) (College Alg., Statistics)
- 2.5-2.9 GPA and Qualifying ACT/Accuplacer score (per MCC course enrollment requirements)
- GPA based on completion of 4 or more high school semesters.
- Completed Early College Program and MCC Application

## Course Offerings

Classes Available in the following pathways: BUSINESS, ENGINEERING TECHNOLOGY, EDUCATION, HEALTH SCIENCE, HOSPITALITY and GENERAL STUDIES. Go to [ecp.lsr7.org/curriculum](http://ecp.lsr7.org/curriculum) for details.

*3 credit hour college course = 0.5 unit of high school credit*

*5 credit hour college course = 1.0 unit of high school credit*

### ACCT 101 ACCOUNTING PRINCIPLES I (3 credit hour)

Grades 11-12

Credit Type: Practical Art/Elective

Practice and application of the accounting principles involved in the process of preparing financial statements in accordance with the Generally Accepted Accounting Principles. Includes accounting procedures for cash, accounts receivable, inventory, depreciation and payroll.

**WEIGHTED: 0.666**

Credit: 0.5 unit

### ACCT 102 ACCOUNTING PRINCIPLES II (3 credit hour)

Grades 11-12

Credit Type: Practical Art/Elective

PREREQUISITE: BSAD 101 or two years of high school accounting. Practice and application of the accounting principles involved in partnerships and corporations. Departmentalization, budgeting, and statement analysis.

**WEIGHTED: 0.666**

Credit: 0.5 unit

### ART108 SURVEY OF ART (3 credit hour)

Grades 11-12

Credit Type: Fine Art/Elective

A brief history of the Visual Arts, including painting, drawing, sculpture and architecture. Global cultures from prehistoric times through present day will be covered.

**WEIGHTED: 0.666**

Credit: 0.5 unit

### BIOL101 GENERAL BIOLOGY (5 credit hour)

Grades 11-12

Credit Type: Science Elective

Biological principles and methods applied to selected groups of living organisms and their environment.

**WEIGHTED: 0.666**

Credit: 1.0 unit

### BIOL 110 HUMAN ANATOMY (5 credit hour)

Grades 11-12:

Credit Type: Science Elective

Structure and function in the human body. (MOTR LIFS 100LA); 5 credit hour course with lab.

**WEIGHTED 0.666**

Credit 1.0 unit

### BIOL 132 Human Nutrition (3 credit hour)

Grades 11-12:

Credit Type: Science Elective

This course introduces students to nutrient requirements, their functions and food sources throughout the life cycle. Students will evaluate food and nutrient intake using peer-reviewed dietary guidelines. (MOTR LIFS 100N); 3 credit hour non-lab course.

**WEIGHTED 0.666**

Credit 0.5 unit

<b>BIOL 208 MICROBIOLOGY (5 credit hour)</b> Grades 11-12: Credit Type: Science Elective Prerequisites: CHEM 105 or higher, plus one of the following courses: BIOL 101, BIOL 104, BIOL 106, BIOL 109, BIOL 110, BIOL 123, BIOL 124 or HLSC 108. Growth, physiology, and genetics of microorganisms. Fundamental concepts of immunology, virology, bacteriology, mycology, and parasitology. Aspects of host-parasite relationships and control of microorganisms by physical and chemical agents.	<b>WEIGHTED 0.666</b> 1.0 unit
<b>BIOL 210 HUMAN PHYSIOLOGY (5 credit hour)</b> Grades 11-12: Credit Type: Science Elective Prerequisite: BIOL 110 and CHEM 105. Functions of the human body as revealed by cells, tissues, organs, and systems in terms of underlying physicochemical processes. (MOTR LIFS 150LP); 5 credit hour course with lab.	<b>WEIGHTED 0.666</b> 1.0 unit
<b>BUSN 105 BUSINESS COMMUNICATIONS (3 credit hour)</b> Grades 11-12 Credit Type: Practical Art/Elective Business Communications identifies the scope and structure of communications within a business environment. The areas of study include writing processes involving a wide variety of business correspondences. Current methods of communication by technology are covered with direct applications utilizing Internet, Email, PowerPoint presentations, electronic files, employee and data privacy, resumes and interviewing techniques. Emphasis is placed on formal reports within the APA and MLA formats/structures.	<b>WEIGHTED: 0.666</b> Credit: 0.5 unit
<b>BUSN 270 LEGAL ENVIRONMENT OF BUSINESS (3 credit hour)</b> Grades 11-12 Credit Type: Practical Art/Elective Provides a survey of laws that are important to persons as citizens of the United States and as participants in its economic system.	<b>WEIGHTED: 0.666</b> Credit: 0.5 unit
<b>CHEM 105 INTRODUCTORY CHEMISTRY FOR HEALTH SCIENCE (5 credit hour)</b> Grades 11-12 Credit Type: Science Elective The principles of general, organic, and biological chemistry for health science students.	<b>WEIGHTED: 0.666</b> Credit: 1.0 unit
<b>CHEM111 GENERAL COLLEGE CHEMISTRY (5 credit hour)</b> Grades 11-12 Credit Type: Science Elective PREREQUISITE: CHEM 107 or high school chemistry & MATH 120. Introduction to the understanding of atoms and molecules: their qualitative and quantitative reactions and interactions.	<b>WEIGHTED: 0.666</b> Credit: 1.0 unit
<b>COMM100 FUNDAMENTALS OF SPEECH (3 credit hour)</b> Grades 11-12 Credit Type: Elective An introductory public speaking course including practical application of speaking and listening skills. The emphasis will be on the organization and delivery of subject matter.	<b>WEIGHTED: 0.666</b> Credit: 0.5 unit
<b>CRJU101 INTRODUCTION TO CRIMINAL JUSTICE (3 credit hour)</b> Grades 11-12 Credit Type: Elective Philosophical and historical background of law enforcement, courts, and corrections. Organization, purpose, and functions of criminal justice agencies on the local, state, and federal levels. The respective roles of personnel in justice agencies in the United States. Career requirements and opportunities in these fields.	<b>WEIGHTED: 0.666</b> Credit: 0.5 unit
<b>CRJU165 CRIMINOLOGY (3 credit hour)</b> Grades 11-12 Credit Type: Elective The course will introduce students to theories associated with criminal behavior and the manifestation of crime. A historical evolution of crime and punishment is introduced along with concepts, terms, and the criminal justice subsystem.	<b>WEIGHTED: 0.666</b> Credit: 0.5 unit
<b>CRJU168 JUVENILE DELINQUENCY (3 credit hour)</b> Grades 11-12 Credit Type: Elective Definitions of delinquent behavior. Theories of causation. Development of the juvenile court. Function of detention, intake, and probation. Community-based and institutional programs. Procedures for processing juveniles and treatment trends.	<b>WEIGHTED: 0.666</b> Credit: 0.5 unit

**CRJU223 CRIMINAL LAW (3 credit hour)****WEIGHTED: 0.666**

Grades 11-12

Credit: 0.5 unit

Credit Type: Elective Introduction to criminal law. Classification and analysis of crimes and criminal acts. Criminal law as a means of preservation and protection of life and property.

**CSIS115 COMPUTER CONCEPTS AND APPLICATIONS (3 credit hour)****WEIGHTED: 0.666**

Grades 11-12

Credit: 0.5 unit

Credit Type: Practical Art/Elective

This course provides basic technology skills needed for success in college-level coursework and career preparation. Topics include file management on local, network and cloud-based storage media. Additional topics include word processing, spreadsheet, database, and presentation software as well as navigation of web-based information, data security and personal information assurance. Test out option available upon request.

**ECON210 MACROECONOMICS (3 credit hour)****WEIGHTED: 0.666**

Grades 11-12

Credit: 0.5 unit

Credit Type: Elective

Prerequisite: ACT Math Score of 21 or higher or appropriate placement test score.

A basic examination of the principles of economics that apply to the economic system in the aggregate. Topics include opportunity costs, gains from trade, demand and supply, determination of aggregate output, employment, inflation, and exchange rates, and the role of fiscal and monetary policy in the U.S. and world economy.

**ECON211 MICROECONOMICS (3 credit hour)****WEIGHTED: 0.666**

Grades 11-12

Credit: 0.5 unit

Credit Type: Elective

Prerequisite: ACT Math Score of 21 or higher or appropriate placement test score.

A basic examination of the microeconomic behavior of individual consumers, firms, and markets in the domestic and world economy. Topics include opportunity costs, gains from trade, demand and supply, production, market structures, and externalities and public goods.

**EDUC200 FOUNDATIONS OF EDUCATION IN A DIVERSE SOCIETY (3 credit hour)****WEIGHTED: 0.666**

Grade 12

Credit: 0.5 unit

Credit Type: Practical Art/Elective

PREREQUISITE: ENGL 101 with a grade of C or better. This course is designed to examine educational practice from diverse historical, philosophical, sociological, economic, and legal perspectives. The course will address issues of educational equity, sociocultural influences on teaching and learning, and how teachers and schools can contribute to interpersonal and intercultural understanding and respect, social justice, and democratic citizenship. Students will explore the nature of school environments,

the fundamental goals of education in the American public school, English Language Learners, the relationship between school and a diverse society, the organization of school curricula, and characteristics of effective schools and instruction in grades P-12.

**EDUC270 EDUCATIONAL PSYCHOLOGY (3 credit hour)****WEIGHTED: 0.666**

Grade 12

Credit: 0.5 unit

Credit Type: Practical Art/Elective

PREREQUISITE: ENGL 101 and PSYC 140 with grades of C or better. This course is designed to help students relate theories and principles of educational psychology to teaching, learning, and assessment. This course focuses on the diversity of learners and learning processes, as well as teacher characteristics, classroom strategies, and data analysis in P-12 classrooms. Appropriate strategies for increasing motivation, multi-dimensional development, and academic achievement for all learners are introduced.

**EDUC280 EDUCATIONAL TECHNOLOGY (3 credit hour)****WEIGHTED: 0.666**

Grade 12

Credit: 0.5 unit

Credit Type: Practical Art/Elective

PREREQUISITE: ENGL 101 with a grade of C or better. In this course students will learn how to integrate instructional technology into P-12 classrooms. Students will study a variety of software programs, presentation technology, telecommunication tools, and assistive technology. The focus will also be on social, ethical, legal, and human issues surrounding the use of technology.

**EDUC285 EDUCATION OF EXCEPTIONAL LEARNERS (3 credit hour)****WEIGHTED: 0.666**

Grade 12

Credit: 0.5 unit

Credit Type: Practical Art/Elective

PREREQUISITE: EDUC 270 with a grade of C or better. This survey course is an introduction to exceptional learners and their education in grades P-12. Students will gain a comprehensive understanding of the characteristics of people with special needs in addition to strategies of educating and including all learners in general education and special education settings. Students will research and discuss complex issues related to compliance with state and federal education laws, such as the Individuals with Disabilities Education Act (IDEA) and the Americans with Disabilities Act (ADA) as well learn to navigate special education processes, such as referral, eligibility, re-evaluation, and IEPs. This course requires a 15-hour special education field experience component.

**ENG215 TECHNICAL WRITING (3 credit hour)**

Grade 12

Credit Type: English 12/Elective

PREREQUISITE: ENGL 101. Prepares students to compose written products appropriate to contexts requiring technical communication and documentation.

**WEIGHTED: 0.666**

Credit: 0.5 unit

**ENGL101 COMPOSITION & READING I (3 credit hour)**

Grade 12

Credit Type: English 12

Focus on instruction in the composing process that includes exploration of ideas through reading, methods of writing development, and use of writing conventions. Instruction takes students from reflective expression to critical analysis through writing.

**WEIGHTED: 0.666**

Credit: 0.5 unit

**ENGL102 COMPOSITION & READING II (3 credit hour)**

Grade 12

Credit Type: English 12

PREREQUISITE: ENGL 101. Students are asked to analyze and evaluate persuasive essays for the writer's use of logical thinking. Students will develop research skills for the purpose of creating documented essays that reflect critical thinking and logical argument.

**WEIGHTED: 0.666**

Credit: 0.5 unit

**ETEC 152 ENGINEERING GRAPHICS & CADD 1 (5 credit hour)**

Grades 11-12

Credit Type: Elective

Prerequisite: MATH 95 with a grade of C or better or appropriate placement test score. Introduction to engineering communications and basic computer aided drafting/design (CADD). Emphasis on technical sketching, orthographic projection, drawing layout, drafting and CADD standards and conventions, dimensioning, sectioning, annotation and basic design principles. Foundation for computer aided drafting/design including file management, basic drawing commands, basic editing commands, layering, blocks and wblocks, dimensioning, polylines, hatching and plotting.

**WEIGHTED: 0.666**

Credit: 1.0 unit

**ETEC 153 DESCRIPTIVE GEOMETRY (3 credit hour)**

Grades 11-12

Credit Type: Elective

Prerequisite: ETEC 152. Graphic solutions of spatial relationships between points, lines, angles, planes and solids. Includes mechanical, architectural and civil problems and concepts. Determining true length, angle, visibility, bearing, slope, intersections, parallelism and perpendicularity using CADD and technical sketching.

**WEIGHTED: 0.666**

Credit: 0.5 unit

**ETEC 170 MICROSTATION (3 credit hour)**

Grades 11-12

Credit Type: Elective

Prerequisite: ETEC 152 with a grade of c or higher. An introduction to computer aided drafting/design (CADD) using Microstation. Topics will include creating basic and complex geometry, CADD standards, dimensioning, cells and cell libraries, plotting and reference files.

**WEIGHTED: 0.666**

Credit: 0.5 unit

**ETEC 210 INTRO TO COMMERCIAL ARCHITECTURE (3 credit hour)**

Grades 11-12

Credit Type: Elective

Prerequisite: ETEC 152 Introduction to commercial architecture and structures. Topics include commercial structure types, site considerations, foundation plans, structures, construction materials and methods, cost estimating and environmentally friendly design practices. An emphasis will be placed on building systems and building system planning.

**WEIGHTED: 0.666**

Credit: 0.5 unit

**ETEC 211 REVIT (3 credit hour)**

Grades 11-12

Credit Type: Elective

Prerequisite: ETEC 152 or satisfactory completion of Project Lead the Way, Introduction to Engineering Design. An introduction to Building Information Modeling using Revit. Building design, layout and components of residential and commercial buildings will be created. Topics will also include levels, views, detailing, scheduling, elevations and sections.

**WEIGHTED: 0.666**

Credit: 0.5 unit

**ETEC 268 INTRO TO STRUCTURAL STEEL DESIGN (3 credit hour)**

Grades 11-12

Credit Type: Elective

Prerequisite: ETEC 152. Introduction to structural steel and structural steel blueprints. Topics include steel as a material, structural steel shapes, drawing types, connection methods and fabrication methods. The AISC Manual of Steel Construction will be introduced and used in reference to structural members and drawings.

**WEIGHTED: 0.666**

Credit: 0.5 unit

**ETEC 269 COMPUTER AIDED DESIGN II (4 credit hour)****WEIGHTED: 0.666**

Grades 11-12

Credit: 0.5 unit

Credit Type: Elective

Prerequisite: ETEC 152 or 169. Advanced computer aided drafting and design (CADD). Advanced dimensioning and tolerancing techniques, attributes, advanced drawing aids, file management and basic customization. Effective use of model space, paper space and viewports. Basic operations of three-dimensional wire frames, surface models, solid models. An introduction to 3D scanning through ReCAP and AutoCADD.

**ETEC 270 INVENTOR (3 credit hour)****WEIGHTED: 0.666**

Grades 11-12

Credit: 0.5 unit

Credit Type: Elective

Prerequisite: ETEC 152 or Project Lead the Way Introduction to Engineering Design (with a C grade or higher). An in-depth introduction to three-dimensional parametric modeling. A current release of an industry parametric modeler will be used to produce three-dimensional part files, assemblies, presentations and orthographic production documents. Students will work on individual and group projects to solve simulated industry design problems.

**ETEC 271 SOLIDWORKS (3 credit hour)****WEIGHTED: 0.666**

Grades 11-12

Credit: 0.5 unit

Credit Type: Elective

Prerequisite: ETEC 152 with a grade of C or higher. An in-depth introduction to three-dimensional parametric modeling. A current release of an industry parametric modeler will be used to produce three-dimensional part files, assemblies, presentations and orthographic production documents. Students will work on individual and group projects to solve simulated industry design problems.

**ETECH 272 ADVANCED INVENTOR (3 credit hour)****WEIGHTED: 0.666**

Grades 11-12

Credit: 0.5 unit

Credit Type: Elective

Prerequisite: ETEC 270 with a grade of C or higher. Advanced parametric modeling using Inventor. Topics include advanced part modeling, sheet metal models and flat patterns, weldments, plastic parts, drawing standards, adaptive parts and assemblies, iParts, iMates and iFeatures.

**GEOG105 WORLD GEOGRAPHY (3 credit hour)****WEIGHTED: 0.666**

Grade 11-12

Credit: 0.5 unit

Credit Type: Elective

Introduction and application of geographic principles to the survey of the major world regions: Europe, Asia, Africa, Middle East, North America, and the Pacific World.

**GEO101 PHYSICAL GEOLOGY (5 credit hour)****WEIGHTED: 0.666**

Grade 11-12

Credit: 1.0 unit

Credit Type: Science Elective

Study of plate tectonics, rocks, minerals, volcanoes, earthquakes, resources, geologic time, and the processes that affect the surface and the interior of the earth. Laboratory analysis of rocks and minerals. Interpretation of topographic and geologic maps as investigative tools. Optional field trips.

**HIST120 UNITED STATES HISTORY TO 1865 (3 credit hour)****WEIGHTED: 0.666**

Grade 11-12

Credit: 0.5 unit

Credit Type: American Government/Elective

Survey of American history and institutions from pre-Columbian times through the Civil War. Examines economic, social, cultural, intellectual, and political development. Federal and Missouri constitutions. \*Students are required to take the US and MO constitution tests and the EOC.

**HIST121 UNITED STATES HISTORY SINCE 1865 (3 credit hour)****WEIGHTED: 0.666**

Grade 11-12

Credit: 0.5 unit

Credit Type: MGI/Elective

Survey of American history and institutions from the Civil War to the present. Examines economic, social, cultural, intellectual, and political development. Federal and Missouri constitutions.

**HIST133 FOUNDATIONS OF WESTERN CIVILIZATION (3 credit hour)****WEIGHTED: 0.666**

Grade 11-12

Credit: 0.5 unit

Credit Type: Elective

Survey of Western Civilization through the classical civilizations of Greece and Rome, the Middle Ages to the Renaissance. Brief comparative summaries of Near Eastern and Oriental civilizations.

**HIST134 MODERN WESTERN CIVILIZATION (3 credit hour)****WEIGHTED: 0.666**

Grade 11-12

Credit: 0.5 unit

Credit Type: MGI/Elective

Survey of European history from the renaissance to the present. Emphasis on Renaissance and Reformation, the emergence of the modern state, industrialism, nationalism, and the problems caused by war, revolution and imperialism in the 20th and 21st centuries. Relationship of European civilization to the developments of the non-European world.

**MATH115 STATISTICS (3 credit hour)****WEIGHTED: 0.666**

Grade 11-12

Credit: 0.5 unit

Credit Type: Math/Elective

Descriptive statistics, ungrouped and grouped data, elementary probability, discrete and continuous statistical inference, significance and distribution measures, regression and correlation analysis.

**MATH120 - COLLEGE ALGEBRA (3 credit hour)****WEIGHTED: 0.666**

Grade 11-12

Credit: 0.5 unit

Credit Type: Math/Elective

A study of various types of equations and inequalities, functions and their inverses, theory of higher degree equations, systems of equations, determinants, logarithms and exponentials, and applications.

**MATH 130 TRIGONOMETRY (3 credit hour)****WEIGHTED: 0.666**

Grade 11-12

Credit 0.5 unit

Credit Type: Math/Elective

PREREQUISITE: MATH 120 with a grade of C or better or appropriate placement test score. Plane geometry is strongly recommended. Angle based trigonometric functions and their inverses, multiple angle formulas, identities, conditional equations, radian measure, arc length, angular velocity, function graphing, and solution of triangles. Plane geometry is strongly recommended.

**MATH 150 PRE-CALCULUS (5 credit hour)****WEIGHTED: 0.666**

Grade 11-12

Credit: 1.0 unit

Credit Type: Math/Elective

Prerequisite: MATH 95 with a grade of C or better or appropriate placement test score A study of various types of algebraic equations and inequalities, functions and their inverses, theory of higher degree polynomial equations, systems of equations and inequalities, logarithms, exponentials, and applications. A study of trigonometric functions and their inverses, formulas and identities, conditional equations, radian measure, arc length, angular velocity, function graphing and solution of triangles.

**MATH180 ANALYTIC GEOMETRY AND CALCULUS I (5 credit hour)****WEIGHTED: 0.666**

Grade 11-12

Credit: 1.0 unit

Credit Type: Math/Elective

PREREQUISITE: MATH 130 or MATH 150

A study of plane analytic geometry, limits, continuity, the derivative for functions of a single variable, differentials, indefinite and definite integrals, the Fundamental Theorem of Calculus, and applications of the derivative and integral.

**MUSI 108 MUSIC APPRECIATION (3 credit hour)****WEIGHTED: 0.666**

Grade 11-12

Credit: 0.5 unit

Credit Type: Fine Art/Elective

This course will introduce the student to the aesthetics of music through the study of musical eras including the Middle Ages through 20th century and music genres through vocal and instrumental mediums.

**PHIL100 INTRODUCTION TO PHILOSOPHY (3 credit hour)****WEIGHTED: 0.666**

Grade 11-12

Credit: 0.5 unit

Credit Type: Elective

This course will introduce students to the fundamental questions of human existence including the foundation of knowledge, the nature of ethical, religious, and social values and meaning, conceptions of being, and human freedom. Consideration will be given to the application of philosophical methods to contemporary society and problems.

**POLS136 INTRODUCTION TO AMERICAN NATIONAL POLITICS (3 credit hour)****WEIGHTED: 0.666**

Grade 11-12

Credit: 0.5 unit

Credit Type: American Government/Elective

Principles of political science. Examination of the development, organization, and function of the national government. Its relationship to the cultural, economic, and social institutions of the United States, Federal and Missouri constitutions. \*Students are required to take the US and MO constitution tests and the EOC.

**PSYC140 GENERAL PSYCHOLOGY (3 credit hour)****WEIGHTED: 0.666**

Grade 11-12

Credit: 0.5 unit

Credit Type: Elective

Introduction to the scientific study of behavior and mental processes through the exploration of major theories, concepts, methods, and research findings in the field of psychology. Using the foundation of the scientific method, topics cover various sub-disciplines in psychology: biological, cognitive, developmental, social and personality, and mental/physical health. Emphasis on biopsychosocial influences and integration across sub-discipline topics.

**SOCI160 SOCIOLOGY (3 credit hour)****WEIGHTED: 0.666**

Grade 11-12

Credit: 0.5 unit

Credit Type: Elective

Introduction to sociological principles, practices, and concepts with emphasis on groups, culture, personality, society, communication, cities, and social institutions. Family, religion, government, social change, social control, and social progress.

**THEA106 THEATER APPRECIATION (3 credit hour)****WEIGHTED: 0.666**

Grade 11-12

Credit: 0.5 unit

Credit Type: Fine Art/Elective

Theater Appreciation is an overview of theater from the playgoer's perspective. The course will include a discussion of theater as a composite art form, investigate theater practices that relate to audiences, and examine the function of the playwright, actor, director, designer, and others in relationship to the creation of a theatrical production.

# HERNDON CAREER CENTER

HERNDON CAREER CENTER COURSES ARE OFFERED IN DAILY, YEAR LONG AM/PM SESSION BLOCKS AT THE  
HERNDON CAREER CENTER, 11501 E STATE ROUTE 350, RAYTOWN, MO 64138

For more Herndon information, please visit <http://www.raytownschools.org/schools/hs/rqs/hcc/>

Acceptance into a Herndon Career Center requires a student to have a minimum 2.0 GPA and a 90% or better attendance rate. Students interested should contact their counselor for an application. Programs marked with an asterisk (\*) are approved Center of Excellence programs.

--Industrial Internships are available to qualified seniors during the second semester of a one-year program or during the fourth semester of a two-year program. Interested students should contact their HCC instructor or counselor for information about internship opportunities and eligibility.

## **C/W • ADVERTISING AND GRAPHIC DESIGN\***

Grades: 11/12

**Location: Herndon Bldg. C**

Credit: 3 Units, 2 semesters, 3 Hours Daily, AM / PM Sections

**PREREQUISITE:** Minimum 2.0 GPA; 90 % attendance record; reading, writing, and math at the 10<sup>th</sup> grade level; at least one semester of keyboarding, and/or computer applications coursework and a minimum of 2 semesters of art

Recommended: Exposure to graphic design. The purpose of this course is to prepare students to continue their education in college. This program is organized into two one-year programs.

**1<sup>st</sup> Year Curriculum** First year curriculum consists of an in-depth study and application of Adobe Creative Suite, specifically Adobe In-Design, Illustrator and Photoshop. The emphasis is on creative problem solving and workflow, artistic critiques, print production, branding, and the use of technology in design to develop skills necessary for continuing education. Math skills will include fractions, ratios, fraction to decimal conversions, proportional scaling, and measurement reading. *College Credit:* An articulated agreement exists with Metropolitan Community College for up to 6 hours of college credit.

**2<sup>nd</sup> Year Prerequisite:** Minimum 85% individual project grade in 2<sup>nd</sup> semester of Advertising & Graphic Design and 93% attendance in 1<sup>st</sup> year of the program. Student must have teacher recommendation.

**2<sup>nd</sup> Year Curriculum** Second year students will build on their foundation by expanding their two-dimensional design skills and advancing their visual communication skills by a variety of design processes and techniques, as well as exploring a variety of design processes and techniques, as well as compositional and aesthetic concepts. Students will follow Adobe Certification Criteria and work towards Adobe Certification

## **C/W • AUTO COLLISION AND REPAIR TECHNOLOGY I\***

Grade: 11/12

**Location: Herndon Bldg. B**

Credit: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections

**PREREQUISITE:** Min 2.0 GPA; 90% attendance record; reading, writing, and math at 10<sup>th</sup> grade level; strong mechanical aptitude

Recommended: Industrial arts, metalwork, art, and computer skills

This course is the first year of a two-year program designed to prepare students for entry-level jobs repairing and refinishing collision damaged vehicles. Employment opportunities exist in automotive dealerships, independent repair shops, specialty shops or fleet operations. Emphasis is placed on classroom instruction during the first year of the program while students work toward industry-recognized certifications from the Inter-Industry on Auto Collision Repair (I-CAR), Pittsburg Paint and Glass (PPG), and Audatex Estimating System (ADP). Lab experiences develop personal pride and craftsmanship using hand tools, power tools, welding and refinishing equipment.

## **C/W • AUTO COLLISION AND REPAIR TECHNOLOGY II\***

Grade: 12

**Location: Herndon Bldg. B**

Credits: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections

**PREREQUISITE:** Successful completion of Auto Collision and Repair Technology I with a minimum of a C grade and 90% attendance.

This course is the second year of a two-year program designed to further develop the skills needed for entry-level or advanced positions in the automotive collision industry. Employment opportunities demand trained technicians who can use the changing technology in the auto collision field. Students will spend the majority of their time in the lab mastering the technical skills necessary to repair customer-owned, late- model vehicles with collision damage.

College credit: Agreements with the Metropolitan Community College and Kansas City Community College enable qualified students to earn up to 26 hours of college credit during the two-year Auto Collision Technology Program and obtainment of certification.

**C/W • AUTOMOTIVE TECHNOLOGY I\***

Grade: 11/12

**Location: Herndon Bldg. A**

Credit: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections

**PREREQUISITE:** Minimum 2.0 GPA; 90% attendance record; reading, writing, and math at the 10<sup>th</sup> grade level

Recommended: Basic technical writing course and power technology or equivalent course

This course is the first year of a two-year course intended to prepare students for entry-level jobs as technicians in maintenance and repair of passenger cars and light trucks. Students will have both classroom instruction and laboratory experiences with approximately 60% of the time devoted to classroom instruction. Proficiency in use of automotive service tools and instruction in the more advanced scientific and mechanical principles on the automobile will be an important part of the training experience. Student fees for this course are approximately \$25.

**C/W • AUTOMOTIVE TECHNOLOGY II\***

Grade: 12

**Location: Herndon Bldg. A**

Credit: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections

**PREREQUISITE:** Successful completion of Automotive Technology I with a grade of C or better and 90% attendance.

This is the second year of a two-year course intended to prepare students for entry-level employment as technicians in the maintenance and repair of passenger cars and light trucks with special emphasis in the use of test equipment for the purpose of diagnosing engine malfunction, steering suspension and alignment adjustment, as well as air-conditioning repair. Approximately 75% of the students' time will be spent repairing customer-owned vehicles with special emphasis in the use of test equipment for the purpose of diagnosing engine malfunction. Classroom instruction will involve the introduction of technical information pertaining to the power plant, power train, automotive electronics, transmissions, and automotive air conditioning.

**C/W • HVAC/INDUSTRIAL MAINTENANCE I & II**

Grade: 11/12

**Location: Herndon Bldg. A**

Credit: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections

**PREREQUISITE:** Min 2.0 GPA; 90% attendance record; math, reading, & writing at 10<sup>th</sup> grade levelRecommended: Successful completion of Algebra II with a C or better. Students wanting to enroll in the 2<sup>nd</sup> year will need to successfully complete year one with a C or better and 90% attendance.

The HVAC/Industrial Maintenance Technician Program provides students with the knowledge and skills necessary to assemble, install, troubleshoot, repair and modify machinery and systems that are mechanically or electronically controlled in residential, commercial, manufacturing and facilities environments. This program will include basic training in heating, venting, air conditioning, refrigeration, air distribution, plumbing, pipe fitting, and electrical systems.. Basic training will also cover hydraulics, pneumatics, print/schematic reading, programmable logic controls (PLC's), operation and maintenance practices on various types of industry related equipment and systems. A hands-on approach, accompanied with classroom instruction characterizes this program. Instruction will involve applying principals and fundamentals using actual industry equipment. All aspects of the application of these principals will be demonstrated in various real-world applications.

**C/W • CONSTRUCTION TECHNOLOGY\***

Grade: 11/12

**Location: Herndon Bldg. A**

Credit: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections

**PREREQUISITE:** Minimum 2.0 GPA; 90% attendance record; reading, writing, and math at the 10<sup>th</sup> grade level

Recommended: Industrial arts courses in wood, metal, electricity, and drafting

This is a one year course that provides instruction in these areas: Blueprint Reading, Basic Concrete Finishing, Structural Framing, Electrical, Plumbing, Interior Finishing, Roofing and the operation of Heavy Equipment. We promote safety with a 10 hour OSHA training program, and training in the proper operation of hand tools and power tools. We teach communication and employability skills to prepare students for the workplace. Students will acquire knowledge and develop technical skills through classroom instruction as well as planning and constructing related projects. Each of the areas consists of some hands-on training. This is an Associated General Contractors of America certified program and also uses curriculum developed by the National Center for Construction, Education, and Research. Students desiring more in-depth study may opt to return for a second year of training if space is available. The second-year program option may be offered to a limited number of students who meet the following criteria: Career Ed instructor recommendation and evaluated aptitude for construction field as well as a grade of C or better and at least 93% attendance. (HCC instructor must approve student's plan prior to actual enrollment for 2<sup>nd</sup> year.)

**College credit:** An agreement with the Carpenters Apprenticeship Program enables students who meet specified requirements to receive apprenticeship hours for skills learned at HCC.

**C/W • COSMETOLOGY\***

Grade: 12

**Location:** Herndon Bldg. A

Credit: 8 Units, 2 Semesters, 8 Hours &amp; 20 minutes daily

**PREREQUISITE:** Min. 2.0 GPA; 90% attendance record; reading, writing and math at the 10<sup>th</sup> grade level. Applicants must have completed all high school graduation requirements (except Practical Arts electives and English IV) by the beginning of their senior year. Recommended: Art, anatomy and physiology, biology, chemistry, business management and communications.

The Cosmetology program at Herndon Career Center prepares students for the Missouri State Board of Licensing examination and to become employed as a cosmetologist. The major study units of this 1,220-hour, full-day program are understanding the properties of hair and scalp; haircutting techniques; chemical applications; skin care and make up; nail care; personal hygiene; business and professional ethics; safety, sterilization and sanitation methods; salesmanship and communication skills; and state laws and rules.

Expectations: Students are expected to purchase a salon kit totaling approximately \$1100.00 and includes items that prepare students for the State Board of Cosmetology exam and give them a foundation kit for entering the Cosmetology profession. There will also be other licensing fees for instruction during the year. Students are expected to have and wear approved uniforms daily and provide daily transportation for themselves to school (students may ride school transportation to school; however, they will have to arrange for personal transportation home every day due to the extended hours of instruction for Cosmetology). Students are also expected to work well in a team environment. Students in this program will begin two weeks prior to the RQS first day of school in order to earn enough training hours to take the state board exam. Students will be concurrently enrolled in English IV. Students do not have to have a social security number in order to enroll in the course, but will need one in order to take the state board exam. A deposit of \$100 is due prior to May 15 if students are selected for this program. Once a student kit is ordered, the student will be responsible for the entire kit cost as they are non-returnable.

**C/W • CULINARY ARTS\***

Grade: 11/12

**Location:** Herndon Institute of Culinary Arts

Credit: 3 units, 2 semesters, 3 Hours Daily, AM/PM Sections

**PREREQUISITE:** Minimum 2.0 GPA; 90% attendance record; reading and writing at the 10<sup>th</sup> grade level; Algebra I with a C grade or better. Applicants must successfully complete an advanced foods course with a minimum of a B grade.

Recommended: Foods and nutrition courses, health courses, business courses

The ideal student must have a solid foundation in introduction food classes and a desire to learn about the hospitality industry. The classes can be but not limited to baking and food science, nutrition classes, culinary prep, and international foods classes. These are the classes that will help the future chef transition into the capstone classes at the Herndon Career Center.

The capstone classes offered at Herndon Career Center are under the umbrella of the National Restaurant Association called ProStart. ProStart is a two-year hospitality program that will develop the aspiring young leader with the restaurant skills that will lead them into college and their career.

ProStart culinary classes offer a block of time that will teach students the foundation of the restaurant industry where they will apply advanced cooking methods while learning both front of the house restaurant standards and back of the house operations. The successful ProStart student will graduate with two national certifications. One being in safety and sanitation and the other is a Certificate of Achievement. Both tie in with many post-secondary culinary institutions known as articulation agreements, such as Johnson County Community College, Johnson and Wales, and Sullivan University.

Expectations: Students will order a uniform to be worn during class. Students may occasionally be required to work after regular school hours in order to participate in catered events and ProStart activities. Student fees will be approximately \$130 to include a consumable materials charge, ServSafe certification, and uniform fee.

2<sup>nd</sup> Year Culinary Arts Special Topics

Students must meet the 90% attendance rate and at least a B average in order to return for the 2<sup>nd</sup> year of curriculum.

**College credit:** Successful students are eligible to earn up to seven hours of credit in the Johnson County Community College Culinary Arts program, up to 12 credit hours from Sullivan University, or 7 hours from Johnson and Wales.

**C/W • DIESEL, INDUSTRIAL & AGRICULTURAL MECHANICS I\***

Grade: 11/12

**Location:** Herndon Bldg. A

Credit: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections

**PREREQUISITE:** Minimum 2.0 GPA; 90% attendance record; reading, writing, and math at the 10<sup>th</sup> grade level; above average mechanical aptitude

Recommended: Industrial Technology courses

This course is the first year of a two-year program intended to prepare students as entry-level technicians working on heavy construction equipment, trucks, industrial plant vehicles, and agricultural equipment. Instruction will involve practice in the maintenance, service, repair, and overhaul of equipment such as engines, power trains, controls, and other components on buses, heavy trucks, and earth moving equipment, agricultural equipment, lift trucks, and stationary power plants.

**C/W • DIESEL, INDUSTRIAL & AGRICULTURAL MECHANICS II\***

Grade: 12

**Location:** Herndon Bldg. A

Credit: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections

**PREREQUISITE:** Successful completion of Diesel, Industrial, & Agricultural Mechanics I with a grade of C or better and 90% attendance

This course is the second year of a two-year program designed to prepare students as entry-level technicians working on heavy construction equipment, trucks, industrial plant vehicles, and agricultural equipment.

**C/W • EMERGENCY MEDICAL TECHNICIAN\***

Grade: 12

**Location: Herndon Bldg. C**

Credit: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections

**PREREQUISITE:** Minimum 2.0 GPA; 90% attendance record; Biology, Chemistry or Principles of Biomedical Science with a C or better; reading, writing, & math at 10<sup>th</sup> grade level.

**Recommended:** Anatomy & Physiology

The Emergency Medical Technician program prepares the EMT student to provide pre-hospital assessment and care for patients of all ages with a variety of medical conditions and traumatic injuries. Areas of study include: an introduction to emergency medical services systems, roles and responsibilities of EMTs, anatomy and physiology, medical emergencies, trauma, special considerations for working in the pre-hospital setting and providing patient transportation. This course is physically demanding and requires a studious student focused on gaining the knowledge and skills required to pass the EMT Basic exam. Clinical observations may be necessary after school hours and would require transportation to the site. Student fees will be approximately \$150 and include CPR, uniform, and required equipment. Successful completion of the HCC EMT program will allow the student to be eligible for the NREMT exam.

**C/W• FOUNDATIONS OF NURSING\***

Grade: 11/12

**Location: Herndon Bldg. C**

Credit: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections

**PREREQUISITE:** Minimum 2.0 GPA; 90% attendance record; Biology 1 with C or better; reading, writing, & math at 10<sup>th</sup> grade level.

**RECOMMENDED:** Anatomy and Physiology, Intro to Health Careers, Chemistry, Psychology

This one-year program is designed for students to explore a career in Nursing and related health careers. This program includes classroom and hands on/clinical experiences. Classroom instruction includes anatomy, physiology, medical terminology and entry level nursing topics. Classroom instruction also includes American Heart Associate CPR and First Aid certification.

Students will learn and practice clinical skills in a controlled simulation lab. Students will then spend 100 hours at various long-term care facilities perfecting their clinical skills. Students will have opportunities to observe other health care professionals. Students who complete the program will have met the requirements to take the final examination to become a Certified Nurse Assistant (CNA). The student must provide his/her own transportation to the clinical sites. A background check will be required for clinical experiences as well as a TB skin test and physician's statement acknowledging the student can physically handle the required tasks to obtain the CNA. Students must have a social security number in order to get the background screening (Family Care Registry) and meet the clinical site requirements. Uniforms will be required for clinical experiences and paid for through student fees. *Student contribution to course expenses could be up to \$220 (for equipment, scrubs, etc.).*

Students who successfully pass their CAN as a Junior, may elect to enroll in the course a second year to focus on Certified Med Technician certification. Enrollment is limited to two second-year students per section. Students must meet eligibility requirements including 95% attendance at HCC (no unexcused), cumulative HCC grade of 90% or higher, and instructor recommendation.

**C• LAW ENFORCEMENT/POLICE SCIENCE I \***

Grade: 11/12

**Location: Herndon Bldg. C**

Credit: 3 units, 2 semesters, 3 Hours Daily, AM/PM Sections

**PREREQUISITE:** Minimum 2.0 GPA, 90% attendance record; reading, writing and math at a 10<sup>th</sup> grade level

This course is a one year course and will provide students with knowledge in the field of law enforcement/police science and prepare them for continuing education and ultimately, employment in a related field. This course is designed to acquaint the student with historical perspectives of law enforcement and a variety of criminal justice career fields, including but not limited to: Crime Scene Investigation, Law Enforcement, Police Science, Patrol Theories and Report Writing, Legal Studies, and Leadership Competencies. Course content may include the discussion and viewing of some of man's worst crime scenes.

Students will be exposed to use of force scenarios in which they must effectively decide whether to use force and what level of force is acceptable. Students will be exposed to real world scenarios which include language and actions consistent with law enforcement encounters. All are significant and vital to our past, present and future in the investigation of such crimes committed by our fellow man. The goal is to become increasingly aware of the social forces that shape our lives and gain insight into the many different aspects of law enforcement and how they influence society's views and opinions on how we deal with and handle the crimes of man. The atmosphere of this class is similar to a mini-police academy. Students will be expected to stand when an adult enters the classroom; they will participate in Roll Call and the Pledge each day. They will be expected to participate in Drill Procedures and carry out some basic police procedures.

A second year program is available by instructor recommendation. Second year students will be expected to assist the instructor as needed with drills, simulations, and providing leadership. Second year students will also be expected to experience off-site learning opportunities which will require transportation and/or work towards industry based certification.

A uniform style polo shirt will be issued to students. Students will be expected to purchase a pair of khaki style pants and black leather tennis shoes or boots.

**C/W • EMERGENCY MEDICAL TECHNICIAN (EMT)\***

Grade: 12

**Location: Herndon Bldg. C**

Credit: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections

**PREREQUISITE:** Minimum 2.0 GPA; 90% attendance record; 10th grade reading, writing, and math levels; Bio. I C or better; SS# required for background check

The program prepares the EMT student to provide pre-hospital assessment and care for patients of all ages with a variety of medical conditions and traumatic injuries. Areas of study include: an introduction to emergency medical services systems, roles, and responsibilities of EMTs, anatomy and physiology, medical emergencies, trauma, special considerations for working in the pre-hospital setting and providing patient transportation. This course is physically demanding and requires a studious student focused on gaining the knowledge and skills required to pass the EMT-Basic exam. Successful completion of the program will prepare students to take the EMT-Basic exam. Students must be 18 by May 1 of their senior year in order to take this course. Clinical observations may be necessary after school hours and would require transportation to the site. Student fees will be approximately \$150 and include CPR, uniform, and required equipment.

**C/W • WELDING/METAL FABRICATION I\***

Grade: 11/12

**Location: Herndon Bldg. A**

Credit: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections

**PREREQUISITE:** Minimum 2.0 GPA; 90% attendance record; reading, writing and math at the 10<sup>th</sup> grade level

Recommended: Students should take basic drafting and metals classes if they are available at their high school

This course is the first year of a two-year program that prepares students to meet the American Welding Society's entry-level employment requirements or pursue post-secondary training. Laboratory work includes basic flame cutting, oxy-fuel welding and shielded metal arc welding of mild steels. Classroom instruction covers welding theory, terminology, techniques, measuring and mathematics. Safety, work ethic and employability skills are emphasized at all times.

Expectations: Students must supply their own protective *cotton* clothing (a long-sleeved work shirt, welding cap, above-the-ankle leather work boots, and jeans or coveralls in good condition). Students who wear glasses are recommended to purchase prescription safety glasses. Students are responsible to replace any equipment initially supplied by the school, such as gloves, helmet, goggles, pliers, etc. Safety, work ethic, employability skills, quality of work and pride in workmanship are emphasized at all times.

American Welding Society Qualified Welder certification: All Herndon Welding students are eligible to obtain this certification in several areas based on instructor evaluation of student skill level. Currently HCC is offering these certifications at no cost to the student (normally \$150 - \$500)!

Other Qualifications available: Students will have an opportunity to complete and receive a 10 Hour OSHA training and card (any absences during training cannot be made up and students will not receive the OSHA card).

**C/W • WELDING/METAL FABRICATION II\***

Grade: 12

**Location: Herndon Bldg. A**

Credit: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections

**PREREQUISITE:** Successful completion of Welding/Metal Fabrication I with a grade of C or better and 90% attendance

This class is the second year of a two-year program that prepares students to meet the American Welding Society's entry-level employment requirements or pursue post-secondary training. Major units of study include advanced shielded metal arc welding (structural and pipe), plus gas metal arc welding, gas tungsten arc welding and plasma arc cutting on carbon, stainless steel and aluminum. Classroom instruction covers advanced welding theory, blueprint reading, and layout and fit-up. Safety, work ethic, employability skills, quality of work and pride in workmanship are emphasized at all times.

Expectations: Students considering a career in welding should plan to purchase their own welding tools and supplies for use in the program. The cost of these items is approximately \$150. Additional expectations are noted in Welding/Metal Fabrication I above.

## **C• SPECIAL TOPICS\***

Grade: 12

Credit: 1 1/2 unit per Semester 1 or 2 Semesters, 3 Hours Daily

This course is designed for students who wish to develop higher-level skills. It will be offered to students who have successfully completed their program or are currently enrolled in the advanced level. The Herndon instructor, director and sending school counselor must approve enrollment in Special Topics. The instructor will provide an individual syllabus for each student.

Required supplies are the responsibility of the student.

### **Intro to Physical Therapy & Sports Medicine**

**PREREQUISITE:** Minimum 2.0 GPA; 90% attendance record; Biology, Chemistry or Principles of Biomedical Science with a C or better; reading, writing, & math at 10th grade level.

Prepare for a rewarding career as a valued member of the physical therapy team while learning all about the human body, specific disorders, and the way physical therapists treat these disorders. Students will explore the history of physical therapy and the relationships between physical therapists, physical therapist assistants, physical therapy aides, and sports medicine professionals. Students will learn how to communicate effectively by using proper medical terminology with other health care professionals and patients. Students will learn proper body mechanics and how to safely move patients. Students will come to understand how to help patients walk with assistive devices like walkers, crutches, and canes. Students will also investigate various balance and coordination disorders. Students will learn to show understanding of common physical therapy techniques, including the use of heat and cold modalities, and their effects on the body. Students will learn about injury recognition and prevention, along with exercise programming and nutrition and weight management. By the time students finish this course, they will have gained valuable knowledge and be well on the way to becoming an important member of the physical therapy and sports medicine team! Students in this course will have the opportunity to earn their OSHA 10-Healthcare and CPR certifications.

## **SOUTHLAND CENTERS for ADVANCED PROFESSIONAL STUDIES (CAPS)**

Southland CAPS (Centers for Advanced Professional Studies) will provide students the opportunity to dive into the professional world by working on real-life projects, by having industry mentors, and by being immersed in a professional culture. Students who take CAPS will be enrolled in an exploratory program that allows them to test-drive their future career goals in high skilled, high demand industries while earning high school credit.

Southland CAPS courses are offered in daily, year-long, AM/PM session blocks at various sites throughout the Kansas City metro area. Each CAPS course may have specific requirements based on the industry partners. Student will be notified of the requirements at the beginning of the school year. For more information, go to <http://www.raytownschools.org> and select Herndon Career Center/Southland CAPS

### **W/DC • ANIMAL HEALTH SCIENCE**

**Location: Kansas City Zoo**

Grades: 11/12

Credit: 3 Units, 2 semesters, 3 Hours Daily, AM / PM Sections

**PREREQUISITE:** None

**RECOMMENDATIONS:** Students need to be on track for graduation and have a desire to be in an environment that encourages teamwork in a project-based real world environment. C or better recommended in Biology.

This course is designed for students who have an interest in the Animal Health field. This career education course will allow students an opportunity to discover and explore a variety of career options in the animal health industry. Students will have the opportunity to learn from professionals in the field of large animals, marine animals, small animals, exotics, wildlife, and animal research. This course is not teacher and curriculum driven. It is a hands on, project based exploratory opportunity for students. Students should be prepared to work with professionals on real-world company based projects. Classroom location for Animal Health Sciences is at the Kansas City Zoo. Students will need to provide their own transportation. Students have the opportunity to earn college credit by dual enrollment through Northwest Missouri State University. (Tuition cost is determined by the University.)

### **W/DC • BUSINESS INNOVATION & CREATION**

**Location: TBD**

Grades: 11/12

Credit: 3 Units, 2 semesters, 3 Hours Daily, AM / PM Sections

**PREREQUISITE:** None

**RECOMMENDATIONS:** Students need to be on track for graduation and have a desire to be in an environment that encourages teamwork in a project-based real-world environment.

This course is designed for students who have an interest in the business innovation and creation field. This career education course will allow students an opportunity to creatively problem solve for new, existing, and expanding markets. Students will have the opportunity to learn from professionals in the field of entrepreneurship, patent development, marketing, and economic development. This course is not teacher and curriculum driven. It is a hands on, project based exploratory opportunity for students. Students should be prepared to work with professionals on real-world company based projects. Classroom location will be determined prior to the start of the school year. Students will need to provide their own transportation. Students have the opportunity to earn college credit by dual enrollment through Northwest Missouri State University. (Tuition cost is determined by the University.)

### **W/DC •TURF MANAGEMENT & HORTICULTURE**

**Location: TBD**

Grades: 11/12

Credit: 3 Units, 2 semesters, 3 Hours Daily, AM / PM Sections

**PREREQUISITE:** None

**RECOMMENDATIONS:** Students need to be on track for graduation and have a desire to be in an environment that encourages teamwork in a project-based real world environment.

This course is designed for students who have an interest in learning about Turf Management & Horticulture. Students will have the opportunity to learn from professionals and explore how soil fertility, grass management, irrigation, landscape plants, landscape construction, pruning, plant disease, insect control, and horticultural mechanics all play a role in turf management and horticulture. Students will also learn careers related to turf management in residential and commercial settings such as the golf and sporting industries. This course is not teacher and curriculum driven. It is a hands-on, project based exploratory opportunity for students. Students should be prepared to work with professionals on real-world company based projects. Location of program is to be determined. Transportation will be required.

**W/DC • TECHNOLOGY SOLUTIONS**

Grades: 11/12

***Location: TBD***

Credit: 3 Units, 2 semesters, 3 Hours Daily, AM / PM Sections

**PREREQUISITE:** None**RECOMMENDATIONS:** Students need to be on track for graduation and have a desire to be in an environment that encourages teamwork in a project-based real world environment.

This career exploration course is designed for students who have an interest in the Information Technology. This course will allow students an opportunity to discover and explore a variety of career options in the technology space. Students will have the opportunity to engage with professionals about computer networking, computer information systems and software development, website and app creation, and more. This course is not teacher and curriculum driven. It is a hands on, project based exploratory opportunity for students. Students should be prepared to collaborate with professionals on real-world technology based projects. Students will need their own transportation. Students have the opportunity to earn college credit by dual enrollment through Northwest Missouri State University or Kansas University-Edwards Campus. (Tuition cost is determined by the University.) Students may participate in Southland CAPS a second year if they attain a grade of B or better and maintain a 90% attendance rate in their first year in Southland CAPS.

# CASS CAREER CENTER

For more complete information see our web site <http://www.casscareercenter.com>

## ENGLISH IV

Grades: 11-12

Credits: 0.25 per semester

**Integrated Credit Procedure:** 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. Since this course is integrated with another class, students must be enrolled in a three-hour block class at the Cass Career Center. Students can earn a maximum of 1.0 credit over a two-year period to fulfill the Language Arts graduation requirement.

## MATH IV

Grades: 11-12

Credits: 0.25 per semester

**Integrated Credit Procedure:** This course presents informational methods of contextual mathematical instruction directly related to the corresponding three-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. Since this course is integrated with another class, students must be enrolled in a three-hour block class at the Cass Career Center. Students can earn a maximum of 1.0 credit over a two-year period to fulfill the Math graduation requirement.

## EMERGENCY MEDICAL TECHNICIAN BASIC (EMT)

Grades: 11-12

Credits: 3 units

**PREREQUISITE:** Min. 2.5 GPA; 90% attendance record at home high school, good reading skills because of post-secondary level textbooks, writing, & math skills. **Mandatory visit with instructor the year prior to enrollment in class.**

Basic life support and emergency skills taught. The student receives instruction for the skills necessary to detect signs, symptoms, and procedures of field management of emergency medical situations. Clinical observations on local ambulance services occur after class time. Students will need to provide their own transportation to these locations. A class uniform will be required. EMT's are involved in extremely demanding and skillful physical work; therefore, physical training will be an essential component to the course. Training will emphasize cardio-respiratory (heart-lung) fitness, flexibility, overall strength and muscular endurance. **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, have a driver's license, and high school diploma to receive certification, though the student may test before they are 18. **Student may be eligible for 8 college credits through Metropolitan Community College if certain criteria are met.**

## FIREFIGHTER I AND II

Grades: 11-12

Credits: 3 units

**PREREQUISITE:** Min. 2.5 GPA; 90% attendance record at home high school, good reading skills because of post-secondary level textbooks, writing, & math skills. **Mandatory visit with instructor the year prior to enrollment in class**

Students are encouraged to participate in Skills USA 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.

**Upon successful completion of this course the student will have received training for certification as a Firefighter I and II, Hazardous Materials Awareness & Operations.** A class uniform will be required. Firefighting involves extremely demanding and skillful physical work, therefore physical training will be an essential component to the course. Training will emphasize cardio-respiratory (heart-lung) fitness, flexibility, overall strength and muscular endurance. **Successful completion of all required courses allows the student to be eligible for testing as a Firefighter through the Missouri Division of Fire Safety.** The student must be 18 years of age, have a driver's license, and high school diploma to receive certification, though the student may test before they are 18. **Student may be eligible for 16 credits through Metropolitan Community College system if certain criteria are met.**

## CRIMINAL JUSTICE/CRIME SCENE INVESTIGATION

Grades: 11-12

Credits: 3 units

**PREREQUISITE:** Application and interview with instructor

This 2 year program is a general introduction to the American criminal justice system with emphasis on law enforcement. Students will investigate US constitutional law and the Missouri criminal code as well as many aspects of law enforcement such as professional ethics, evidence procedure, crime scene and accident investigation, and types of law enforcement equipment used in industry today. There will be a strong connection to industry and students should be prepared for dealing with real world scenarios in a mature and professional manner. A class uniform will be required. This course is both a physical and knowledge demanding course and students will participate in active physical training.

## **Entry Level Secondary Agriculture Courses**

### **AGRICULTURAL SCIENCE I – PLANT & ANIMAL TECHNOLOGY**

Grades: 11-12

Credit: 1 unit

A course designed as an introduction to general agriculture and horticulture. Units of instruction will include small animal care, animal breeds, animal reproduction, animal nutrition, agribusiness, agricultural processing, food science, plant growth, plant reproduction, crop science, and land use and regulations. Students will also be introduced to the National FFA Organization, supervised agriculture experience programs, leadership development, and over 200 career opportunities. (This course is offered each year.)

### **AGRICULTURAL SCIENCE II – MECHANIZED AGRICULTURE**

Grades: 11-12

Credit: 1 unit

**PREREQUISITE:** Agricultural Science I or concurrent enrollment

A course designed for an introduction to mechanized agricultural technology and the careers associated with this field. Units of instruction will include careers in agricultural mechanics and skill training units in hand and power tools as well as wood and metal work, arc welding, oxyacetylene welding, electricity, project planning, plumbing and concrete masonry. Course work will also include instruction in leadership development and supervised agricultural experience program development. Students will be required to complete a lab project in each content area. Class size is limited to 12. This course is offered each year.

**Advanced Secondary Agriculture Courses** - These specialized courses are for students who have successfully completed or are concurrently enrolled in Agricultural Science I and/or II courses. All advanced courses will include instruction in leadership development and supervised agriculture experience.

### **VETERINARY AND EQUINE SCIENCE**

Grades: 11-12

Credit: 1 unit

**PREREQUISITE:** Agricultural Science I or concurrent enrollment

A course that builds on animal science topics introduced in Ag Science I. First semester, 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. Second semester, students will look at horse production, care and management. Instruction on the horse industry, reproduction, nutrition, selection, health, and training will be covered. This course is offered in even years.

### **CONSERVATION OF NATURAL RESOURCES**

Grades: 11-12

Credit: 1 unit

**PREREQUISITE:** Ag Science I and II or instructor's consent

A course that prepares students for activities in the conservation and/or improvement of natural resources such as oil, water, air, forests, fish and wildlife for economic and recreational purposes. Units of instruction will include management in: natural resources, habitats, soils, entomology, grasslands, streams and ponds, fish, forestry, and wildlife. Students will be required to develop a comprehensive conservation plan. **This course is offered in odd years.**

### **AGRIBUSINESS MANAGEMENT – ECONOMICS AND SALES**

Grades: 11-12

Credit: 1 unit

**PREREQUISITE:** Ag Science I or concurrent enrollment

**College Credit:** State Fair Community College (AGRI 132; Agricultural Economics); may be earned for 3 college credit hours. This course combines economic principles of business with sales, management, and service skills. Economic principles will include supply/demand, fix/variable cost, and time value of money, futures/options/stock market, business management, and price forecasting. Students will be expected to complete a farm or small business plan. Sales units will include human relations, personal inventory, careers, sales presentations, customer relations, marketing, purchasing, grading, and transporting. **This course is offered in even years.**

### **AGRICULTURAL STRUCTURES I/II**

Grades: 11-12

Credit: 0.5 unit

**PREREQUISITE:** Ag Science II or instructor's consent

**First Semester (I):** This course includes electrical wiring, electrical motors, concrete masonry, plumbing, area surveying, and farm buildings. Class size limited to 12 students. **This course is offered in even years.**

**Second Semester (II):** This class continues the course studies of Ag Structures I through construction of major agriculture structures. Class size limited to 12 students. **This course is offered in even years.**

### **AGRICULTURAL CONSTRUCTION I/II**

Grades: 11-12

Credit: 0.5 unit

**PREREQUISITE:** Ag Science II or instructors consent

**First Semester (I):** This course utilizes welding in the development of major metal skills in MIG, arc, and oxyacetylene systems. Class size limited to 12 students. **This course is offered in even years.**

**Second Semester (II):** This course continues the studies of Ag Construction I through construction of major metal and wood projects. Class size limited to 12 students. **This course is offered in even years.**

### **ADVANCED LIVESTOCK MANAGEMENT**

Grades: 11-12

Credit: 1 unit

**College Credit:** University of Central Missouri (AGRI 1420: Animal Husbandry); may be earned for 3 college credit hours

**PREREQUISITE:** Ag Science I or concurrent enrollment

Intensive study in livestock production, management, marketing, nutrition, breeding, production records, selection, animal health, waste management, and conservation practices may be included in this course. This course is offered in odd years.

### **AGRICULTURAL POWER and MECHANIZATION TECHNOLOGY**

Grades: 11-12

Credit: 1 unit

**PREREQUISITE:** Ag Science II or instructor consent

This course develops skills in the theory of operation in maintenance, repair, adjustment, and overhaul of small engines.

**Second Semester (II):** Includes basic principles of power transmission, hydraulic systems, as well as gas and diesel engines.

Students will be required to complete a lab project. Class size limited to 12 students. **This course is offered in odd years.**

### **LANDSCAPE DESIGN & TURF MANAGEMENT**

Grades: 11-12

Credit: 1 unit

**PREREQUISITE:** Ag Science I or instructor consent

This course includes careers, the basic techniques of landscape design, and selection of plant materials. Developing bids and cost estimates, landscape installation and landscape and maintenance is also included. A major landscape project is required for this class. Greenhouse lab participation is required. **This course is offered in even years.**

### **GREENHOUSE OPERATION AND MANAGEMENT**

Grades: 11-12

Credit: 1 unit

**PREREQUISITE:** Ag Science I or instructor's consent

This course develops a basic understanding of greenhouse techniques. Propagation, pruning, soil, fertilizers and greenhouse construction will be studied. Production of greenhouse crops will be used to demonstrate procedures such as plants started from cuttings, seeds, grafts, and layering. Greenhouse lab participation is required. **This course is offered in odd years.**

### **SUPERVISED AGRICULTURAL EXPERIENCE**

Grade: 12

Credits: 1-2 units

**PREREQUISITE:** Concurrent enrollment in advanced agriculture courses and instructor's consent

This SAE class is designed to give students an opportunity to receive credit for an agriculture related work experience. Students must be enrolled in an upper level agriculture class and SAE instructor/supervisors must approve enrollment. Students must work 10 hours to receive one credit and may earn up to two credit hours for a 20-hour work week. Students are not required to attend an actual SAE class but written reports must be submitted weekly. **This course is offered each year.**

# MIDDLE SCHOOL

# MIDDLE SCHOOL PROGRAMMING AND COURSE DESCRIPTIONS

## Sixth Grade

Sixth Grade Programming	
Semester 1	Semester 2
<b><u>Core Curriculum*</u></b> <ul style="list-style-type: none"> <li>• Language Arts Reading 6</li> <li>• Language Arts Writing 6</li> <li>• 6<sup>th</sup> Math or 6<sup>th</sup> Accelerated Math</li> <li>• Science 6</li> <li>• World Geography</li> </ul>	<b><u>Core Curriculum*</u></b> <ul style="list-style-type: none"> <li>• Language Arts Reading 6</li> <li>• Language Arts Writing 6</li> <li>• 6<sup>th</sup> Math or 6<sup>th</sup> Accelerated Math</li> <li>• Science 6</li> <li>• World Geography</li> </ul>
<b><u>Required Electives*</u></b> <ul style="list-style-type: none"> <li>• Art (Quarter)</li> <li>• Music (Quarter)</li> <li>• Physical Education (Semester; one Semester required)</li> </ul> <p><i>Students may choose from the following electives to complete their schedule:</i>  <b>Quarter = .25 units      Semester = .5 units      Year = 1.0 units</b></p> <b><u>Electives</u></b> <ul style="list-style-type: none"> <li>• Band or Strings (Year long in place of Exploratory Courses)</li> </ul> <b><u>Exploratory Courses (If not in Band or Strings) - 6 week courses</u></b> Three per semester, six total <ul style="list-style-type: none"> <li>• Discovering World Languages and Cultures</li> <li>• Exploring Business, Marketing &amp; Informational Technology</li> <li>• Exploring Engineering &amp; Industrial Technology</li> <li>• Exploring Family and Consumer Science</li> <li>• Introduction to Broadcasting/Video Technology, Speech, and Theatre</li> <li>• Students Maximizing Academic Resources to Succeed</li> </ul>	

**\*Required**

## SIXTH GRADE COURSES

All 6th grade students will automatically be enrolled in the following classes:

### Language Arts Reading 6

Full Year

The sixth grade reading course is designed to build independent readers and critical thinkers. Students learn and apply key comprehension strategies to help them understand what they read when reading a wide variety of literature and nonfiction texts. Vocabulary lessons provide instruction in word meanings and focus on developing word learning strategies to support students when reading independently.

### Language Arts Writing 6

Full Year

The sixth grade writing course is designed to help students build their writing skills as they become independent writers. Students hear and discuss examples of good writing and write original pieces in a variety of genres. They use the writing process of prewriting, drafting, revising, proof-reading and publishing when writing for variety purposes and audiences. Grammar and mechanics instruction occurs during the revision and proofreading phases of the writing process.

### 6<sup>th</sup> Math

Full Year

Students are recommended for this class based on their achievement and previous successful experience with mathematics. 6th Math topics include operations with fractions and decimals, rational numbers, ratios, unit rates, and percentages; algebraic expressions; solving and writing one-step equations and inequalities; two- and three-dimensional geometry; data sets and problem-solving strategies. Remediation of basic mathematics skills will be provided for selected students. **Daily homework will be assigned. Note: Students in 6th Math can move to 7th Accelerated after taking the Summer Bridge Course to make up content missed in 6th Accelerated.**

### 6<sup>th</sup> Accelerated Math

Full Year

Students are recommended for this class using multiple data points, including their achievement and previous successful experience with mathematics. 6th Accelerated Math includes all 6th-grade math standards plus half of the 7th-grade math standards (i.e. 1 ½ years of math content in one school year). Students should have strong number sense, be able to master concepts quickly and persevere when content is challenging. Strong reading skills are recommended. **Daily homework and projects will be assigned.** This course will prepare students for 7th Accelerated Math.

### Science 6

Full Year

This course is designed to investigate our world through the study of Life Science. Students will learn inquiry skills by using the science and engineering practices developed within the Next Generation Science Standards. While using the science and engineering practices, students will learn about the Structure and Function of Cells, Animals and Plants, Evolution and Ecosystems. Students will use hands-on activities and inquiry based instruction to learn about Life Science.

### World Geography

Full Year

The study of world geography and cultures focuses on human and physical systems of the world's regions. The emphasis is on the interaction between/among these systems as they impact the establishment and evolution of societies. Students will utilize spatial reasoning and examine organization of people, places, and environments to understand that human and physical systems vary from place to place, change over time, and give meaning to places. In a time of globalization, students will understand that geography influences culture, migration of people, diffusion of ideas, and the development of new technologies.

### 6th Grade Physical Education

.50 (Semester)

Fitness is the foundation of the middle school physical education curriculum. Middle school physical education activities will include a variety of team sports, individual sports, and lifetime activities. Our goal is to promote physical activity, other healthy behaviors and fitness throughout life. The objectives of physical education are to develop motor skills in a variety of activities; to establish lifelong foundations of physical fitness; to acquire knowledge of physical activities; to incorporate technology; and, to develop positive character traits through social interaction with other students. The Fitnessgram, a fitness test administered twice a year, measures cardio-respiratory endurance, flexibility, muscular strength, and muscular endurance. Class activities are designed to enhance each of these areas while encouraging and developing each student's individual level of fitness.

**6th Grade Art****.25 (Quarter)**

This course is an introduction to Visual Arts in the Middle school. Students will learn fundamental art concepts through hands-on, creative activities. Emphasis is placed on self-expression and creative problem solving.

**6th Grade Vocal Music****.25 (Quarter)**

This music class is designed as an exploratory course for all students who enjoy music. The basic elements of the course are: understanding and learning about music notation, ensemble singing, listening, and music appreciation. Students who show a desire to continue in Music and demonstrate aptitude in Vocal Music are recommended for 7th grade Vocal Music or 7th grade Select Choir. Note: there is not a required performance for this course.

**Exploratory Classes****All 6th grade students will take 1.0 unit of credit from the following options:*****Exploratory Wheel*****1.0 (Full Year)****Discovering World Languages and Cultures****6 Weeks**

Discovering World Languages and Cultures is a six week course that will introduce students to languages and cultures from around the world. Each week students will visit a different continent and explore languages spoken in that region. Students will learn vocabulary through daily listening, speaking, reading and writing activities. Grades will be based on daily work and short quizzes. This class is highly recommended for students who are considering taking a Modern Language course in seventh and/or eighth grade.

**Exploring Business, Marketing, and Information Technology****6 Weeks**

Dive into the world of business and computer science to help BizCity solve real-world problems. You will use technology, design thinking, and business concepts to communicate, collaborate, and create solutions. Along the way, learn how a community is interconnected through business and people while exploring career opportunities.

**Exploring Family Consumer Science****6 Weeks**

A course exploring basic teen essentials to develop self-discovery, friendships, and independent life skills.

**Exploring Engineering and Industrial Technology****6 Weeks**

In this course, students will be introduced to STEM (Science, Technology, Engineering, and Math) concepts and how these relate to the real world. This course takes on an interdisciplinary approach to STEM topics and allows students to explore each of the STEM disciplines. Students will attain knowledge of Engineering and Industrial Technology careers, through the design process, measurement, sketching, and 3D modeling. Throughout the length of this course, students will develop and use 21st century skills including problem-solving, critical thinking, technological literacy, innovation, and collaboration.

**Introduction to Broadcasting/Video Technology, Speech, and Theatre****6 Weeks**

This course introduces broadcasting, technology, speech, and theatre. Students learn foundational skills for success in subsequent ELA elective courses.

**Students Maximizing Academic Resources to Succeed (SMARTS)****6 Weeks**

This course is designed to help students succeed in a Global Society. Course topics include writing, inquiry, collaboration, organization, and reading.

***Band or Strings*****1.0 (Full Year)****6th Grade Band****1.0 (Full Year)**

This band is a full year course that introduces fundamental skill in playing a woodwind, brass or percussion instruments. Much time is devoted to rhythmic skills, scales, dynamic contrast, intonation, ear training, breath control, musicality, articulation, and music appreciation. Public performance is a graded component of the course. Purchase/rental of an instrument is required to take this course. Purchase of concert attire/uniform is required for this class.

**6th Grade String Orchestra****1.0 (Full Year)**

**PREREQUISITES:** Previous playing experience in this school district or consent of teacher following an audition

String students will have the opportunity to participate in string orchestra. Music theory, music history, string orchestra literature, rhythm, chords, and melody will be studied as related to playing a string instrument. Emphasis on intonation studies, vibrato, positions, and bowing techniques will help the string student to progress to senior high. Grade requirements will be based on skill in producing the desired sound and improvement shown when needed. Practice is essential. Several concerts will be required during the school year. Each student should be equipped with an instrument approved by the teacher. Private lessons are helpful but not required. Purchase of concert attire/uniform is required for these classes.

Seventh Grade Programming	
Semester 1	Semester 2
<b><u>Core Curriculum*</u></b> Language Arts 7 -Advanced Option: Advanced Studies Language Arts 7 7 <sup>th</sup> Math or 7 <sup>th</sup> Accelerated Math Science 7 -Advanced Option: Advanced Studies Science 7 Ancient World History -Advanced Option: Advanced Studies Ancient World History	<b><u>Core Curriculum*</u></b> Language Arts 7 -Advanced Option: Advanced Studies Language Arts 7 7 <sup>th</sup> Math or 7 <sup>th</sup> Accelerated Math Science 7 -Advanced Option: Advanced Studies Science 7 Ancient World History -Advanced Option: Advanced Studies Ancient World History
<b><u>Required Electives*</u></b> Health (Semester) Physical Education (Semester)  <i>Students may choose from the following electives to complete their schedule:</i> <b>Quarter = .25 units                  Semester = .5 units                  Year = 1.0 units</b> <b>Elective Options</b> - Students will select electives that equal a total of two units of credit Business, Marketing, and Information Technology (Quarter) Engineering & Industrial Technology (Quarter) Experiencing Broadcasting & Video Technology (Quarter) Experiencing Family Consumer Science (Quarter) Exploring Language and Cultures (Quarter) Exploring Speech and Theatre (Quarter) Medical Detectives (Quarter) 7 <sup>th</sup> -grade Art (Semester) 7 <sup>th</sup> -grade Vocal Music (Semester) OR 7 <sup>th</sup> -grade Select Choir audition required (Semester) 7 <sup>th</sup> Grade Band (Year) String Orchestra (Year) 7 <sup>th</sup> Grade AVID (Year)	

**\*Required**

## SEVENTH GRADE COURSE DESCRIPTIONS

**All 7<sup>th</sup> grade students will automatically be enrolled in the following classes:**

### Language Arts 7

Language arts curriculum consists of four major units of study: reading, writing, listening, speaking and information literacy. By reading a variety of materials, students will develop and apply strategies and skills to comprehend and analyze fiction and nonfiction. Working through the writing process, students will write effectively in various forms of writing, especially expository text. Students can also expect to develop and apply listening and speaking skills. Applying research process skills, students will gather, analyze, and evaluate a variety of media in the information literacy strand.

### Full Year

**Advanced Studies Language Arts 7****Full Year**

This course parallels the content of the 7<sup>th</sup> grade Language Arts course with a more rigorous and in-depth focus on selected topics. Units of study include expository writing; literary analysis using fiction/drama selections; a research project; whole class novel study; grammar/usage study and vocabulary study. Differences from Language Arts 7 will occur in novel selections, independent work & reading, and the nature of performance tasks (projects/assessments). Higher expectations through inquiry-based learning, critical thinking strategies, and creativity will also differentiate this class from Language Arts 7. Students are expected to embrace a more rigorous curriculum and must be proficient writers with above grade level reading ability.

**7<sup>th</sup> Math****Full Year**

Students are recommended for this class based on their achievement and previous successful experience with mathematics. 7<sup>th</sup> Math topics include fraction, decimal, and percent relationships; integers; algebraic expressions; solving two-step equations and inequalities; ratios and proportions; angle relationships; two- and three-dimensional geometry; probability and problem-solving strategies. Remediation of basic mathematics skills will be provided for selected students. **Daily homework will be assigned.** **Note: Students in 7<sup>th</sup> Math can move to 8 Algebra I after taking the Summer Bridge Course to make up content missed in 7<sup>th</sup> Accelerated.**

**7<sup>th</sup> Accelerated Math****Full Year**

Students are recommended for this class based on their achievement and previous successful experience with mathematics. This is a continuation of the 6<sup>th</sup> Accelerated Math course. This course includes the second half of the 7<sup>th</sup>-grade math standards and all of the 8<sup>th</sup>-grade math standards (i.e. 1 ½ years of math content in one school year). Students should have a strong number sense, be able to master concepts quickly, and persevere when content is challenging. Strong reading skills are recommended. Work includes independent study. **Daily homework and projects will be assigned.** 6<sup>th</sup> Accelerated Math and 7<sup>th</sup> Accelerated Math will prepare students for Algebra I in 8<sup>th</sup>-grade. **Note: Students in 6<sup>th</sup> Math can move to 7<sup>th</sup> Accelerated after taking the Summer Bridge Course to make up content missed in 6<sup>th</sup> Accelerated.**

**Science 7****Full Year**

This course is designed to investigate our world through the study of Earth Science. Students will learn inquiry skills by using the science and engineering practices developed within the Next Generation Science Standards. While using the science and engineering practices, students will learn about Earth's Systems, Earth's Place in the Universe and humans impact our planet. Students will use hands-on activities and inquiry based instruction to learn about our Earth and its place in the Universe.

**Advanced Studies Science 7****Full Year PREREQUISITE:**

Strongly recommended concurrent enrollment in Advanced Studies 7<sup>th</sup> grade Math

Students are recommended for this class based on their prior achievement and successful experience with science. This course parallels the content of 7<sup>th</sup> Science curriculum with a more rigorous and in-depth investigation of selected topics in science and technology. There is an emphasis on laboratory investigation and inquiry. Creative thinking is useful in problem solving as well as the decision-making processes used in higher level science processes. Projects will require independent study and time management skills.

**Ancient World History****Full Year**

This course studies the development of civilizations in the ancient world. Content themes include government, religion/culture, geography, technology, social structures, economics and connections to current events. Emphasis will be given to the Eastern Hemisphere. Students will further develop critical thinking skills including analysis, examination, inference, and prediction. Emphasis will be given to the Eastern Hemisphere. Students will further develop critical thinking skills including analysis, examination, inference, and prediction.

**Advanced Studies Ancient World History****Full Year**

This course parallels the content of the 7<sup>th</sup> grade Ancient World History course with a more rigorous and in-depth focus on selected topics. This course will prepare students for Advanced Studies courses at the high school level.

**Physical Education****.50 (Semester)**

Fitness is the foundation of the middle school physical education curriculum. Middle school physical education activities will include a variety of team sports, individual sports, and lifetime activities. Our goal is to promote physical activity, other healthy behaviors and fitness throughout life. The objectives of physical education are to develop motor skills in a variety of activities; to establish lifelong foundations of physical fitness; to acquire knowledge of physical activities; to incorporate technology; and, to develop positive character traits through social interaction with other students. The Fitnessgram, a fitness test administered twice a year, measures cardio-respiratory endurance, flexibility, muscular strength, and muscular endurance. Class activities are designed to enhance each of these areas while encouraging and developing each student's individual level of fitness.

**Health****.50 (Semester)**

Increased awareness in lifelong wellness includes understanding the basic structures and function of human body systems, adolescent health issues that affect physical health, social health and mental/emotional health. These include personal safety, healthy relationships, and nutrition, responding to emergencies, drug awareness, disease and disease prevention. By participating in this course, students will develop an understanding of and the skills necessary to choose healthy lifelong habits through a variety of class activities.

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**All 7th grade students will take 2.0 units of credit from the following options:**

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**Business, Marketing, and Information Technology**

**.25 (Quarter)**

Make a connection between computer science and entrepreneurship through marketing, app building, graphic design, digital citizenship, cybersecurity, and various tech tools. You will have the opportunity to create and develop your very own business idea. This course will help ignite your future in business and computer science.

**Engineering and Industrial Technology**

**.25 (Quarter)**

This nine-week class is an introduction to the hands-on activities and careers available in the field of Industrial and Engineering Technology. This course is based around the design process to solve problems and understand the influence that creative and innovative design has on our lives. Students will use industry standard 3D modeling software to create a virtual image of their design and creative solutions.

**Experiencing Broadcasting & Video Technology**

**.25 (Quarter)**

The 7th grade Broadcasting & Video Technology curriculum consists of the following units of study: analysis of television viewing, the use of production equipment, the creation of projects such as news reports, interviews, and music videos. The class provides students with an opportunity to create scripts and storyboards for productions. The students perform editing work as they create titles, use the video mixer, and add sound. As part of the curriculum, students will work in groups to create a weekly news show. Students in the class should expect to come in before and after school to complete projects

**Experiencing Family & Consumer Sciences**

**.25 (Quarter)**

In this nine-week Family and Consumer Science course seventh grade students will experience deeper opportunities in interpersonal relationships, as well as the use of equipment in the foods and sewing labs

**Exploring Languages and Cultures**

**.25 (Quarter)**

Exploring Languages and Cultures is a quarter course that introduces the basics of the languages and cultures of French, German, Spanish, and Chinese speaking countries. Students will learn some basic vocabulary of all four languages, and the geography, history and cultures of France, Germany, Spain, and China. Grades will be based on their tests, quizzes, homework, in-class activities, and daily work. This class is highly recommended for students who are planning to take a Modern Language course in eighth grade.

**Exploring Speech & Theatre**

**.25 (Quarter)**

The Speech and Drama curriculum consists of the following units of study: communication speech process, listening, outlining, speech delivery, informative speeches, pantomime, staging, analyze plays, and perform plays. The curriculum provides students with an opportunity to practice their oral and written communication skills. The projects in the class improve listening skills, increase creativity and critical thinking skills, improve vocal expression and promote confidence in public speaking situations.

**Medical Detectives**

**.25 (Quarter)**

In the Medical Detectives unit, students play the role of real-life medical detectives as they collect and analyze medical data to diagnose disease. They solve medical mysteries through hands-on projects and labs such as measuring and interpreting vital signs, dissecting a sheep brain, investigating disease outbreaks, and exploring how a breakdown within the human body can lead to dysfunction.

**7th Grade Art**

**.50 (Semester)**

This course is for students who enjoy creating and self-expression through hands-on art activities. Students will experiment with fundamental art concepts and techniques through the exploration of a variety of art materials. Grades are based on mastery of art concepts per the art curriculum.

**7th Grade Vocal Music**

**.50 (Semester)**

**PREREQUISITE:** 6th Grade Vocal Music

This 7th-Grade Music course expands knowledge and skills introduced in 6th-grade Vocal Music. The basic areas of focus are ensemble singing, music literacy, music appreciation, and one required performance. Students who show a desire to continue in Music are recommended for 8th Grade Vocal Music or Select 8th Grade Choir. Purchase of concert attire is required for this class.

**7th Grade Select Choir**

**.50 (Semester)**

**PREREQUISITE:** Teacher Recommendation/Audition Process

This 7th-Grade music course expands the fundamental skills introduced in 6th grade. The basic areas of focus are ensemble singing, part-singing, music literacy, music appreciation. Students audition during their 6th-grade year for placement in this course. This class meets in place of 7th Grade Vocal Music and meets every other day alternating with PE to ensure yearlong skill-building in Choir. The 7th-grade select choir sings at formal concerts and performs for the community. These performances are a graded component of the course. Students who show a desire to continue in music are recommended for 8th Grade Vocal Music or Select 8th Grade Choir. Purchase of concert attire is required for this class.

**7th Grade Band****Full Year****Prerequisites: Previous playing experience in this school district or consent of teacher following an audition**

This band is a full-year course that continues to develop the skills and proficiencies acquired in the earlier grades. Fundamentals are stressed with much time devoted to rhythmic skills, scales, dynamic contrast, intonation, ear training, breath control, musicality, articulations and music appreciation. Public performances are required. Placement is determined by director recommendation. Purchase of concert attire/uniform is required for this class.

**String Orchestra****Full Year****PREREQUISITES: Previous playing experience in this school district or consent of teacher following an audition**

String students will have the opportunity to participate in string orchestra. Music theory, music history, string orchestra literature, rhythm, chords, and melody will be studied as related to playing a string instrument. Emphasis on intonation studies, vibrato, positions, and bowing techniques will help the string student to progress to senior high. Grade requirements will be based on skill in producing the desired sound and improvement shown when needed. Practice is essential. Several concerts will be required during the school year. Each student should be equipped with an instrument approved by the teacher. Private lessons are helpful but not required. Purchase of concert attire/uniform is required for these classes.

**Library Assistant****.50 (Semester)**

The major objective of Library class is to provide students with a foundation in library skills. Time will be devoted to specialized skills needed to work in the media center. Students will become proficient with circulation processes and with using the catalog for searching. They will also help students locate materials. Grades will be based on performance of assigned duties in the media center and completion of individual projects. Library class can be taken during either the seventh or eighth grade year, but not both years. Students may sign up during spring enrollment and may pick up an application in the media center. The librarian will determine final placement. Students should also choose an art or music class in the event they are not chosen to work in the library.

**Office Assistant****(Must have filled out application)****.50 (Semester)**

Office Assistant classes offer an introduction to general office procedures and management for students with no previous training. The student will be introduced to general office procedures - operation of various office machines, filing, and miscellaneous school errands. Grades will be based on student performance and attitude toward the assigned duties in the office. Office Assistants will meet on alternate days of the week with Physical Education. On the days students are not in Physical Education class, they will assume office duties. Students may sign up during spring enrollment. The principal will decide final placement. Students must also choose an art or music class in the event they are not assigned to work in the office.

\*Office Assistants are not available at SLMS.

**Science Laboratory Assistant****(Must have filled out application)****.50 (Semester)**

The science laboratory assistant classes offer an introduction to general laboratory techniques and organization. These students would be responsible for setting up and taking down labs, cleaning glassware and equipment, and maintaining an organized stockroom. Students will also design, conduct and analyze scientific investigations. Grades will be based on performance of assigned duties, completion of individual projects and attitude toward laboratory responsibilities. Science Laboratory Assistant class can be taken during either the seventh or eighth grade year, but not both years. Students will sign up during spring enrollment and may pick up an application from any science teacher. The lead science teacher will decide final placement. Students must also choose an art or music class in the event they are not chosen to work in the science laboratory.

Eighth Grade Programming	
Semester 1	Semester 2
<b><u>Core Curriculum*</u></b> Language Arts 8 -Advanced Option: Advanced Studies Language Arts 8 <sup>th</sup> Math or Algebra I Science 8 -Advanced Option: Advanced Studies Science 8 Early American History -Advanced Option: Advanced Studies Early American History	<b><u>Core Curriculum*</u></b> Language Arts 8 -Advanced Option: Advanced Studies Language Arts 8 <sup>th</sup> Math or Algebra I Science 8 -Advanced Option: Advanced Studies Science 8 Early American History - Advanced Option: Advanced Studies Early American History
<b><u>Required Electives*</u></b> Physical Education (Semester)  <b><i>Students may choose from the following electives to complete their schedule:</i></b> <b><i>Quarter = .25 units                      Semester = .5 units                      Year = 1.0 units</i></b>  <b><u>Elective Options</u></b> - Students will select electives that equal a total of two and a half units of credit Introduction to Computer Science (Semester) Technology, Innovation, & Entrepreneurship (Semester) Foods and Family (Semester) Creative Style and Design (Semester) Industrial Technology (Semester) Engineering Technology (Semester) 8 <sup>th</sup> Grade Broadcasting & Video Technology (Semester) Speech & Theatre (Semester) 8 <sup>th</sup> Grade Broadcasting: Special Projects (Semester) <i>Application and teacher recommendation required.</i> 8 <sup>th</sup> Grade Art I(Semester) 8 <sup>th</sup> Grade Art II (Second Semester, follows successful completion of 8 <sup>th</sup> Grade Art I first semester) 8 <sup>th</sup> Grade Vocal Music (Semester) OR 8 <sup>th</sup> Grade Select Choir <i>audition required</i> (Semester) 8 <sup>th</sup> Grade Band (Year) String Orchestra (Year) French I, German I, Spanish I, or Mandarin Chinese I (Year) 8 <sup>th</sup> Grade AVID (Year)- <b>Course availability varies by building</b>	

**\*Required**

## EIGHTH GRADE COURSE DESCRIPTIONS

All 8th grade students will automatically be enrolled in the following classes:

### Language Arts 8

Full Year

Language arts curriculum consists of the following units of study: literature, writing, and grammar/usage. Students will continue to improve their reading skills by reading and studying a variety of literature forms: short stories, novels, poetry and drama. Students will analyze stories, apply the elements of literature, identify figures of speech, and develop critical thinking skills. The language arts curriculum will provide students with an opportunity to improve writing skills in sentences, paragraphs, short reports, essays and poetry. Reviewing and applying proofreading skills, capitalization, punctuation, spelling, grammar and usage will be included.

### Advanced Studies Language Arts

Full Year

This course extends units in the 8<sup>th</sup> grade language arts course. It is an in-depth approach which emphasizes literary analysis and composition. Units of study will include persuasive writing (a literature-based persuasive essay; expository writing; literary analysis of drama; study of elements of non-fiction; poetry analysis; whole class novel study; extensive vocabulary and grammar/usage study; a research essay. Differences from language arts 8 will occur in novel & poetry selections and level of independent work. All students will be expected to complete independent reading and self-selected reading projects, and they could work independently on blogs/podcasting. Higher expectations through inquiry-based learning, critical thinking strategies, and creativity will also differentiate this class. Enrichment opportunities are building specific and may include oration contests, spelling bees, culture trips, outside speakers, creative writing, and writing contests. Students are expected to embrace a more rigorous curriculum and must demonstrate above grade level reading and strong proficiency as writers.

### 8<sup>th</sup> Math

Full Year

Students are placed in this class based on their achievement and previous successful experience with mathematics. 8th Math topics include real numbers, the Pythagorean Theorem, integer exponents, scientific notation, solving multi-step equations, graphing equations, functions, bivariate data, systems of equations, angle relationships, and problem-solving strategies. Remediation of mathematics skills will be provided for selected students. **Daily homework will be assigned.**

### Algebra I

Full Year

**PREREQUISITE:** Semester grades of B- or better in 6th and 7th Accelerated Math recommended

This course includes all Algebra I standards. Algebra I encompasses abstract ideas; the use of patterns and generalizations, solving linear, quadratic, and rational functions, simplifying radicals; and solving word problems. Projects are required. Work includes independent study. **Daily homework and projects will be assigned. Students successfully completing the Algebra I course will earn a high school elective credit towards graduation. Students are still required to earn three additional math credits in high school. The grade earned in Algebra I will appear on the high school transcript and the high school GPA. Note: Students in 7th Math can move to 8 Algebra I after taking the Summer Bridge Course to make up content missed in 7th Accelerated.**

### Science 8

Full Year

This course is designed to investigate science using an integrated approach. The focus is to instill sound investigative and critical thinking skills in our students so they will be able to design their own experiments. The Science and Engineering Practices are a significant, embedded part of this course, and integrated units will include the following topics: Temperature and Heat, the Elements, Forces, and Waves and Magnets.

### Advanced Studies Science 8

Full Year

**PREREQUISITE:** Strongly recommended semester grades of B- or better in Advanced Studies Science 7; concurrently enrolled in Algebra 1

This course parallels the content of 8<sup>th</sup> Science with a more rigorous and in-depth investigation of selected topics in science and technology with an emphasis on the Science and Engineering Practices. Creative thinking is useful in problem solving as well as the decision-making processes used in higher level science processes. Projects will require independent study and time management skills.

### Early American History

Full Year

This course will survey our nation's early history from 1492 to 1865. The course is designed to provide an understanding of and appreciation for our national heritage. Correlations between past and present events are examined, and cultural literacy is cultivated, through the study of the formation of our national "character." In addition, emphasis is placed on the growth of basic American principles, the contributions of various ethnic and cultural groups, and the development of democratic traditions. Furthermore, thinking skills such as problem solving, cause and effect, and analysis are a focus.

**Advanced Studies Early American History****Full Year**

This course parallels the content of the 8<sup>th</sup> grade Early American History course with a more rigorous and in-depth focus on selected topics. This course will prepare students for Advanced Studies courses at the high school level.

**Physical Education****.50 (Semester)**

Fitness is the foundation of the middle school physical education curriculum. Middle school physical education activities will include a variety of team sports, individual sports, and lifetime activities. Our goal is to promote physical activity, other healthy behaviors and fitness throughout life. The objectives of physical education are to develop motor skills in a variety of activities; to establish lifelong foundations of physical fitness; to acquire knowledge of physical activities; to incorporate technology; and, to develop positive character traits through social interaction with other students. The Fitnessgram, a fitness test administered twice a year, measures cardio-respiratory endurance, flexibility, muscular strength, and muscular endurance. Class activities are designed to enhance each of these areas while encouraging and developing each student's individual level of fitness.

**Elective Classes****All 8<sup>th</sup> grade students will take 2.5 units of credit from the following options:****Introduction to Computer Science****.50 (Semester)**

Create your own app. The course combines the creation of mobile apps along with programming that goes beyond the virtual world into the physical world. Students are challenged to creatively use sensors and actuators to develop systems that interact with their environment. They will code and upload programs to microcontrollers to create wearable technology, interactive art, or other devices. Students will also collaboratively design and develop an android mobile app to solve a real-world problem. This course is based around the 'App Creators' and 'Computer Science for Innovators and Makers' units of the Project Lead the Way Gateway program.

**Technology, Innovation, & Entrepreneurship****.50 (Semester)**

It's been said that entrepreneurs are the ones who really change the world. Through hands-on activities and technology, students will be inspired to think like an entrepreneur. You will find solutions to real world problems using curiosity, creativity, and collaboration. Learn new ways for effective brainstorming, how to apply design thinking, conduct market research and pitch your idea. To produce promotional materials, you will also develop technology skills in graphic design. No matter your area of interest (i.e. sports, music, science, etc.), you can become an entrepreneur! Whether you want to start your own money-making business or create a non-profit to help others, this course will help you get started on your goals.

**Foods and Family****.50 (Semester)**

In this course, students will be expanding on the Culinary and Education and Training (Family and Child Development) career pathways. Foods & Family is a semester-long course that covers topics including nutrition, food preparation, child development, family relationships, and communication. Class projects will include oral, written, and research assignments, as well as food lab experiences.

**Creative Style and Design****.50 (Semester)**

Creative Style & Design is a semester-long course in which students will expand upon Personal Finance, Textile-Clothing Construction, Interior Design, and Hospitality. Class projects include oral/written/research and real world learning projects, as well as a variety of sewing opportunities.

**Industrial Technology****.50 (Semester)**

This 18-week course will provide an exciting project-based, hands-on approach to learning in a shop environment. Students will be introduced to and use the design process to solve problems and understand the influence that creative and innovative design has on our lives. Students utilize hands-on tools and equipment to complete a personalized lamp, wood project, metal tool tray, and trebuchet or catapult.

**Engineering Technology****.50 (Semester)**

This 18-week course will provide an exciting project-based, hands-on approach to learning. Students will trace the history, development, and influence of automation and robotics. They learn about mechanical systems, energy transfer, machine automation and computer control systems. The students will also acquire knowledge and skills in basic circuitry design and examine the impact of electricity on our lives. This course is based around the Automation & Robotics and Magic of Electrons units of the Gateway to Technology, Project Lead the Way program.

**8<sup>th</sup> Grade Broadcasting & Video Technology****.50 (Semester)**

The 8<sup>th</sup> Broadcasting & Video Technology curriculum consists of the following units of study: analysis of television viewing, the use of production equipment, the creation of projects such as: news reports, interviews, and music videos. The class provides students with an opportunity to create scripts and storyboards for productions. The students perform editing work as they create titles, use the video mixer, and add sound. As part of the curriculum, students will work in groups to create a weekly news show. Students in the class should expect to come in before and after school to complete projects.

**Speech & Theatre****.50 (Semester)**

The Speech and Theatre curriculum consists of the following units of study: personal communication, public speaking, and theatre arts. The curriculum provides students with an opportunity to practice their oral and written communication skills. The projects in the class improve listening skills, increase creativity and critical thinking skills, improve vocal expression, and promote confidence in public speaking situations and theatrical performances.

**8<sup>th</sup> Grade Broadcasting: Special Projects****.50 (Semester)**

**Placement is determined by application and teacher recommendation.**

Enrollment in special projects is by application only and is designed to build on the concepts and skills learned in the Intro to Broadcasting/Video Technology classes. The projects required will require higher-level skills to translate an idea into an effective video segment for the school and members of the community. **Students will be expected to mentor the introduction to broadcasting and video production students and help develop their skills.**

**8th Grade Art I****.50 (Semester)**

8th Grade Art I will focus on self expression through fundamental art concepts while introducing exciting new media and techniques. This course is for students who enjoy making art and being creative in a variety of ways such as clay, computer arts, painting and drawing. Grades are based on mastery of art concepts per the art curriculum. This course can be followed by 8th Grade Art II

**8th Grade Art II****.50 (Semester)**

**Prerequisite: 8th Grade Art I first semester**

This course is designed for students who enjoy creating and are interested in taking a FULL year of art in 8th grade. Students will strengthen their artistic skills and techniques learned in 8th grade Art I first semester, incorporating student choice and specialized art media. This course is recommended for students interested in preparing for the advanced art courses at the high school level. Grades are based on mastery of art concepts per the art curriculum.

**8th Grade Vocal Music****.50 (Semester)**

This 8th-Grade music course expands the fundamental skills learned in 7th grade. The basic areas of focus are ensemble singing, part singing, music literacy, music appreciation, and one required performance. This course prepares students for the entry-level choir ensembles at the High School by building fundamental skills in group singing. Students who show a desire to continue in music are recommended for Treble Choir or Tenor Bass Choir in the 9th grade. Purchase of concert attire is required for this class.

**8th Grade Select Choir****.50 (Semester)**

**Black/Gold Choir (PLMS) Summit Lakes Singers (SLMS) Concert Choir (BCMS) Concert Choir (ETMS) PREREQUISITE: Teacher Recommendation/Audition Process**

This select choir is an 8th-Grade auditioned ensemble that focuses on ensemble singing in multiple parts and music literacy. Students audition during their 7th-grade year for placement in this course. This class meets in place of 8th Grade Vocal Music and meets every other day alternating with PE to ensure yearlong skill-building in Choir. The 8th-grade select choir sings at formal concerts yearly, performs for school assemblies, participates in choir tours, and competes at a festival. These performances are a graded component of the course. Purchase of concert attire is required for this class. This course prepares students for the entry-level choir ensembles at the High School by building fundamental skills in group singing.

**8<sup>th</sup> Grade Band****Full Year**

**Prerequisites: Previous playing experience in this school district or consent of teacher following an audition**

This band is a full year course that continues to develop the skills and proficiencies acquired in the earlier grades. Fundamentals are stressed with much time devoted to rhythmic skills, scales, dynamic contrast, intonation, ear training, breath control, musicality, articulations and music appreciation. Public performances are required. Placement is determined by director recommendation. Purchase of concert attire/uniform is required for this class.

**String Orchestra****Full Year**

**PREREQUISITES: Previous playing experience in this school district or consent of teacher following an audition** String students will have the opportunity to participate in string orchestra. Music theory, music history, string orchestra literature, rhythm, chords, and melody will be studied as related to playing a string instrument. Emphasis on intonation studies, vibrato, positions, and bowing techniques will help the string student to progress to senior high. Grade requirements will be based on skill in producing the desired sound and improvement shown when needed. Practice is essential. Several concerts will be required during the school year. Each student should be equipped with an instrument approved by the teacher. Private lessons are helpful but not required. Purchase of concert attire/uniform is required for these classes.

**French I, German I, Spanish I, Mandarin Chinese I****Full Year**

Each middle school modern language class contains the same coursework as level I at the high school. Upon successful completion, the student will earn high school graduation credit and be ready to enroll in level II in the ninth grade. French I, German I, Spanish I and Mandarin Chinese I are full year courses that introduce the fundamentals of each modern language and the cultures represented by that language. Emphasis is on listening, speaking, reading and writing skills through acquisition of practical vocabulary such as greetings, school, sports, family, food, hobbies, numbers, the weather, clothing, body parts, places and the household. Grammar will often be included as part of vocabulary stories. There will be a focus on the present tense. Semester grades will be based on class participation, vocabulary quizzes, tests, speaking activities, writing activities, listening activities, reading activities and a final exam. The final exam will count 10% of each semester's overall grade.

- These classes are not intended for native speakers.
- At the high school level, French, German, Spanish and Mandarin Chinese enrollment includes the International Baccalaureate program and options for college credit.

**Students successfully completing an 8<sup>th</sup> grade Modern Language course will earn a high school graduation credit. The grade earned in the 8<sup>th</sup> Modern Language course will appear on the high school transcript and the high school GPA.**

**8th Grade AVID****Full Year**

This course will focus on preparation for high school. The students will regularly exhibit and utilize the skills and strategies learned in the seventh-grade AVID course. Students will refine previous goals, focusing on their transition to high school as part of a college preparatory path. Their writing will focus on completing all steps of the writing process and varying style, word choice, vocabulary, structure, and voice. Students will transition from active learners to leaders. Other areas of focus include broadening their experiences with analyzing text and utilizing appropriate reading strategies. Students will also participate in college preparatory testing and build connections with the high school they will attend. **Course availability varies by building.**

**Library Assistant****.50 (Semester)****(Must have filled out application)**

The major objective of Library class is to provide students with a foundation in library skills. Time will be devoted to specialized skills needed to work in the media center. Students will become proficient with circulation processes and with using the catalog for searching. They will also help students locate materials. Grades will be based on performance of assigned duties in the media center and completion of individual projects. Library class can be taken during either the seventh or eighth grade year, but not both years. Students may sign up during spring enrollment and may pick up an application in the media center. The librarian will determine final placement. Students should also choose an art or music class in the event they are not chosen to work in the library. **Course availability varies by building.**

**Office Assistant****.50 (Semester)****(Must have filled out application)**

Office Assistant classes offer an introduction to general office procedures and management for students with no previous training. The student will be introduced to general office procedures - operation of various office machines, filing, and miscellaneous school errands. Grades will be based on student performance and attitude toward the assigned duties in the office. Office Assistants will meet on alternate days of the week with Physical Education. On the days students are not in Physical Education class, they will assume office duties. Students may sign up during spring enrollment. The principal will decide final placement. Students must also choose an art or music class in the event they are not assigned to work in the office. **Course availability varies by building.**

**Science Laboratory Assistant****.50 (Semester)****(Must have filled out application)**

The science laboratory assistant classes offer an introduction to general laboratory techniques and organization. These students would be responsible for setting up and taking down labs, cleaning glassware and equipment, and maintaining an organized stockroom. Students will also design, conduct and analyze scientific investigations. Grades will be based on performance of assigned duties, completion of individual projects and attitude toward laboratory responsibilities. Science Laboratory Assistant class can be taken during either the seventh or eighth grade year, but not both years. Students will sign up during spring enrollment and may pick up an application from any science teacher. The lead science teacher will decide final placement. Students must also choose an art or music class in the event they are not chosen to work in the science laboratory. **Course availability varies by building.**

**Peer Inclusive Environment (PIE)****.50 (Semester)****(Must have filled out application)**

This is a peer mentoring and modeling class for students in the general education setting who will be buddied with students enrolled in Life Skills\* classes. This class will promote positive relationships, equity amongst all students, and also support Choose to Include. Students who apply and are accepted into PIE will be enrolled in PIE for an hour of the day that fits with the rest of their schedule. During that hour, they will be paired with a student who is considered to be in the Life Skills program. **Course availability varies by building.**