Dear Parents and Students:

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 Associate Superintendent of Human Resources, Dr. Jeff Miller, 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
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# HIGH SCHOOL COURSE GRADUATION REQUIREMENTS

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

<table>
<thead>
<tr>
<th>CURRICULAR AREAS</th>
<th>Graduation</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMUNICATION SKILLS</td>
<td>4 units (Must include 1 unit in a core English class for each grade 9-12)</td>
</tr>
<tr>
<td>SOCIAL STUDIES</td>
<td>3 units (Must include 1 unit Am. History, 1 unit World History, 1/2 unit American Government and 1/2 unit Modern Global Issues)</td>
</tr>
<tr>
<td>MATHEMATICS</td>
<td>3 units (Must include 1 unit Algebra I and 1 unit Geometry or Algebra/Geometry I, Algebra/Geometry II, and Algebra/Geometry III)</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>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)</td>
</tr>
<tr>
<td>FINE ARTS</td>
<td>1 unit</td>
</tr>
<tr>
<td>PRACTICAL ARTS</td>
<td>1 unit</td>
</tr>
<tr>
<td>PHYSICAL EDUCATION</td>
<td>1 unit (Must include 1/2 unit of Foundations of Fitness)</td>
</tr>
<tr>
<td>PERSONAL FINANCE</td>
<td>1/2 unit</td>
</tr>
<tr>
<td>HEALTH</td>
<td>1/2 unit</td>
</tr>
<tr>
<td>ELECTIVES</td>
<td>9 units</td>
</tr>
<tr>
<td>Totals</td>
<td>26 units</td>
</tr>
</tbody>
</table>
## POST-HIGH SCHOOL EDUCATION ADMISSIONS REQUIREMENTS

<table>
<thead>
<tr>
<th>CURRICULAR AREAS</th>
<th>Entering Freshman University of Missouri System Credit Requirements</th>
<th>Missouri Public 4 Year Colleges (I.E. UCM, MSU) Credit Requirements</th>
<th>Community &amp; Technical Colleges (I.E. Metropolitan Community Colleges, etc.)</th>
<th>Military Careers</th>
<th>Apprenticeships</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMUNICATION SKILLS</td>
<td>4 Units</td>
<td>4 Units</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOCIAL STUDIES</td>
<td>3 Units Govt 1/2</td>
<td>3 Units Govt 1/2</td>
<td>HIGH SCHOOL Diploma, G.E.D. Or A Certificate Of Completion Of Home School Program</td>
<td>HIGH SCHOOL Diploma Or A Certificate Of Completion Of Home School Program</td>
<td>MOST REQUIRE A High School Diploma Or A G.E.D. And Must Be At Least 18 Years Of Age</td>
</tr>
<tr>
<td>MATHEMATICS</td>
<td>4 Units Alg 1 &amp; Higher</td>
<td>3 Units Alg 1 &amp; Higher</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCIENCE</td>
<td>3 Units No General Science 1 Must Be A Lab Class</td>
<td>3 Units No General Science 1 Must Be A Lab Class</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FINE ARTS</td>
<td>1 Unit</td>
<td>1 Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRACTICAL ARTS</td>
<td>0 Units</td>
<td>0 Units</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSICAL EDUCATION</td>
<td>0 Units</td>
<td>0 Units</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADDITIONAL ELECTIVES</td>
<td>2 Units 2 Years Of The Same Foreign Language</td>
<td>3 Units Selected from Foreign Language &amp;/Or core courses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTHER REQUIREMENTS</td>
<td>Plus appropriate class rank and a minimum score of 24 on the ACT</td>
<td>Plus appropriate class rank and ACT score</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 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. This course will be taught by Math, Science and Language Arts content area teachers.
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 Habits of the Heart bulletin board. All other projects should be pre-approved by the community service coordinator.

A+ tutoring/mentoring hours can count as community service hours as long as 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
Four 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 and office positions
3) Cooperative Career Education (CCE)—Technical and industrial positions
4) Internship in STEM Careers – Science, Technology, Engineering and Math advanced academic positions
5) Internship in MIC – See Missouri Innovation Campus, page 119.

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. This means to pass 6 of 7 classes the previous semester.
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) Dual Enrollment/MOVIP: Students planning to participate in dual enrollment/MOVIP classes 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

NATIONAL ASSOCIATION OF INTERCOLLEGIATE ATHLETICS (NAIA)

For more information about eligibility to play NAIA athletics, go to 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 Guidance Office.

CORE UNITS REQUIRED FOR NCAA CERTIFICATION

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

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.

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

ADVANCED STUDIES AND RECOGNITION PROGRAM

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 Diploma Program (IB)
   II. International Baccalaureate Career-Related Program (formerly IBCC)
   III. Advanced Placement (AP)
   IV. Courses for Dual Credit
   V. Honors Credit
   VI. Project Lead The Way (PLTW)
   VII. Dual Enrollment
   VIII. Articulated Credit
   IX. Other Credit Options (Correspondence/On-line)
   X. College Credit Courses

All students who take AP and IB exams must pay the examination fee. AP and IB exams must be taken for weighted credit. All students who take courses for dual credit must pay college tuition.

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

Students and their parents should meet with a guidance 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 guidance offices.

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, Action, and Service (CAS). Students may...
instead opt to choose individual IB courses in order to receive certificates. Students enrolled in IB courses are required to take and pay for the corresponding assessments. IB assessments include completing a portfolio, a written paper, an oral presentation, a notebook, a project, and written exams. Failure to complete required IB assessments 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 drop an IB course during the testing year must arrange to do so before November 1 to avoid exam fees.

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

- IB Theory of Knowledge
- IB History of the Americas HL 11
- IB History of the Americas HL 12
- IB Info Tech in a Global Society SL
- IB Psychology SL
- IB Psychology HL
- IB Visual Arts SL or HL
- IB Theatre Arts SL or HL

II. INTERNATIONAL BACCALAUREATE CAREER-RELATED PROGRAM (formerly IBCC)
The IBCC is a two year program that incorporates the rigor, vision and values of IB course work with an approved career-related qualification. The course sequences which currently satisfy the career-related requirement are listed below and are designated in the Summit Technology Academy portion of this book. Other career education course sequences will be considered on an as-needed basis. 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 IBCC-core requirements. The IBCC core consists of a Community and Service requirement, the Approaches to Learning course, Language Development, and a reflective project where students evaluate an ethical issue from their career work.

- IB Approaches to Learning
- IB Biology HL 11th grade
- IB Biology HL 12th grade
- IB Mathematics SL 12th grade
- IB English A1 HL 11th grade
- IB English A1 HL 12th grade
- IB Business Management SL
- IB Sports, Exercise and Health Science SL

III. ADVANCED PLACEMENT (AP)
The Advanced Placement Program is essentially a way for schools to provide their stronger students with courses of study appropriate to their abilities and interests, with reasonable assurance that these studies will not be repeated at college.

R-7 high schools offer several AP courses to juniors and seniors. 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. 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.

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

- AP American History
- AP European History
- AP Physics
- AP Calculus

IV. 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, and recommendation of the high school principal or counselor.

Below is a listing of all dual credit courses:

- Advanced Web Design
- College Accounting
- College Credit English
- Technical English
- French IV and V
- German IV and V
- Spanish IV and V
- Mandarin Chinese IV/V
- IB History of the Americas 11th & 12th
- IB Psychology
- Anatomy & Phys
- Human Body Sys
- Pre-professional Nursing
- Medical Interventions/Bio Innovations
- College Algebra
- Calculus/AP
- Digital Electronics/CIM
- Engineering Design & Development
- Business Administration
- IB Business Management SL
- Advanced Business Essentials
- Software Development
- Computer Applications II
- Sports & Entertainment Marketing
- Creative Marketing through Entrepreneurship
- Network Engineering I/II
- IB Visual Art
- IB Biology 11th & 12th
- Pre-professional Educator Cadet
- Principles of Biomedical Science
- Intro to Engineering
- Principles of Engineering
- Pre-Allied Health
- IB Environmental Sys & Societies
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 COMPASS 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.

High School freshmen and sophomores who wish to enroll in dual credit courses must also score in the 90th percentile or higher on the SAT or ACT exam.

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

- Career or technical courses require a 2.5 or higher unweighted GPA to be eligible.

All other courses intended for transfer to other Missouri colleges or universities require a 3.0 or higher unweighted GPA.

V. HONORS/WEIGHTED CREDIT

Students should be aware that the following criteria must be met in order 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.
3. The course utilizes post-secondary materials that are criterion referenced to the course of study (a bibliographical list is required.)
4. The course has an individual study component that promotes critical thinking, problem solving, and is cross-referenced to another course.
5. Sixty-five per cent (65%) of the total course work for an honors course will be at the analysis, synthesis, and evaluation level.
6. 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.

VI. PROJECT LEAD THE WAY (PLTW)

** denotes a Project Lead The Way (PLTW) course, which is a nationally recognized engineering and biomedical curriculum being offered through the Lee’s Summit School District. Introduction to Engineering, Principles of Engineering, Civil Engineering and Architecture (CEA) and Computer Science & Software Engineering 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, Engineering Design and Development or Medical Interventions/Biomedical Innovations offered at Summit Technology Academy. Ask your Guidance Counselor about information regarding PLTW or go to www.pltw.org. Courses marked with double asterisk (**) are approved Project Lead the Way courses.

VII. DUAL ENROLLMENT

Please see your counselor for a Dual Enrollment Procedures handout and a School District-MCC Dual Enrollment Approval Form. There are specific procedures for how dual enrollment courses affect GPA, graduation requirements, transcripts, and weightedness. The approval form must be signed by student, parent, and guidance counselor prior to enrollment at MCC. Seniors who are enrolled in enough classes to meet graduation requirements may also enroll in an accredited college or licensed career center. Dual enrollment credit does not become a part of the high school transcript unless qualifies for high school credit under the terms of the agreement with the Metropolitan Community Colleges. Regulations for dual enrollment:

1. 2.5 unweighted GPA to qualify for career-technical courses, 3.0 unweighted GPA to qualify for academic courses
2. College credit may apply to high school credit if pre-approved (see your guidance counselor)
3. Appropriate placement score

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 excepted 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

Courses by Correspondence and Missouri Virtual Instructional Program (MOVIP)

Missouri’s Virtual Instruction Program (MoVIP) offers online courses for students statewide. Students can take an entire course from any internet-connected computer, available 24 hours a day, and seven days a week. Approved correspondence courses
(no more than 2 units of credit) and MoVIP courses are options available to students in the R-7 District. Please contact your Guidance Counselor for approval and course listings. Visit http://movip.org for more MoVIP information.

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.
R-7 ONLINE ACADEMY

Additional information can be found at http://r7online.lsr7.org.

Course offerings include:

American Government (11-12)
Astronomy (11-12)
Business Law (11-12)
College Accounting (10-12) (Dual credit optional)
Computer Hardware/Operating Systems (CHaOS) I/II (9-12) (Dual credit optional)
Computer Applications I/II (9-12)
Creative Writing (11-12)
Database Management I/II (9-12)
General Psychology (11-12)
Geometry (Alg. I Pre-req.)
Health & Wellness (9-12)
Introduction to Human Services (9-12)
Mandarin Chinese (9-12)
Meteorology (11-12)
Modern Global Issues (11-12)
Personal Finance (11-12)
Science of Nature (11-12)

Course descriptions are located in the corresponding department sections.

Participation and Attendance
A strong personal commitment and work ethic is needed by any student who takes an online course. Students and parents should utilize the resources found at http://r7online.lsr7.org to find out if online learning is right for their needs.

Online courses follow the same semester calendar as face-to-face classes. Students are expected to keep pace with the assignment due dates set by their course instructor. Continuous communication between the student and the instructor, as well as a commitment to staying on pace with course assignments, are necessary to be successful in an online course. The date and time for the final exam will be communicated during the course by the instructor.

Technology Requirements
All students taking an R7 Online course must have access to a computer with Internet available. The Lee’s Summit R-7 School District does not provide a computer and/or access to the Internet for students enrolled in online courses. For specific technical requirements, please visit http://r7online.lsr7.org/getting-started.
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 consecutive semesters prior to graduation (grades 10-12)
- 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.

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_______
*Social Security Number  ___________    _______    ___________
*Social Security numbers will be used by the Department of Higher Education (DHE) for the purpose of determining eligibility to receive A+ funding and to make payments to the community college or career-technical school. Failure to disclose your Social Security number may result in delays in the receipt of A+ funds.

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 of the requirements below:**

1. Attend a designated A+ high school for at least three (3) consecutive years (grades 10, 11, 12) 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. (Student should see A+ Coordinator immediately if the score is not achieved. There may be some other options.)

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

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.

<table>
<thead>
<tr>
<th>Student Signature</th>
<th>Date</th>
<th>Parent/Guardian Signature</th>
<th>Date</th>
</tr>
</thead>
</table>

12
EXPLORING CAREER PATHS

Career paths provide a plan for ALL students, regardless of their interests, abilities, talents, or desired levels of education. With career paths ALL students will have areas of FOCUS, along with flexibility and a variety of ideas to pursue as they make decisions regarding course selection through career paths, ALL students will see a relevance to their selected school courses. Thus, students are more apt to do well in school.

What are career paths?

- Career paths are clusters of occupations and careers that are grouped together because many of the people in them share similar interests and strengths.
- All paths include a variety of occupations that require different levels of education and training.
- Career paths provide students with an area of focus, along with flexibility among many options and a variety of ideas to pursue.

What steps are involved in choosing a career path?

- Identify your interests, abilities and talents.
- Consider the possible careers in each path in relationship to those interests, abilities and talents.
- Decide which career path seems to fit you best.
- Select courses that are related to the career path you have chosen.

How can parents and other interested adults help?

- Help students identify interests, abilities and talents by discussing strengths with them.
- Share information about careers and work experiences.
- Arrange for students to talk with people about careers that are of interest.

What if students change their minds?

- A career path choice is not a permanent commitment.
- As students have new experiences, they will learn new things about themselves and may change career paths.
- If a student decides on a new career path, he or she can discuss it with a counselor and adjust future course selections accordingly.
Career Paths and Career Clusters

Arts & Communications
These occupations are related to the humanities and the performing, visual, literary and media arts. They may include architecture, interior design, creative writing, fashion design, film, fine arts, graphic design and production, journalism, language, radio, television, advertising and public relations.

Career Clusters: Arts, A/V Technology and Communications

Business Management & Technology
These occupations are related to the business environment. They may include entrepreneurship, sales, marketing, computer/information systems, finance, accounting, personnel, economics and management.

Career Clusters: Information Technology; Finance; Marketing, Sales and Service; Business, Management and Administration

Health Services
These occupations are related to the promotion of health and the treatment of disease. They may include research, prevention, treatment and related technologies.

Career Clusters: Health Science

Human Services
These occupations are related to economic, political and social systems. They may include education, government, law and law enforcement, leisure and recreation, military, religion, childcare and social services.

Career Clusters: Human Services; Hospitality and Tourism; Government and Public Administration; Law, Public Safety, Corrections and Security; Education and Training

Industrial & Engineering Technology
These occupations are related to the technologies necessary to design, develop, install or maintain physical systems. They may include engineering, manufacturing, construction, service and related technologies.

Career Clusters: Science, Technology, Engineering and Mathematics; Architecture and Construction; Manufacturing; Transportation, Distribution and Logistics

Natural Resources
These occupations are related to the environment and natural resources. They may include agriculture, earth science, environmental sciences, fisheries, forestry, horticulture and wildlife.

Career Clusters: Agriculture, Food and Natural Resources

For more information on Missouri’s career clusters, visit [http://dese.mo.gov/divcareered/career_clusters.htm](http://dese.mo.gov/divcareered/career_clusters.htm)
**Myths and Realities About Careers**

Making a career decision is a hard process that requires you to believe in yourself, and to believe that your choices determine your future. It requires a desire to exert control over your future by deciding on a path and then making decisions that help you stay on that path.

Making a career decision is different today than in the past. The following are myths about career decision making that are not true today.

<table>
<thead>
<tr>
<th>Myth</th>
<th>Reality</th>
</tr>
</thead>
<tbody>
<tr>
<td>I need to decide for the rest of my life.</td>
<td>The average adult changes careers 7 times in his or her lifetime.</td>
</tr>
<tr>
<td>I need to decide on a specific occupation.</td>
<td>Deciding on a career path and/or field of occupations, not a specific job title, is probably best.</td>
</tr>
<tr>
<td>Some careers are not open to me because of my race, color, national origin, gender, or age.</td>
<td>ALL careers are available to you.</td>
</tr>
<tr>
<td>There is a perfect career.</td>
<td>There are many excellent career choices for you, but each choice will probably have something about it that you wish were different. You need to choose a career that is a good fit, knowing that it probably will not be perfect.</td>
</tr>
</tbody>
</table>

Missouri Connections is a comprehensive Internet-based career information system that allows students and parents to explore careers and colleges, participate in career assessments, educational and occupational planning, and job preparation and management. You can also view and update your Personal Plan of Study, and create your own Career Portfolio!

**Directions for accessing Missouri Connections:**

- Direct your Internet browser to: http://myconnections.lsr7.org
- Click on ‘My Connections’
- Click on ‘Missouri Connections’
- Username: Your student school computer username
- Password: Your student school computer password
It's not too soon to start thinking about your future!

**College**

If you are considering attending school (four-year college, university, career/technical school, or two-year college) after high school, you may find it helpful to do the following:

- Make a **list of the schools** that interest you.
- **Gather information** from each school and study it.
- **Register to take the ACT or SAT Assessment** before December of your senior year (spring of your junior year is recommended).
- **Visit the campus** of each school you are seriously considering.
- **Apply early** for admission and housing.
- Apply early for **financial assistance**. Pay attention to deadlines listed in the financial aid information you receive from your counselor and the schools you are interested in attending.
- **Find out** about local, state, federal and private student financial assistance programs.
- **Make your decision**. Take time to review all information carefully and weigh your options.

**Armed Forces**

If you are considering serving in the **Armed Forces** after high school, you might find it helpful to do the following:

- **Visit with friends, neighbors, and relatives** who have served in various branches of the Armed Forces.
- **Study the military literature** available in your counseling office.
- **Evaluate any physical limitations** that might prevent you from serving in the Armed Forces.
- **Compare military training opportunities** with possible civilian occupations.
- Arrange with your counselor to visit with various **military recruiters** during your junior and senior years of high school. When meeting with recruiters, listen very carefully, ask tons of questions, and ask to see it in writing.
- **Compare benefits, tours of duty, training, and promotion opportunities** of military programs.

**Employment**

If you are considering **direct employment** after high school, you might find it helpful to:

- **Explore your special abilities and interests** with your school counselor.
- Collect and study materials about **writing resumes** and letters of application.
- **Consider whether you want to move** away from your home region after high school.
- **Visit with individuals** working in various occupations that may be of interest to you.
- **Become familiar with major employers** in the areas where you are interested in working.
- Be knowledgeable about the **career/technical program offerings** available in your high school.

### Choosing a Career Path

#### Step 1: Self-Inventory / identify your interests, abilities and talents

<table>
<thead>
<tr>
<th>Activities That Sound Interesting To Me</th>
<th>Activities That Sound Interesting To Me</th>
<th>Activities That Sound Interesting To Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. reading or writing stories or articles</td>
<td>1. interviewing people</td>
<td>1. preparing medicines in a pharmacy</td>
</tr>
<tr>
<td>2. designing and building scenery for plays</td>
<td>2. using computer program to do math</td>
<td>2. helping sick people</td>
</tr>
<tr>
<td>3. gardening</td>
<td>3. typing letters, forms, banners, etc.</td>
<td>3. working with animals</td>
</tr>
<tr>
<td>4. taking photographs</td>
<td>4. keeping records, taking notes at meetings</td>
<td>4. helping with sports injuries</td>
</tr>
<tr>
<td>5. acting in a play or movie</td>
<td>5. working with numbers</td>
<td>5. studying anatomy and disease</td>
</tr>
<tr>
<td>6. listening to/playing music</td>
<td>6. organizing files and paperwork</td>
<td>6. performing surgery</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal Qualities That Describe Me</th>
<th>Personal Qualities That Describe Me</th>
<th>Personal Qualities That Describe Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. imaginative</td>
<td>1. practical</td>
<td>1. compassionate and caring</td>
</tr>
<tr>
<td>2. creative</td>
<td>2. independent</td>
<td>2. good listener</td>
</tr>
<tr>
<td>3. outgoing</td>
<td>3. organized</td>
<td>3. good at following directions carefully</td>
</tr>
<tr>
<td>4. like using my hands to create things</td>
<td>4. like to use machines</td>
<td>4. conscientious and careful</td>
</tr>
<tr>
<td>5. performer</td>
<td>5. like to be around people</td>
<td>5. patient</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>In My Free time I Would Enjoy</th>
<th>In My Free time I Would Enjoy</th>
<th>In My Free time I Would Enjoy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. working on the school paper or yearbook</td>
<td>1. being in a speech contest or debate</td>
<td>1. volunteering in a hospital</td>
</tr>
<tr>
<td>2. acting in a play</td>
<td>2. using a computer</td>
<td>2. taking care of pets</td>
</tr>
<tr>
<td>3. painting pictures, drawing</td>
<td>3. volunteering in a local hospital office</td>
<td>3. exercising and taking care of myself</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School Subjects/Activities That I Enjoy or Do Well In</th>
<th>School Subjects/Activities That I Enjoy or Do Well In</th>
<th>School Subjects/Activities That I Enjoy or Do Well In</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. social studies</td>
<td>1. speech</td>
<td>1. math</td>
</tr>
<tr>
<td>2. choir/chorus/band</td>
<td>2. language</td>
<td>2. science</td>
</tr>
<tr>
<td>3. creative writing</td>
<td>3. math</td>
<td>3. biology</td>
</tr>
<tr>
<td>4. art</td>
<td>4. marketing</td>
<td>4. chemistry</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal Qualities That Describe Me</th>
<th>Personal Qualities That Describe Me</th>
<th>Personal Qualities That Describe Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. good listener</td>
<td>1. like helping with problems</td>
<td>1. friendly</td>
</tr>
<tr>
<td>2. nature lover</td>
<td>2. nature lover</td>
<td>2. open</td>
</tr>
<tr>
<td>3. physically active</td>
<td>3. physically active</td>
<td>3. outgoing</td>
</tr>
<tr>
<td>4. problem solver</td>
<td>4. problem solver</td>
<td>4. good at making decisions</td>
</tr>
<tr>
<td>5. observant</td>
<td>5. observant</td>
<td>5. good listener</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>In My Free time I Would Enjoy</th>
<th>In My Free time I Would Enjoy</th>
<th>In My Free time I Would Enjoy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. building stage sets for a school play</td>
<td>1. hiking</td>
<td>1. tutoring young children</td>
</tr>
<tr>
<td>2. drawing sketches of cars, mechanical things</td>
<td>2. participating in FFA or 4H</td>
<td>2. helping with a community project</td>
</tr>
<tr>
<td>3. working on cars</td>
<td>3. experimenting with a chemistry set</td>
<td>3. coaching kids in a sport</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School Subjects/Activities That I Enjoy or Do Well In</th>
<th>School Subjects/Activities That I Enjoy or Do Well In</th>
<th>School Subjects/Activities That I Enjoy or Do Well In</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. math</td>
<td>1. math</td>
<td>1. language arts</td>
</tr>
<tr>
<td>2. geometry</td>
<td>2. geography</td>
<td>2. history</td>
</tr>
<tr>
<td>3. woodworking</td>
<td>3. biology</td>
<td>3. speech</td>
</tr>
<tr>
<td>4. science</td>
<td>4. geometry</td>
<td>4. math</td>
</tr>
</tbody>
</table>

Total # circled A. B. C. D. E. F.
Step 2: Career Paths Survey

Keeping in mind the information you just gained from the self-inventory, read each of the following descriptions. Rank them from 1 to 6 in the order that best describes you, 1 being best. Use each number only once.

A) _____ Are you a creative thinker? Are you imaginative, innovative and original? Do you like to communicate ideas?

B) _____ Do you enjoy being a leader, organizing people, planning activities for others and talking with people? Do you like to work with numbers or ideas? Do you enjoy carrying through with an idea and seeing the end product? Do you like to know what is expected of you and like things around you to be neat and orderly?

C) _____ Do you like to care for people or animals who are sick or help them stay well? Are you interested in new diseases and in how the body works? Do you enjoy observing patients and looking for changes in how they are doing?

D) _____ Are you mechanically inclined and practical? Do you like to use your hands and build things? Are you curious about how things work?

E) _____ Are you a nature lover? Are you practical, curious about the physical world and interested in plants and animals? Do you like to be physically active? Do you like to observe, learn, investigate, or solve problems?

F) _____ Are you friendly, open, outgoing, understanding and cooperative? Do you like to work with people to help solve problems? Is it important to you to do something that makes things better for other people?

KEY TO SURVEY:
A) = Arts and Communications
B) = Business Management & Technology
C) = Health Services
D) = Industrial and Engineering Technology
E) = Natural Resources
F) = Human Services

Compare the self-inventory with the survey above. The letters A-F in the self-inventory boxes represent the Career Paths listed above. The self-inventory area that you scored highest in is the career path where your interests lie. It should also be the survey item you rank highest. This is the career path you should explore.

Discuss this information with adults in your family and with other interested adults. Ask them to share what they see as your strengths and talents. It is also helpful to ask them to talk about information they may have about careers and the world of work.

There are a variety of other career interest instruments. Your counselor will be leading you through some of these while you are in high school and will be happy to help you compare those results with the career Paths.
What is focused learning?
Focused learning involves successful completion of four related units of study. Each career path has several learning focuses. Focuses help students select their elective courses around a more specific career path. Students may complete course work in more than one focus or take additional course work within a focus to deepen their knowledge in their chosen career path.

When do students declare a focus?
All students should have a four-year plan of study around a career path. Beginning in the 10th grade, students will have declared a focus. Students can change a focus if they find this is not an area of interest. Students are never locked into a specific focus.

Focused learning was developed using the six-career paths model and current courses offered to Lee’s Summit R-7 students. These focuses are just a beginning; the plan is for focuses to change as the job demand and needs of our student population changes.

What are the benefits of choosing an area of focus?
A student’s chosen area of focus appears on the academic transcript. This is an official document that can be accessed by contacting the counseling office. The academic transcript is used when applying to colleges and for scholarships. Once a student has completed the four units of credit, a notation of “yes” appears on the transcript. Students completing focused learning will be recognized in media publications.

Why do students choose an area of focus?
Deciding on a career focus can assist you in exploring your interests and preparing for your future. The intent is not for you to decide on a specific occupation for the rest of your life, but to select a career focus into which you can begin directing your energies. A career focus is not a permanent commitment. As you have new experiences, you learn new things about yourself and may decide to change your career focus.

Learning Focuses by Career Paths

**Arts and Communications Paths**
- Architectural Design
- Communications
  - Debate/Forensic Concentration
  - Journalism/Publications/Video Production Concentration
- Fine & Applied Art
- International Studies
- Performing Arts
  - Choral Music Concentration
  - Theatre Concentration
  - Instrumental Music Concentration
  - Film/Audio Production Concentration
- Advanced Studies

**Business Management & Technology Paths**
- Accounting
- Administrative Professional (2-year assoc. degree)
- Business Administration (4-year degree)
- Information Technology
- Marketing
- Software Engineering

**Health Services Paths**
- Health Services Professions
  - 2 Year Degree, or Technical Program Concentration
- Health Services Professions
  - 4 Year or Terminal Degree Concentration
- Sports Medicine

**Human Services Paths**
- Culinary Arts
- Education
  - Early Childhood/Elementary Concentration
  - Secondary/Post-Secondary Concentration
- Protective Services
- Public Services
- Social Services
- Social Sciences

**Industrial & Engineering Technology Paths**
- Construction Trades
- Drafting and Design (CAD)
- Electronics
- Engineering
- Fabrication/Manufacturing
- Mechanical/Automotive Technology

**Natural Resources Paths**
- Animal Science
- Agriscience
  - Landscape Design/Horticulture Concentration
- Environmental Studies

For more information, visit [http://myconnections.lsr7.org](http://myconnections.lsr7.org)
## Area of Focus: Advanced Studies

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent upon college major:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Doctoral Degree Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Specialist Degree Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Masters Degree Program</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### High School

- **English** = 4
- **Math** = 3
- **Science** = 3
- **Social Studies** = 3
- **Physical Education** = 1
- **Health** = .5
- **Personal Finance** = .5
- **Fine Arts** = 1
- **Practical Arts** = 1
- **Focused Electives** = 4
- **General Electives** = 5

26 credits to graduate

### College Programs Currently Available

This area of focus is designed for students pursuing the International Baccalaureate (IB) Diploma Program. Students completing this area of focus will be prepared to enter selective and highly selective colleges and universities after graduation. For a list of specific colleges, universities and programs supporting this path, contact your school counselor:

- LSHS—986-2003
- LSNHS—986-3003
- LSWHS—986-4003

You can also access US, public/private college information at the following website:

www.missouriconnections.org

### Sample Occupation

<table>
<thead>
<tr>
<th>Sample Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced (Salary based on info missourieconomy.org)</th>
<th>Employment Outlook (Through 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemist/Biophysicist</td>
<td>Doctoral</td>
<td>$35,300 - $77,200</td>
<td>Growing</td>
</tr>
<tr>
<td>Microbiologist</td>
<td>Doctoral</td>
<td>$41,500 - $77,900</td>
<td>Growing</td>
</tr>
<tr>
<td>Postsecondary Teacher</td>
<td>Doctoral</td>
<td>$36,800 - $80,600</td>
<td>Growing</td>
</tr>
<tr>
<td>Clinical Psychologist</td>
<td>Doctoral</td>
<td>$35,040 - $56,690</td>
<td>Steady</td>
</tr>
</tbody>
</table>

### Note: ~Denotes .5 credits per semester @ Denotes off-campus course equals 3.0 credits per year

Visit: http://myconnections.lsr7.org

### Area of Focus: Communications

**Concentration:** General Studies

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actor/Director/Producer</td>
<td>High School</td>
<td>English = 4, Math = 3, Science = 3, Physical Education = 1, Health = .5, Personal Finance = .5, Fine Arts = 1, Practical Arts = 1, Focused Electives = 4, General Electives = 5, <strong>Total 26 credits to graduate</strong></td>
</tr>
<tr>
<td>Advertising</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agent/Business Mngr.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broadcast Journalism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dancer/Choreographer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Editor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fashion Editor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphic Artist/Designer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journalism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lighting Designer/Technician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Photographer/Photojournalist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Relations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publishing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio/Television Broadcaster</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reporter/Correspondent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Language Teacher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writer/Author</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Area of Focus Coursework**

**Courses selected must equal 4.0 credits:**
- Advanced Broadcasting
- Intro Video Tech/Broadcasting
- News for Print and Online I
- News for Print and Online II
- Debate
- Advanced Debate
- Intro to Yearbook

- Theatre Arts I/II
- Advanced Video Tech
- Competitive Dramatics
- Repertory Theatre
- Adv Yearbook
- Modern Languages I/II/III/IV
- "Fashion Design & Merchandising"
- "Multimedia"
- "Speech Communications"

Digital Media Technology @ STA

**Postsecondary**

**Gain education, training and work experience to further your career!**

<table>
<thead>
<tr>
<th>Community College Majors</th>
<th>College/University Majors</th>
<th>Other Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Associate's Degree:</strong></td>
<td><strong>Bachelor's/Graduate Degree:</strong></td>
<td><strong>On the Job Training:</strong></td>
</tr>
<tr>
<td>Communications</td>
<td>Communication</td>
<td>Disc Jockey</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>Public Relations</td>
<td>Teaching Assistant</td>
</tr>
<tr>
<td>Journalism and Public Relations</td>
<td>Speech Communications</td>
<td>Lighting set-up</td>
</tr>
<tr>
<td></td>
<td>Ethical Leadership</td>
<td>Translator</td>
</tr>
<tr>
<td></td>
<td>Health Communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Speech/Theatre Education</td>
<td></td>
</tr>
</tbody>
</table>

**Sample Occupation**

| Broadcast News Analyst     | Bachelor’s + work experience | $29,000 - $94,600 | Growing |
| Public Relations Specialist| Bachelor’s                  | $30,800 - $62,200 | Growing |
| Public Relations Manager   | Bachelor’s or higher + work experience | $57,000 - $108,000 | Growing |
| Radio/TV Announcer         | Long-term OJT               | $15,600 - $41,300 | Steady |

**Salary based on info missourieconomy.org**

**Employment Outlook (Through 2018)**

*Visit: http://myconnections.lsr7.org*

**Note:** ~Denotes .5 credits per semester

*OJT Denotes On the Job Training*

*Denotes off-campus course equals 3.0 credits per year*
## Area of Focus: Communications

**Concentration:** Debate/Forensic

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actor</td>
<td>High School</td>
<td>English = 4</td>
<td>Courses selected must equal 4.0 credits:</td>
</tr>
<tr>
<td>Broadcast</td>
<td></td>
<td>Math = 3</td>
<td>Debate</td>
</tr>
<tr>
<td>Journalism</td>
<td></td>
<td>Science = 3</td>
<td>Advanced Debate</td>
</tr>
<tr>
<td>Journalism</td>
<td></td>
<td>Social Studies = 3</td>
<td>Competitive Dramatics</td>
</tr>
<tr>
<td>Law</td>
<td></td>
<td>Physical Education = 1</td>
<td>IB Theater Arts SL/HL</td>
</tr>
<tr>
<td>Paralegal</td>
<td></td>
<td>Health = .5</td>
<td>~Speech Communications</td>
</tr>
<tr>
<td>Politician</td>
<td></td>
<td>Personal Finance = .5</td>
<td></td>
</tr>
<tr>
<td>Politician</td>
<td></td>
<td>Fine Arts = 1</td>
<td></td>
</tr>
<tr>
<td>Politician</td>
<td></td>
<td>Practical Arts = 1</td>
<td></td>
</tr>
<tr>
<td>Politician</td>
<td></td>
<td>Focused Electives = 4</td>
<td></td>
</tr>
<tr>
<td>Politician</td>
<td></td>
<td>General Electives = 5</td>
<td></td>
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<td>Politician</td>
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</tr>
<tr>
<td>Politician</td>
<td></td>
<td>26 credits to graduate</td>
<td></td>
</tr>
</tbody>
</table>

**Postsecondary**  
**Gain education, training and work experience to further your career!**

<table>
<thead>
<tr>
<th>Sample Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced (Salary based on info missourieconomy.org)</th>
<th>Employment Outlook (Through 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lawyer</td>
<td>First Professional Degree</td>
<td>$50,800 – $136,000</td>
<td>Growing</td>
</tr>
<tr>
<td>Legal Secretary</td>
<td>Associate’s</td>
<td>$24,700 - $43,300</td>
<td>Steady</td>
</tr>
<tr>
<td>Forensic Science Tech</td>
<td>Bachelor’s</td>
<td>$34,000 - $53,600</td>
<td>Steady</td>
</tr>
<tr>
<td>Legislator</td>
<td>Bachelor’s</td>
<td>$19,970 - $34,560</td>
<td>Steady</td>
</tr>
</tbody>
</table>

**Note:**  
~Denotes .5 credits per semester  
@ Denotes off-campus course equals 3.0 credits per year  
OJT Denotes On the Job Training  
Visit: [http://myconnections.lsr7.org](http://myconnections.lsr7.org)
# Area of Focus: Communications

Concentration: Journalism/Publications/Video Production

## Career Options

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
</tr>
</thead>
</table>
| Art Director                    | High School     | English = 4  
Math = 3  
Science = 3  
Social Studies = 3  
Physical Education = 1  
Health = .5  
Personal Finance = .5  
Fine Arts = 1  
Practical Arts = 1  
Focused Electives = 4  
General Electives = 5  
26 credits to graduate          |
| Broadcast Journalism            | High School     | Leads to a career in journalism where people write, edit, and create content for various platforms. |
| Broadcaster                     | High School     | Public relations involves managing communications between an organization and the public.         |
| Director                        | High School     | Film and arts critics evaluate and critique artistic works.                                     |
| Editor                          | High School     | Leads to a career in journalism where people work behind the scenes to create content.            |
| Film/Arts Critic               | High School     | Leads to a career in journalism where people work behind the scenes to create content.            |
| Graphic Artist                 | High School     | Leads to a career in journalism where people work behind the scenes to create content.            |
| Journalism                     | High School     | Leads to a career in journalism where people work behind the scenes to create content.            |
| Photographer                   | High School     | Leads to a career in journalism where people work behind the scenes to create content.            |
| Public Relations               | High School     | Leads to a career in journalism where people work behind the scenes to create content.            |
| Publishing                     | High School     | Leads to a career in journalism where people work behind the scenes to create content.            |
| Radio/TV Producer              | High School     | Leads to a career in journalism where people work behind the scenes to create content.            |
| Reporter/Correspondent         | High School     | Leads to a career in journalism where people work behind the scenes to create content.            |
| Technical Production           | High School     | Leads to a career in journalism where people work behind the scenes to create content.            |
| Web-Page Design                | High School     | Leads to a career in journalism where people work behind the scenes to create content.            |
| Writer                         | High School     | Leads to a career in journalism where people work behind the scenes to create content.            |

### Area of Focus Coursework

#### Courses selected must equal 4.0 credits:

- Intro Video Tech/Broadcasting
- Advanced Broadcasting
- News for Print and Online I
- News for Print and Online II
- Intro to Yearbook
- Adv Yearbook
- Advanced Video Tech
- Adv Web Page Design
- IB Film
- ~Creative Writing
- ~Speech Communications
- ~Multimedia
- ~Personal Image
- ~Journalism

### High School

**Gain education, training and work experience to further your career!**

**Courses selected must equal 4.0 credits:**

- Intro Video Tech/Broadcasting
- Advanced Broadcasting
- News for Print and Online I
- News for Print and Online II
- Intro to Yearbook
- Adv Yearbook
- Advanced Video Tech
- Adv Web Page Design
- IB Film
- ~Creative Writing
- ~Speech Communications
- ~Multimedia
- ~Personal Image
- ~Journalism

### Postsecondary

**Community College Majors**

**Associate's Degree:**

- Interactive Media
- Mass Media

**College/University Majors**

**Bachelor's/Graduate Degree:**

- Journalism
- Broadcast Journalism
- Print/Internet Journalism
- Mass Media
- Digital Film/Media Production
- Integrated Media
- Photography

**Other Options**

- Interactive Media Certification
- Photography

### Sample Occupation

<table>
<thead>
<tr>
<th>Sample Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced (Salary based on info missourieconomy.org)</th>
<th>Employment Outlook (Through 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising Sales Agent</td>
<td>Moderate OJT</td>
<td>$21,000 - $63,300</td>
<td>Growing</td>
</tr>
<tr>
<td>Advertising/Promo Manager</td>
<td>Bachelor's Degree or higher + work experience</td>
<td>$40,000 - $97,200</td>
<td>Growing</td>
</tr>
<tr>
<td>Writer/Author</td>
<td>Bachelor's Degree</td>
<td>$30,500 - $62,500</td>
<td>Growing</td>
</tr>
<tr>
<td>Broadcast News Analyst</td>
<td>Bachelor's Degree or higher + work experience</td>
<td>$29,000 - $94,600</td>
<td>Growing</td>
</tr>
</tbody>
</table>

**Note:** ~Denotes .5 credits per semester  
@ Denotes off-campus course equals 3.0 credits per year  
OJT Denotes On the Job Training

Visit: http://myconnections.lsr7.org
## Area of Focus: Fine & Applied Art

### Career Options

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>English = 4 Math = 3 Science = 3 Social Studies = 3 Physical Education = 1 Health = 5 Personal Finance = .5 Fine Arts = 1 Practical Arts = 1 Focused Electives = 4 General Electives = 5 26 credits to graduate</td>
<td>Courses selected must equal 4.0 credits: Visual Arts IB Visual Arts ~Drawing I/II/III ~Ceramics I/II/III ~Painting I/II/III ~Portfolio I/II ~Graphic &amp; Comp Arts I/II Advanced Concepts in CAD Civil Eng Arch Advanced Web Page Design Culinary Arts I ~Personal Image ~Culinary Foundations ~Fashion Design Merchandising ~Graphics Technology ~Stage Craft ~Interior Design ~Multimedia ~Intro to Web Design ~International Foods FACS Internships</td>
</tr>
<tr>
<td>Postsecondary</td>
<td>Community College Majors College/University Majors Other Options</td>
<td></td>
</tr>
<tr>
<td>Gain education, training and work experience to further your career!</td>
<td>Associate’s Degree: Advertising Digital Filmmaking/Video Production Graphic Design Photography Web Design/Interactive Media Bachelor’s/Graduate Degree: Advertising Graphic Design Industrial Design Animation/Special Effects Printmaking Fine Arts (BFA) Art Education Illustration Art Management Art Therapy Art Therapy Shadowing Art Gallery/Museum Employee Art Retail Summer Camp w/Art Emphasis Theatre Coops Productions Volunteer City Theatre Groups Renaissance Festival</td>
<td></td>
</tr>
<tr>
<td>Outlook</td>
<td>Sample Occupation</td>
<td>Degree Required</td>
</tr>
<tr>
<td>Sculptor</td>
<td>Bachelor’s or higher + work experience</td>
<td>$39,300 - $97,900</td>
</tr>
<tr>
<td>Photographer</td>
<td>Long-term OJT</td>
<td>$17,000 - $43,300</td>
</tr>
<tr>
<td>Interior Designer</td>
<td>Associate’s</td>
<td>$27,000 - $52,800</td>
</tr>
<tr>
<td>Fine Artist</td>
<td>Long-term OJT</td>
<td>$25,860 - $57,570</td>
</tr>
</tbody>
</table>

Note: ¹Denotes .5 credits per semester  @ Denotes off-campus course equals 3.0 credits per year  OJT Denotes On the Job Training

Visit: http://myconnections.lsr7.org
## Area of Focus: Performing Arts

### Concentration: Choral Music

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composer</td>
<td>High School</td>
<td>English = 4</td>
<td>Courses selected must equal 4.0 credits:</td>
</tr>
<tr>
<td>Entertainment Law</td>
<td></td>
<td>Math = 3</td>
<td>Symphonic Band</td>
</tr>
<tr>
<td>Luthier/Inst. Builder</td>
<td></td>
<td>Science = 3</td>
<td>Concert Band</td>
</tr>
<tr>
<td>Music Director</td>
<td></td>
<td>Social Studies = 3</td>
<td>Concert Orchestra</td>
</tr>
<tr>
<td>Music Therapy</td>
<td></td>
<td>Physical Education = 1</td>
<td>Symphony Orchestra</td>
</tr>
<tr>
<td>Musicologist</td>
<td></td>
<td>Health = .5</td>
<td>Music Appreciation</td>
</tr>
<tr>
<td>Music Pub/Editor/Copyist</td>
<td></td>
<td>Fine Arts = 1</td>
<td>IB Music</td>
</tr>
<tr>
<td>Music Critic</td>
<td></td>
<td>Practical Arts = 1</td>
<td></td>
</tr>
<tr>
<td>Music Teacher</td>
<td></td>
<td>Focused Electives = 4</td>
<td></td>
</tr>
<tr>
<td>Performing Arts Med.</td>
<td></td>
<td>General Electives = 5</td>
<td></td>
</tr>
<tr>
<td>Performer</td>
<td></td>
<td>26 credits to graduate</td>
<td></td>
</tr>
<tr>
<td>Radio Personality/DJ</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Recording Eng.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talent Agent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postsecondary</td>
<td></td>
<td>Gain education, training and work experience to further your career!</td>
<td></td>
</tr>
<tr>
<td><strong>Community College Majors</strong></td>
<td></td>
<td><strong>Associate’s Degree:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Music Teacher</td>
<td></td>
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<td></td>
<td></td>
<td>Studio Teacher</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Recording Engineering</td>
<td></td>
</tr>
<tr>
<td><strong>College/University Majors</strong></td>
<td></td>
<td><strong>Bachelor’s/Graduate Degree:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Music</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Music Business/Talent Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Composition/Orchestra/Conducting</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Music Therapy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cinema Arts</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Musical Theatre</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Recording Arts</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Acoustical Engineering</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Physical Therapy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Performing Arts Medicine</td>
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</tr>
<tr>
<td><strong>Other Options</strong></td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Military Performer</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>Apprenticeship</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Luthier</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Live Sound Tech</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Studio Recording Tech</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Studio Musician</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Studio Teacher</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Pop/Rock/Jazz Ensemble</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Community Theatre</td>
</tr>
</tbody>
</table>

### Sample Occupation

<table>
<thead>
<tr>
<th>Sample Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced</th>
<th>Employment Outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music Director/Composer</td>
<td>Bachelor’s or higher + work experience</td>
<td>$31,200 - $48,100</td>
<td>Growing</td>
</tr>
<tr>
<td>Musicians/Singer</td>
<td>Long-term OJT</td>
<td>$22,300 - $83,300</td>
<td>Growing</td>
</tr>
<tr>
<td>Music Teacher, Postsecondary</td>
<td>Masters and/or Doctorate</td>
<td>$37,910 - $69,900</td>
<td>Growing</td>
</tr>
<tr>
<td>Talent Producer</td>
<td>Bachelor’s + work experience</td>
<td>$66,720 - $71,400</td>
<td>Steady</td>
</tr>
</tbody>
</table>

**Note:** ~Denotes .5 credits per semester

**OJT Denotes On the Job Training**

**Visit:** [http://myconnections.lsr7.org](http://myconnections.lsr7.org)
### Area of Focus: Performing Arts
Concentration: Film/Audio Production

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agent</td>
<td></td>
<td></td>
<td>Courses selected must equal 4.0 credits:</td>
</tr>
<tr>
<td>Audio Engineer</td>
<td></td>
<td></td>
<td>Percussion</td>
</tr>
<tr>
<td>Audio Technician</td>
<td></td>
<td></td>
<td>Concert Orchestra</td>
</tr>
<tr>
<td>Director</td>
<td></td>
<td></td>
<td>Choir</td>
</tr>
<tr>
<td>Entertainment Law</td>
<td></td>
<td></td>
<td>Symphonic Band</td>
</tr>
<tr>
<td>Film or Audio Restorer</td>
<td></td>
<td></td>
<td>Intro Video Tech/Broadcasting</td>
</tr>
<tr>
<td>Film Scoring</td>
<td></td>
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<td>IB Film</td>
</tr>
<tr>
<td>Film or Video Editor</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Live Sound Tech</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Producer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio Personality/DJ</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recording Artist</td>
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<td></td>
</tr>
<tr>
<td>Sound Effects Eng</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studio Musician</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talent Mgmt/Scout</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Videographer</td>
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</tr>
<tr>
<td></td>
<td>High School</td>
<td>English = 4</td>
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<td>Math = 3</td>
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<td>Social Studies = 3</td>
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<td>Personal Finance = .5</td>
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<tr>
<td></td>
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<td>Fine Arts = 1</td>
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<td>Focused Electives = 4</td>
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<td>General Electives = 5</td>
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</tr>
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<td>26 credits to graduate</td>
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<tr>
<td></td>
<td>Postsecondary</td>
<td>Gain education, training and work experience to further your career!</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Community College Majors</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>College/University Majors</td>
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<td>Other Options</td>
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<tr>
<td></td>
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<tr>
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<tr>
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<td></td>
<td>Bachelor’s/Graduate Degree:</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Audio Engineering</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Recording Arts</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Entertainment Business</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Commercial Music</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Acoustical Engineering</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td>• Cinematic Arts</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• TV Production</td>
<td></td>
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<tr>
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<td>• Animation/Digital Arts</td>
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<td></td>
<td></td>
<td>Apprenticeship</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Studio Recording Tech</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Live Sound Tech</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sound Equipment Installation/Sales</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Outlook</td>
<td>Sample Occupation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Degree Required</td>
<td></td>
</tr>
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<td>Entry-Level/Experienced</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Salary based on info missourieconomy.org)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Outlook</td>
<td>Employment Outlook</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Through 2018)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Audio Visual Collections Specialist</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td></td>
<td>Outlook</td>
<td>$22,900 - $48,800</td>
<td>Steady</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Producer/Director</td>
<td>Bachelor’s</td>
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<tr>
<td></td>
<td></td>
<td>$33,110 - $71,430</td>
<td>Steady</td>
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<tr>
<td></td>
<td>Outlook</td>
<td>Sound Eng. Technician</td>
<td>Professional Certificate</td>
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<tr>
<td></td>
<td></td>
<td>$25,540 - $42,150</td>
<td>Growing</td>
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<td></td>
<td>Outlook</td>
<td>Engineering Technician</td>
<td>Associate’s</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$35,120 - $56,230</td>
<td>Steady</td>
</tr>
</tbody>
</table>

Note: ~Denotes .5 credits per semester  
OJT Denotes On the Job Training  
@ Denotes off-campus course equals 3.0 credits per year  
Visit: http://myconnections.lsr7.org
# Area of Focus: Performing Arts

## Concentration: Instrumental Music

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composer</td>
<td>High School</td>
<td>English = 4</td>
<td>Courses selected must equal 4.0 credits:</td>
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<td>Conductor</td>
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<td>Math = 3</td>
<td>Concert Band</td>
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<tr>
<td>Entertainment Law</td>
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<td>Science = 2</td>
<td>Symphonic Band</td>
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<tr>
<td>Luthier/Inst. Builder</td>
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<td>Social Studies = 3</td>
<td>Philharmonic Orchestra</td>
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<tr>
<td>Music Director</td>
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<td>Physical Education = 1</td>
<td>Music Appreciation</td>
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<td>Music Teacher</td>
<td></td>
<td>Health = .5</td>
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</tr>
<tr>
<td>Music Therapy</td>
<td></td>
<td>Personal Finance = .5</td>
<td></td>
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<tr>
<td>Musicologist</td>
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<td>Fine Arts = 1</td>
<td></td>
</tr>
<tr>
<td>Music Librarian</td>
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<td>Practical Arts = 1</td>
<td></td>
</tr>
<tr>
<td>Music Critic</td>
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<td>Focused Electives = 4</td>
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<tr>
<td>Performer</td>
<td></td>
<td>General Electives = 5</td>
<td></td>
</tr>
<tr>
<td>Pub/Editor/Copyist</td>
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<td></td>
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</tr>
<tr>
<td>Studio Teacher</td>
<td>Postsecondary</td>
<td></td>
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</tr>
<tr>
<td>Recording Eng.</td>
<td></td>
<td>Gain education, training and work experience to further your career!</td>
<td></td>
</tr>
<tr>
<td>Radio Personality/DJ</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talent Agent</td>
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<td></td>
</tr>
</tbody>
</table>

**High School**
- English = 4
- Math = 3
- Science = 2
- Social Studies = 3
- Physical Education = 1
- Health = .5
- Personal Finance = .5
- Fine Arts = 1
- Practical Arts = 1
- Focused Electives = 4
- General Electives = 5

**Community College Majors**
- Associate’s Degree:
  - Music Teacher
  - Studio Teacher
  - Recording Engineering

**College/University Majors**
- Bachelor’s/Graduate Degree:
  - Music
  - Music Business/Talent Management
  - Composition/Orchestra/Conducting
  - Music Therapy
  - Cinema Arts
  - Musical Theatre
  - Recording Arts
  - Acoustical Engineering
  - Physical Therapy
  - Performing Arts Medicine

**Other Options**
- Military Performer
- Apprenticeship/Luthier
- Live Sound Technician
- Studio Recording Technician
- Studio Teacher
- Pop/Rock/Jazz Ensemble
- Community Theatre
- Church Music
- Studio Musician

**Outlook**

<table>
<thead>
<tr>
<th>Sample Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced (Salary based on info missourieconomy.org)</th>
<th>Employment Outlook (Through 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director/Composer</td>
<td>Bachelor’s or higher + work experience</td>
<td>$31,200 - $48,100</td>
<td>Growing</td>
</tr>
<tr>
<td>Musician/Singer</td>
<td>Long-term OJT</td>
<td>$22,300 - $83,300</td>
<td>Growing</td>
</tr>
<tr>
<td>Instrument Repair/Tuner</td>
<td>Long-term OJT</td>
<td>$26,940 - $36,000</td>
<td>Steady</td>
</tr>
<tr>
<td>Music Teacher, Postsecondary</td>
<td>Masters and/or Doctorate</td>
<td>$37,910 - $69,900</td>
<td>Growing</td>
</tr>
</tbody>
</table>

**Note:** ~Denotes .5 credits per semester
@ Denotes off-campus course equals 3.0 credits per year
OJT Denotes On the Job Training

Visit: http://myconnections.lsr7.org
# Area of Focus: Performing Arts

## Concentration: Theatre

### Area of Focus Coursework

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actor</td>
<td>High School</td>
<td>English = 4</td>
<td>Courses selected must equal 4.0 credits:</td>
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<tr>
<td></td>
<td></td>
<td>Math = 3</td>
<td>Theatre Arts I/II</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social Studies = 3</td>
<td>IB Theatre Arts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Physical Education = 1</td>
<td>Repertory Theatre</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Health = .5</td>
<td>Competitive Dramatics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Personal Finance = .5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fine Arts = 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Practical Arts = 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Focused Electives = 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>General Electives = 5</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>26 credits to graduate</td>
<td></td>
</tr>
<tr>
<td>Costume Designer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costume Designer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Make-Up Artist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production Mgmt.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Producer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio/TV Announcer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screenwriter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set Designer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage Manager</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theatre Mgmt.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Community College Majors

- **Associate's Degree:**
  - Speech & Theatre Arts
  - Theatre
  - Stage Management
  - Theatre Design

### College/University Majors

- **Bachelor's/Graduate Degree:**
  - Performance Theatre
  - Theatre Education
  - Musical Theatre
  - Technical Theatre
  - Video Production
  - Screenwriting
  - Design, Technology, & Management
  - Acting

### Other Options

- Studio Teacher
- Disc Jockey
- Stage Crew
- Network Internship
- City Theatre Groups

### Sample Occupation

- **Producer/Director:** Bachelor’s or higher + work experience
  - Entry-Level/Experienced Salary: $33,110 - $71,430
  - Employment Outlook: Steady

- **Choreographer:** Work experience in related occupation
  - Entry-Level/Experienced Salary: $24,200 - $62,600
  - Employment Outlook: Steady

- **Drama Teacher:** Bachelor’s + license
  - Entry-Level/Experienced Salary: $39,810 - $59,200
  - Employment Outlook: Steady

- **Set/Exhibit Designer:** Bachelor’s
  - Entry-Level/Experienced Salary: $41,420 - $69,750
  - Employment Outlook: Steady

### Notes:
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- OJT Denotes On the Job Training
- Visit: [http://myconnections.lsr7.org](http://myconnections.lsr7.org)

*28 credits to graduate
Courses selected must equal 4.0 credits:
Theatre Arts I/II
IB Theatre Arts
Repertory Theatre
Competitive Dramatics*
## Area of Focus: Accounting

### Career Options

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account Collector</td>
<td>High School</td>
<td>English = 4</td>
<td>Courses selected must equal 4.0 credits:</td>
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<tr>
<td>Accountant</td>
<td></td>
<td>Math = 3</td>
<td>Marketing 101</td>
</tr>
<tr>
<td>Actuary</td>
<td></td>
<td>Science = 3</td>
<td>Accounting</td>
</tr>
<tr>
<td>Appraiser/Assessor</td>
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<td>Social Studies = 3</td>
<td>College Accounting</td>
</tr>
<tr>
<td>Auditor</td>
<td></td>
<td>Physical Education = 1</td>
<td>Technical English</td>
</tr>
<tr>
<td>Bank Teller</td>
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<td>Health = .5</td>
<td>SBE Internship (2 credits)</td>
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<tr>
<td>Billing Clerk</td>
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<td>Personal Finance = .5</td>
<td>~Intro to Business Management</td>
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<tr>
<td>Book-keeper</td>
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<td>Fine Arts = 1</td>
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</tr>
<tr>
<td>Budget Analyst</td>
<td></td>
<td>Practical Arts = 1</td>
<td></td>
</tr>
<tr>
<td>Business Teacher</td>
<td></td>
<td>Focused Electives = 4</td>
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</tr>
<tr>
<td>Economist Financial</td>
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<td>General Electives = 5</td>
<td></td>
</tr>
<tr>
<td>Analyst</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Planner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forensic Accountant</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Investment Advisor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loan Officer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statistician</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stockholder</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treasurer</td>
<td></td>
<td></td>
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</tbody>
</table>

### Area of Focus Coursework

Courses selected must equal 4.0 credits:
- Marketing 101
- Accounting
- College Accounting
- Technical English
- SBE Internship (2 credits)
- Business Administration

### Education Level

<table>
<thead>
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<th>Courses Selected Must Equal 4.0 Credits:</th>
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<tbody>
<tr>
<td>IB Business Management SL</td>
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<tr>
<td>~Computer Applications I/II</td>
</tr>
<tr>
<td>~Business Law</td>
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<tr>
<td>~Economics</td>
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</table>

### Required Credits for Graduation

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<th>Required Credits for Graduation</th>
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<tbody>
<tr>
<td>English = 4</td>
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<td>Math = 3</td>
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<td>Science = 3</td>
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<td>Social Studies = 3</td>
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<td>Physical Education = 1</td>
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<td>Health = .5</td>
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<tr>
<td>Personal Finance = .5</td>
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<tr>
<td>Fine Arts = 1</td>
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<td>Practical Arts = 1</td>
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<tr>
<td>Focused Electives = 4</td>
</tr>
<tr>
<td>General Electives = 5</td>
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<tr>
<td>26 credits to graduate</td>
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</table>

### Postsecondary

**Gain education, training and work experience to further your career!**

<table>
<thead>
<tr>
<th>Community College Majors</th>
<th>College/University Majors</th>
<th>Other Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate’s Degree:</td>
<td>Bachelor’s/Graduate Degree:</td>
<td>Bookkeeping Certificate</td>
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<td>Business</td>
<td>Accounting</td>
<td>Tax Prep Certificate</td>
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<tr>
<td>Applied Science</td>
<td>Human Resources</td>
<td>Certified Public Accountant</td>
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<td></td>
<td>Information Systems</td>
<td>Master in Accounting</td>
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<tr>
<td></td>
<td>Marketing</td>
<td>Fraud/Forensics</td>
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<tr>
<td></td>
<td>Mathematics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Economics</td>
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<td>Mathematics</td>
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### Sample Occupation

<table>
<thead>
<tr>
<th>Sample Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced</th>
<th>Employment Outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Analyst</td>
<td>Bachelor’s</td>
<td>$42,700 - $88,800</td>
<td>Growing</td>
</tr>
<tr>
<td>Statistician</td>
<td>Master’s</td>
<td>$39,200 - $78,000</td>
<td>Growing</td>
</tr>
<tr>
<td>Accountant/Auditor</td>
<td>Bachelor’s</td>
<td>$35,000 - $69,700</td>
<td>Growing</td>
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<tr>
<td>Bookkeeping Audit Clerk</td>
<td>Moderate OJT</td>
<td>$20,600 - $36,900</td>
<td>Growing</td>
</tr>
</tbody>
</table>

### Note:

- ~Denotes .5 credits per semester
- @ Denotes off-campus course equals 3.0 credits per year
- OJT Denotes On the Job Training
- Visit: http://myconnections.lsr7.org
## Area of Focus: Administrative Professional

### 2-Year Associate Degree

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Assistant</td>
<td>High School</td>
<td>English = 4 Math = 3 Science = 3 Social Studies = 3 Physical Education = 1 Health = .5 Personal Finance = .5 Fine Arts = 1 Practical Arts = 1 Focused Electives = 4 General Electives = 5</td>
<td>Courses selected must equal 4.0 credits: Technical English Advanced Business Essentials Marketing 101 SBE Internship (2 credits)</td>
</tr>
<tr>
<td>Business Mgmt</td>
<td></td>
<td>26 credits to graduate</td>
<td>Business Administration Intro to Business Essentials ~Computer Applications II ~Multimedia ~Intro to Web Design ~Speech Communications</td>
</tr>
<tr>
<td>Hotel</td>
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<td>Restaurant</td>
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<tr>
<td>Retail</td>
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<td></td>
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<tr>
<td>Marketing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Court Reporter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cruise Director</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Data Entry Specialist</td>
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<td></td>
<td></td>
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<tr>
<td>File Clerk</td>
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<tr>
<td>Financial Mgmt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Golf Club Mgmt</td>
<td></td>
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</tr>
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<td>Human Resources Assistant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Mgmt</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Recreation</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Programmer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Word Processor</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Community College Majors

- **Associate’s Degree:**
  - Applied Science
  - Business
  - Computer Science

### College/University Majors

- **Bachelor’s/Graduate Degree:**
  - Internship
  - On-the-Job Training
  - Professional Certificates

### Other Options

### Gain education, training and work experience to further your career!

### Sample Occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced (Salary based on info missourieconomy.org)</th>
<th>Employment Outlook (Through 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resource Assistant</td>
<td>Short-term OJT</td>
<td>$25,100 - $40,000</td>
<td>Decline</td>
</tr>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; Line Supervisor (Mgr)</td>
<td>Work experience in related occupation</td>
<td>$28,700 - $56,500</td>
<td>Growing</td>
</tr>
<tr>
<td>Office Personnel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; Line Supervisor (Mgr)</td>
<td>Prod/Operations Worker</td>
<td>$31,900 - $60,200</td>
<td>Steady/Decline</td>
</tr>
<tr>
<td>Paralegal &amp; Legal Assistant</td>
<td>Associate’s</td>
<td>$29,210 - $44,080</td>
<td>Growing</td>
</tr>
</tbody>
</table>

### Outlook

- **Human Resource Assistant:** Short-term OJT
- **1<sup>st</sup> Line Supervisor (Mgr):** Work experience in related occupation
- **Office Personnel:**
- **1<sup>st</sup> Line Supervisor (Mgr):** Prod/Operations Worker
- **Paralegal & Legal Assistant:** Associate’s

### Notes

- ~Denotes .5 credits per semester
- @ Denotes off-campus course equals 3.0 credits per year
- OJT Denotes On the Job Training
- Visit: [http://myconnections.lsr7.org](http://myconnections.lsr7.org)
## Area of Focus: Business Administration

### 4-Year Degree

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broker</td>
<td>High School</td>
<td>English = 4, Math = 3, Science = 3, Social Studies = 3, Physical Education = 1, Personal Finance = .5, Fine Arts = 1, Practical Arts = 1, Focused Electives = 4, General Electives = 5</td>
<td>Courses selected must equal 4.0 credits: Accounting, Marketing 101, Creative Mkt/Entrepreneurship, SBE Internship (2 credits), Technical English, College Accounting, Business Administration, IB Business Management SL, Intro to Business Essentials, Advanced Business Essentials</td>
</tr>
<tr>
<td>Business Analyst</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Mgmt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Controller</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Mgmt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Planner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government Planner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H R Mgmt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investigator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment Advisor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loan Officer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operations Research Analyst</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate Agent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate Appraiser</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sm. Business Owner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply Chain Mgmt.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Postsecondary

**Gain education, training and work experience to further your career!**

<table>
<thead>
<tr>
<th>Community College Majors</th>
<th>College/University Majors</th>
<th>Other Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate’s Degree:</td>
<td>Bachelor’s/Graduate Degree:</td>
<td>Internship Management Trainee</td>
</tr>
<tr>
<td></td>
<td>Sales</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marketing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Finance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Economics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Business Administration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Logistics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public Relations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Administration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Computer Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statistics</td>
<td></td>
</tr>
</tbody>
</table>

### Outlook

**Sample Occupation**

<table>
<thead>
<tr>
<th>Sample Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced (Salary based on info missourieconomy.org)</th>
<th>Employment Outlook (Through 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resource Manager</td>
<td>Bachelor’s or higher + work experience</td>
<td>$61,300 - $120,000</td>
<td>Growing</td>
</tr>
<tr>
<td>Economist</td>
<td>Master’s</td>
<td>$48,600 - $100,700</td>
<td>Growing</td>
</tr>
<tr>
<td>Operations Research Analyst</td>
<td>Master’s</td>
<td>$47,700 - $81,200</td>
<td>Growing</td>
</tr>
<tr>
<td>Database Administrator</td>
<td>Bachelor’s</td>
<td>$35,700 - $73,600</td>
<td>Growing</td>
</tr>
</tbody>
</table>

**Note:** ~Denotes .5 credits per semester  @ Denotes off-campus course equals 3.0 credits per year  OJT Denotes On the Job Training

Visit: [http://myconnections.lsr7.org](http://myconnections.lsr7.org)
## Area of Focus: Information Technology

### Area of Focus Coursework

<table>
<thead>
<tr>
<th>Required Credits for Graduation</th>
<th>Courses selected must equal 4.0 credits:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Technical English</td>
</tr>
<tr>
<td></td>
<td>Advanced Web Page Design</td>
</tr>
<tr>
<td></td>
<td>SBE Internship (2 credits)</td>
</tr>
<tr>
<td></td>
<td>CCE Internship (2 credits)</td>
</tr>
<tr>
<td></td>
<td>Computer Science &amp; Software Engineering</td>
</tr>
<tr>
<td></td>
<td>Cyber Security @ STA (1.5 credits)</td>
</tr>
<tr>
<td></td>
<td>Network Engineering I @ STA (1.5 credits)</td>
</tr>
<tr>
<td></td>
<td>Network Engineering II @ STA (1.5 credits)</td>
</tr>
<tr>
<td></td>
<td>Information Tech in Global Society @ STA (1 credit)</td>
</tr>
</tbody>
</table>

**High School**

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications Eng</td>
<td>English = 4</td>
<td>26 credits to graduate</td>
</tr>
<tr>
<td>Business Teacher</td>
<td>Math = 3</td>
<td></td>
</tr>
<tr>
<td>Comp. Engineer</td>
<td>Science = 3</td>
<td></td>
</tr>
<tr>
<td>Comp. Programmer</td>
<td>Social Studies = 3</td>
<td></td>
</tr>
<tr>
<td>Comp. Systems Analyst</td>
<td>Physical Education = 1</td>
<td></td>
</tr>
<tr>
<td>Computer Repair</td>
<td>Health = .5</td>
<td></td>
</tr>
<tr>
<td>Game Programmer</td>
<td>Personal Finance = .5</td>
<td></td>
</tr>
<tr>
<td>Help Desk</td>
<td>Fine Arts = 1</td>
<td></td>
</tr>
<tr>
<td>Multimedia Producer</td>
<td>Practical Arts = 1</td>
<td></td>
</tr>
<tr>
<td>Operating Systems</td>
<td>Focused Electives = 4</td>
<td></td>
</tr>
<tr>
<td>Engineer</td>
<td>General Electives = 5</td>
<td></td>
</tr>
<tr>
<td>Software Trainer</td>
<td>26 credits to graduate</td>
<td></td>
</tr>
<tr>
<td>Video Game Developer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Web Designer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Community College Majors
- **Associate’s Degree:**
  - Computer Technology
  - Computer Programming
  - Web Development
  - Software Applications/Programming
  - Computer Science

### College/University Majors
- **Bachelor’s/Graduate Degree:**
  - Computer Info Systems
  - Game and Simulation Programming
  - Computer Engineering
  - Computer Science
  - Software App/Development
  - Multimedia/Web Design
  - Info Systems and Security
  - Data Communication Systems Tech

### Other Options
- Military
- Apprenticeship
- Sales/Entry-level Tech Support
- Professional Certificates
  - CISCO
  - CCNA Security
  - CCNO

### Sample Occupation

<table>
<thead>
<tr>
<th>Sample Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced (Salary based on info missourieconomy.org)</th>
<th>Employment Outlook (Through 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comp Hardware Engineer</td>
<td>Bachelor’s or higher + work experience</td>
<td>$60,200 - $145,000</td>
<td>Growing</td>
</tr>
<tr>
<td>Comp/Info Systems Mgr</td>
<td>Bachelor’s or higher + work experience</td>
<td>$71,400 - $117,600</td>
<td>Growing</td>
</tr>
<tr>
<td>Comp Programmer</td>
<td>Bachelor’s</td>
<td>$42,400 - $79,200</td>
<td>Growing</td>
</tr>
<tr>
<td>Database Administrator</td>
<td>Bachelor’s</td>
<td>$35,760 - $61,020</td>
<td>Growing</td>
</tr>
</tbody>
</table>

**Note:** ~Denotes .5 credits per semester

<table>
<thead>
<tr>
<th>OJT Denotes On the Job Training</th>
</tr>
</thead>
</table>

Visit: [http://myconnections.lsr7.org](http://myconnections.lsr7.org)
# Area of Focus: Marketing

## Career Options

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad Account Exec.</td>
<td>High School</td>
<td>English = 4 Math = 3 Science = 3</td>
<td>Courses selected must equal 4.0 credits: Marketing 101 College Accounting</td>
</tr>
<tr>
<td>Concert Promoter</td>
<td></td>
<td>Social Studies = 3 Physical Education = 1 Health = .5</td>
<td>Creative Mkt/Entrepreneurship Business Administration</td>
</tr>
<tr>
<td>Event Fundraising</td>
<td></td>
<td>Personal Finance = .5 Fine Arts = 1</td>
<td>Accounting IB Business Management SL</td>
</tr>
<tr>
<td>Event Planner</td>
<td></td>
<td>Practical Arts = 1 Focused Electives = 4</td>
<td>Technical English ~ Fashion Design &amp; Merchandising</td>
</tr>
<tr>
<td>Fashion Buyer</td>
<td></td>
<td>General Electives = 5</td>
<td>Sports/Entertainment Mkt ~General Psychology</td>
</tr>
<tr>
<td>Floral Designer</td>
<td></td>
<td></td>
<td>Marketing Internship (2 credits)</td>
</tr>
<tr>
<td>Marketing Mgr.</td>
<td></td>
<td></td>
<td>Advertising Art and Graphic Design @ Herndon</td>
</tr>
<tr>
<td>Marketing Teacher</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merchandise Display</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-line Producer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PR Specialist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchasing Manager</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate Sales</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail Manager</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales Rep</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales Rep</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sm. Business Owner</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Area of Focus Coursework

Courses selected must equal 4.0 credits:
- Marketing 101
- College Accounting
- Creative Mkt/Entrepreneurship
- Business Administration
- Accounting
- IB Business Management SL
- Technical English
- ~ Fashion Design & Merchandising
- Sports/Entertainment Mkt
- ~General Psychology
- Marketing Internship (2 credits)
- Advertising Art and Graphic Design @ Herndon

### High School

- English = 4
- Math = 3
- Science = 3
- Social Studies = 3
- Physical Education = 1
- Health = .5
- Personal Finance = .5
- Fine Arts = 1
- Practical Arts = 1
- Focused Electives = 4
- General Electives = 5

26 credits to graduate

### Postsecondary

#### Gain education, training and work experience to further your career!

- Associate’s Degree:
  - Business
  - General Studies

### Community College Majors

- Bachelor’s/Graduate Degree:
  - Sales
  - Marketing
  - Promotion Management
  - Advertising
  - Public Relations
  - Logistics
  - Hospitality
  - Sports Entertainment

### College/University Majors

### Other Options

- Cashier
- Retail Sales
- Product Promoters
- Entrepreneur
- E-Marketing
- Real Estate
- Travel Agent
- Fashion Merchandising

### Sample Occupation

<table>
<thead>
<tr>
<th>Sample Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced</th>
<th>Employment Outlook (Through 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Manager</td>
<td>Bachelor’s or higher + work experience</td>
<td>$61,500 - $136,100</td>
<td>Growing</td>
</tr>
<tr>
<td>Market Research Analyst</td>
<td>Bachelor’s</td>
<td>$34,900 - $75,300</td>
<td>Growing</td>
</tr>
<tr>
<td>Sales Manager</td>
<td>Bachelor’s or higher + work experience</td>
<td>$57,800 - $136,900</td>
<td>Growing</td>
</tr>
<tr>
<td>Sales Rep</td>
<td>Work experience in related occupation</td>
<td>$27,900 - $71,200</td>
<td>Growing</td>
</tr>
</tbody>
</table>

### Note:
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### Area of Focus: Software Engineering

<table>
<thead>
<tr>
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<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Programmer</td>
<td>High School</td>
<td>English = 4</td>
<td>Courses selected must equal 4.0 credits:</td>
</tr>
<tr>
<td>Computer Software Engineer</td>
<td></td>
<td>Math = 3</td>
<td>Technical English</td>
</tr>
<tr>
<td>Computer Support Specialist</td>
<td></td>
<td>Science = 3</td>
<td>Advanced Web-Page Design</td>
</tr>
<tr>
<td>Computer Systems Analyst</td>
<td></td>
<td>Social Studies = 3</td>
<td>SBE Internship (2 credits)</td>
</tr>
<tr>
<td>Database Admin.</td>
<td></td>
<td>Physical Education = 1</td>
<td>Computer Science &amp; Software Engineering</td>
</tr>
<tr>
<td>Network and Computer Systems Admin.</td>
<td></td>
<td>Health = 5</td>
<td>CCE Internship (2 credits)</td>
</tr>
<tr>
<td>Network Systems and Data Communications Analyst</td>
<td></td>
<td>Personal Finance = .5</td>
<td>Cyber Security @ STA (1.5 credits)</td>
</tr>
<tr>
<td>Computer Specialist</td>
<td></td>
<td>Fine Arts = 1</td>
<td>Software Development @ STA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Practical Arts = 1</td>
<td>Information Tech in a Global Society @ STA (1 credit)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Focused Electives = 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>General Electives = 5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>26 credits to graduate</td>
<td></td>
</tr>
</tbody>
</table>

**High School**

- **Gain education, training and work experience to further your career!**

**Community College Majors**

- **Associate's Degree:**
  - Computer Technology
  - Computer Programming
  - Web Development
  - Software App/Programming
  - Computer Science

**College/University Majors**

- **Bachelor's/Graduate Degree:**
  - Computer Info Systems
  - Game and Simulation Programming
  - Computer Engineering
  - Computer Science
  - Software App/Development
  - Multimedia/Web Design
  - Info Systems & Security
  - Data Communications Systems Tech

**Postsecondary**

**Other Options**

- **Certificates:**
  - Military
  - Apprenticeship
  - Sales/Entry-level Tech Support
  - Professional Certificates

**Outlook**

<table>
<thead>
<tr>
<th>Sample Occupation</th>
<th>Degree Required</th>
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<th>Employment Outlook (Through 2018)</th>
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<td>Bachelor's or higher + work experience</td>
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<td>Growing</td>
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<tr>
<td>Comp Programmer</td>
<td>Bachelor's</td>
<td>$42,400 – $79,200</td>
<td>Growing</td>
</tr>
<tr>
<td>Database Admin</td>
<td>Bachelor's</td>
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<td>Growing</td>
</tr>
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</table>

**Note:** ~Denotes .5 credits per semester  
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OJT Denotes On the Job Training  
Visit: [http://myconnections.lsr7.org](http://myconnections.lsr7.org)
## Area of Focus: Health Service Professions

**Concentration:** Certification, 2 Year Degree, or Technical Program

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Lab Tech</td>
<td>English = 4</td>
<td></td>
<td>Courses selected must equal 4.0 credits:</td>
</tr>
<tr>
<td>Cert. Medical Tech</td>
<td>Math = 3</td>
<td></td>
<td>Biology I</td>
</tr>
<tr>
<td>Cert. Medication Aide</td>
<td>Science = 3</td>
<td></td>
<td>Chemistry I</td>
</tr>
<tr>
<td>Cert. Nurse Asst.</td>
<td>Social Studies = 3</td>
<td></td>
<td>Human Anatomy Physiology</td>
</tr>
<tr>
<td>Cert. Restorative Asst.</td>
<td>Physical Education = 1</td>
<td></td>
<td>Human Body Systems</td>
</tr>
<tr>
<td>Dental Asst</td>
<td>Health = .5</td>
<td></td>
<td>~Child &amp; Adolescent Psychology</td>
</tr>
<tr>
<td>Dental Tech</td>
<td>Personal Finance = .5</td>
<td></td>
<td>~Child Development: Parenting Issues</td>
</tr>
<tr>
<td>Echocardiogram Tech</td>
<td>Fine Arts = 1</td>
<td></td>
<td>~Essentials of Athletic Training &amp; First Aid</td>
</tr>
<tr>
<td>Emergency Med Tech</td>
<td>Practical Arts = 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home Health Aide</td>
<td>Focused Electives = 4</td>
<td></td>
<td>Life Careers @ Cass</td>
</tr>
<tr>
<td>Licensed Practical Nurse</td>
<td>General Electives = 5</td>
<td></td>
<td>Pre-Professional Nursing @ STA</td>
</tr>
<tr>
<td>Ophthalmic Med Asst.</td>
<td>26 credits to graduate</td>
<td></td>
<td>Fire Fighter I/II/EMT @ Cass</td>
</tr>
<tr>
<td>Paramedic</td>
<td></td>
<td></td>
<td>Medical Interventions/Biomedical Innovations @ STA</td>
</tr>
<tr>
<td>Pharmacy Tech</td>
<td></td>
<td></td>
<td>Foundations of Nursing @ Herndon</td>
</tr>
<tr>
<td>Radiology Tech</td>
<td></td>
<td></td>
<td>Internship in STEM Careers</td>
</tr>
<tr>
<td>Respiratory Tech</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgical Tech</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ultrasound Tech</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veterinary Tech</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### High School

**Gain education, training and work experience to further your career!**

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Lab Tech</td>
<td>English = 4</td>
<td>Courses selected must equal 4.0 credits:</td>
</tr>
<tr>
<td>Cert. Medical Tech</td>
<td>Math = 3</td>
<td>Biology I</td>
</tr>
<tr>
<td>Cert. Medication Aide</td>
<td>Science = 3</td>
<td>Chemistry I</td>
</tr>
<tr>
<td>Cert. Nurse Asst.</td>
<td>Social Studies = 3</td>
<td>Human Anatomy Physiology</td>
</tr>
<tr>
<td>Cert. Restorative Asst.</td>
<td>Physical Education = 1</td>
<td>Human Body Systems</td>
</tr>
<tr>
<td>Dental Asst</td>
<td>Health = .5</td>
<td>~Child &amp; Adolescent Psychology</td>
</tr>
<tr>
<td>Dental Tech</td>
<td>Personal Finance = .5</td>
<td>~Child Development: Parenting Issues</td>
</tr>
<tr>
<td>Echocardiogram Tech</td>
<td>Fine Arts = 1</td>
<td>~Essentials of Athletic Training &amp; First Aid</td>
</tr>
<tr>
<td>Emergency Med Tech</td>
<td>Practical Arts = 1</td>
<td></td>
</tr>
<tr>
<td>Home Health Aide</td>
<td>Focused Electives = 4</td>
<td>Life Careers @ Cass</td>
</tr>
<tr>
<td>Licensed Practical Nurse</td>
<td>General Electives = 5</td>
<td>Pre-Professional Nursing @ STA</td>
</tr>
<tr>
<td>Ophthalmic Med Asst.</td>
<td></td>
<td>Fire Fighter I/II/EMT @ Cass</td>
</tr>
<tr>
<td>Paramedic</td>
<td></td>
<td>Medical Interventions/Biomedical Innovations @ STA</td>
</tr>
<tr>
<td>Pharmacy Tech</td>
<td></td>
<td>Foundations of Nursing @ Herndon</td>
</tr>
<tr>
<td>Radiology Tech</td>
<td></td>
<td>Internship in STEM Careers</td>
</tr>
</tbody>
</table>

### Postsecondary

**Gain education, training and work experience to further your career!**

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Community College Majors</th>
<th>College/University Majors</th>
<th>Other Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Lab Tech</td>
<td>Associate's Degree</td>
<td></td>
<td>Medical Office Assistant</td>
</tr>
<tr>
<td>Dental Assistant</td>
<td>Health/Medical Administration</td>
<td></td>
<td>Chiropractic Technician/Asst.</td>
</tr>
<tr>
<td>Home Health Aide</td>
<td>Medical Billing/Coding</td>
<td></td>
<td>Medical/Health Asst.</td>
</tr>
<tr>
<td>Veterinary Tech</td>
<td>Dental Assistant</td>
<td></td>
<td>Cert. Lifeguard</td>
</tr>
<tr>
<td>Surgical Tech</td>
<td>Medical/Surgical Technologist</td>
<td></td>
<td>Cert. Scuba Rescue Diver</td>
</tr>
<tr>
<td>Ultrasound Tech</td>
<td>Massage Therapy/Healing</td>
<td></td>
<td>Cert. Scuba Instructor</td>
</tr>
<tr>
<td>Veterinary Tech</td>
<td>Gerontology</td>
<td></td>
<td>Cert. Nurse Assistant</td>
</tr>
<tr>
<td>Surgical Tech</td>
<td>Diagnostic Ultrasound Tech</td>
<td></td>
<td>Cert. Restorative Aide</td>
</tr>
<tr>
<td>Ultrasound Tech</td>
<td>Allied Health Science</td>
<td></td>
<td>Cert. Medication Aide</td>
</tr>
<tr>
<td>Veterinary Tech</td>
<td>Lab Technician</td>
<td></td>
<td>Cert. Medical Tech</td>
</tr>
</tbody>
</table>

### Outlook

<table>
<thead>
<tr>
<th>Sample Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced</th>
<th>Employment Outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Lab Tech</td>
<td>Associate’s</td>
<td>$21,800 – $37,900</td>
<td>Growing</td>
</tr>
<tr>
<td>Dental Assistant</td>
<td>Moderate OJT</td>
<td>$24,400 - $37,400</td>
<td>Growing</td>
</tr>
<tr>
<td>Home Health Aide</td>
<td>Short term OJT</td>
<td>$16,400 - $21,100</td>
<td>Growing</td>
</tr>
<tr>
<td>Surgical Technologist</td>
<td>Professional Certificate</td>
<td>$26,770 - $37,050</td>
<td>Growing</td>
</tr>
</tbody>
</table>

**Note:** ~Denotes .5 credits per semester  
OJT Denotes On the Job Training  
@ Denotes off-campus course equals 3.0 credits per year  
Visit: http://myconnections.lsr7.org
## Area of Focus: Health Service Professions

**Concentration:** 4 Year Terminal Degree

### Career Options

<table>
<thead>
<tr>
<th>Area of Focus Coursework</th>
<th>Required Credits for Graduation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Courses selected must equal 4.0 credits:</strong></td>
<td></td>
</tr>
<tr>
<td>Biology II or IB Biology</td>
<td>Human Anatomy Physiology</td>
</tr>
<tr>
<td>Physics I/II</td>
<td>Chemistry I/II or IB Chem</td>
</tr>
<tr>
<td>AP Physics C</td>
<td>Principles of Biomed Sciences</td>
</tr>
<tr>
<td>Human Body Systems</td>
<td>~Essentials of Athletic Training &amp; First Aid</td>
</tr>
<tr>
<td>Foundations of Nursing @ Herndon</td>
<td>Internship in STEM Careers @ STA</td>
</tr>
<tr>
<td>Pre-Professional Nursing @ STA</td>
<td>Medical Interventions/Biomedical Innovations @ STA</td>
</tr>
</tbody>
</table>

### Education Level

- **High School**
  - English = 4
  - Math = 3
  - Science = 3
  - Social Studies = 3
  - Physical Education = 1
  - Health = .5
  - Personal Finance = .5
  - Fine Arts = 1
  - Practical Arts = 1
  - Focused Electives = 4
  - General Electives = 5
  - 26 credits to graduate

- **Postsecondary**
  - Gain education, training and work experience to further your career!

### Area of Focus Coursework

- **Community College Majors**
  - Associate’s Degree:
    - Health/Medical Administration
    - Nursing
    - Respiratory Therapist
    - Speech-Language Pathology
    - Biomedical Tech
    - Pre/Med Chemistry
    - Immunology/Toxicology
    - Epidemiology/Virology

- **College/University Majors**
  - Bachelor’s Degree:
    - Health/Medical Administration Nursing
    - Respiratory Therapist
    - Speech-Language Pathology
    - Biomedical Tech
    - Pre/Med Chemistry
    - Immunology/Toxicology
    - Epidemiology/Virology

- **Other Options**
  - Graduate Degree:
    - Physician
    - Pharmaceutical
    - Physical Therapy
    - Speech-Language Pathology
    - Dentist
    - Optometrist
    - Chiropractor
    - Nurse Practitioner
    - Epidemiology/Virology

### Sample Occupation

<table>
<thead>
<tr>
<th>Sample Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced</th>
<th>Employment Outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician &amp; Surgeon</td>
<td>First professional degree</td>
<td>$53,080 - $156,270</td>
<td>Growing</td>
</tr>
<tr>
<td>Biomedical Engineer</td>
<td>Bachelor’s</td>
<td>$41,900 - $79,800</td>
<td>Growing</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>First professional degree</td>
<td>$84,040 - $106,240</td>
<td>Growing</td>
</tr>
<tr>
<td>Registered Nurse</td>
<td>Bachelor’s</td>
<td>$41,480 - $56,670</td>
<td>Growing</td>
</tr>
</tbody>
</table>

### Note:

- ~Denotes .5 credits per semester
- @ Denotes off-campus course equals 3.0 credits per year
- OJT Denotes On the Job Training

Visit: [http://myconnections.lsr7.org](http://myconnections.lsr7.org)
## Area of Focus: Sports Medicine

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletic Trainer</td>
<td>High School</td>
<td>English = 4</td>
<td>Courses selected must equal 4.0 credits:</td>
</tr>
<tr>
<td>Biomechanics</td>
<td></td>
<td>Math = 3</td>
<td>Human Anatomy Physiology</td>
</tr>
<tr>
<td>Chiropractor</td>
<td></td>
<td>Science = 3</td>
<td>Human Body Systems</td>
</tr>
<tr>
<td>Ergonomics</td>
<td></td>
<td>Social Studies = 3</td>
<td>Principles of Biomed Sciences</td>
</tr>
<tr>
<td>Exercise Physiology</td>
<td></td>
<td>Physical Education = 1</td>
<td>Chemistry II</td>
</tr>
<tr>
<td>Kinesiology</td>
<td></td>
<td>Personal Finance = .5</td>
<td>Biology II</td>
</tr>
<tr>
<td>Massage Therapy</td>
<td></td>
<td>Fine Arts = 1</td>
<td></td>
</tr>
<tr>
<td>Occupational Therapy</td>
<td></td>
<td>Practical Arts = 1</td>
<td></td>
</tr>
<tr>
<td>Orthopedics</td>
<td></td>
<td>Focused Electives = 4</td>
<td></td>
</tr>
<tr>
<td>Personal Trainer</td>
<td></td>
<td>General Electives = 5</td>
<td></td>
</tr>
<tr>
<td>Physical Therapy</td>
<td></td>
<td>26 credits to graduate</td>
<td></td>
</tr>
<tr>
<td>Sports Physician</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### High School

- **Courses selected must equal 4.0 credits:**
  - Human Anatomy Physiology
  - Human Body Systems
  - Principles of Biomed Sciences
  - Chemistry II
  - Biology II

Medical Interventions/Biomedical Innovations @ STA

### Postsecondary

**Gain education, training and work experience to further your career!**

<table>
<thead>
<tr>
<th>Community College Majors</th>
<th>College/University Majors</th>
<th>Other Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate’s Degree:</td>
<td>Bachelor’s/Graduate Degree:</td>
<td></td>
</tr>
<tr>
<td>Sports Medicine</td>
<td>Science of Sports Medicine</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre-Med</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Biology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chemistry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exercise Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health Promotion</td>
<td></td>
</tr>
</tbody>
</table>

### Sample Occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/ Experienced (Salary based on info missourieconomy.org)</th>
<th>Employment Outlook (Through 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chiropractor</td>
<td>First professional degree</td>
<td>$31,500 - $86,200</td>
<td>Growing</td>
</tr>
<tr>
<td>Physical Therapist</td>
<td>Master’s</td>
<td>$43,600 - $71,500</td>
<td>Growing</td>
</tr>
<tr>
<td>Athletic Trainer</td>
<td>Bachelor’s</td>
<td>$30,700 - $53,800</td>
<td>Growing</td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td>Master’s</td>
<td>$47,030 - $61,160</td>
<td>Growing</td>
</tr>
</tbody>
</table>

### Note:
- "~" Denotes .5 credits per semester
- OJT Denotes On the Job Training
- "@" Denotes off-campus course equals 3.0 credits per year
- Visit: [http://myconnections.lsr7.org](http://myconnections.lsr7.org)
## Area of Focus: Culinary Arts

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
<th>Community College Majors</th>
<th>College/University Majors</th>
<th>Other Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baker</td>
<td>High School</td>
<td>English = 4, Math = 3, Science = 3, Social Studies = 3, Personal Finance = .5, Fine Arts = 1, Practical Arts = 1, Focused Electives = 4, General Electives = 5</td>
<td>Courses selected must equal 4.0 credits: Marketing 101, FACS Internship, ~Intro to Business Management, ~Intro to Hospitality &amp; Tourism</td>
<td>Associate’s Degree: Food and Beverage, Chef Apprentice</td>
<td>Bachelor’s/Graduate Degree: Culinary Arts, Hotel/Restaurant Management, Hospitality/Tourism, Dietetics/Nutritionist, Public Health</td>
<td>Apprenticeship, Military, On-the-Job Training</td>
</tr>
<tr>
<td>Caterer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chef</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culinary Instructor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Broker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Journalism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Media</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health/Food Inspector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research/Dev</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restaurateur</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety/Sanitation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sommelier (knowledge of wine)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### High School

- **Courses selected must equal 4.0 credits:**
  - Marketing 101
  - FACS Internship
  - ~Intro to Business Management
  - ~Intro to Hospitality & Tourism

- **Culinary Arts @ Herndon**

### PostSecondary

**Gain education, training and work experience to further your career!**

- **Community College Majors**
  - Associate’s Degree: Food and Beverage, Hotel/Restaurant Management, Chef Apprentice
- **College/University Majors**
  - Bachelor’s/Graduate Degree: Culinary Arts, Hotel/Restaurant Management, Hospitality/Tourism, Dietetics/Nutritionist, Public Health
- **Other Options**
  - Apprenticeship, Military, On-the-Job Training

### Sample Occupation & Degree Required

<table>
<thead>
<tr>
<th>Sample Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced (Salary based on info missourieconomy.org)</th>
<th>Employment Outlook (Through 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Sci/Technologist</td>
<td>Bachelor’s</td>
<td>$36,400 - $81,400</td>
<td>Growing</td>
</tr>
<tr>
<td>Food Service Manager</td>
<td>Work experience in related occupation</td>
<td>$38,400 – $70,700</td>
<td>Growing</td>
</tr>
<tr>
<td>Health and Safety</td>
<td>Bachelor’s</td>
<td>$48,270 - $81,600</td>
<td>Growing</td>
</tr>
<tr>
<td>Inspector</td>
<td>Long-term OJT</td>
<td>$16,320 - $21,610</td>
<td>Growing</td>
</tr>
<tr>
<td>Cooks, Restaurant</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Outlook

- **Note:** ~Denotes .5 credits per semester
- **OJT Denotes On the Job Training**
- **@ Denotes off-campus course equals 3.0 credits per year**
- **Visit:** [http://myconnections.lsr7.org](http://myconnections.lsr7.org)

---

**Outlook**

- Food Sci/Technologist
- Bachelor’s
- $36,400 - $81,400
- Growing

- Food Service Manager
- Work experience in related occupation
- $38,400 – $70,700
- Growing

- Health and Safety Inspector
- Bachelor’s
- $48,270 - $81,600
- Growing

- Cooks, Restaurant
- Long-term OJT
- $16,320 - $21,610
- Growing
# Area of Focus: Education

**Concentration:** Early Childhood/Elementary

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Care Administrator</td>
<td>High School</td>
<td>English = 4</td>
<td><strong>Courses selected must equal 4.0 credits:</strong> IB Psychology, Music Appreciation, ~Sociology I/II, ~General Psychology, ~Child &amp; Adolescent Psychology, ~Intro to Human Services</td>
</tr>
<tr>
<td>Child Nutritionist</td>
<td></td>
<td>Science = 3</td>
<td></td>
</tr>
<tr>
<td>Elementary Teacher</td>
<td></td>
<td>Social Studies = 3</td>
<td></td>
</tr>
<tr>
<td>Head Start</td>
<td></td>
<td>Physical Education = 1</td>
<td></td>
</tr>
<tr>
<td>Military School Teacher</td>
<td></td>
<td>Health = 5</td>
<td></td>
</tr>
<tr>
<td>Nanny</td>
<td></td>
<td>Fine Arts = 1</td>
<td></td>
</tr>
<tr>
<td>Special Ed Teacher</td>
<td></td>
<td>Practical Arts = 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Focused Electives = 4</td>
<td>Early Childcare Professional @ Herndon, Pre-Professional Education Cadet @ STA (2 credits)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>General Electives = 5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>26 credits to graduate</td>
<td></td>
</tr>
</tbody>
</table>

### Postsecondary

**Gain education, training and work experience to further your career!**

<table>
<thead>
<tr>
<th>Community College Majors</th>
<th>College/University Majors</th>
<th>Other Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate’s Degree:</td>
<td>Bachelor’s/Graduate Degree:</td>
<td>Apprenticeship</td>
</tr>
<tr>
<td>Teaching</td>
<td>Art Education</td>
<td>Military</td>
</tr>
<tr>
<td>Youth Care Services</td>
<td>Child/Family Development</td>
<td>On-the-Job Training</td>
</tr>
<tr>
<td>Youth Development Work</td>
<td>Elementary Education</td>
<td></td>
</tr>
<tr>
<td>Sign Lang Interpreter</td>
<td>Physical Education/Health</td>
<td></td>
</tr>
<tr>
<td>Applied Science</td>
<td>Mathematics Education</td>
<td></td>
</tr>
<tr>
<td>Child Growth/Development</td>
<td>Music/Vocal &amp; Instrumental Ed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Science Education</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sample Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced (Salary based on info missourieconomy.org)</th>
<th>Employment Outlook (Through 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-school/Child Care Cntr. Administrator</td>
<td>Bachelor’s or higher + work experience</td>
<td>$27,700 – $48,900</td>
<td>Growing</td>
</tr>
<tr>
<td>Elementary Teacher</td>
<td>Bachelor’s or higher + work experience</td>
<td>$31,000 - $50,000</td>
<td>Growing</td>
</tr>
<tr>
<td>Child Care Worker</td>
<td>Short-term OJT</td>
<td>$15,000 - $21,000</td>
<td>Growing</td>
</tr>
<tr>
<td>Special Ed, Teacher Preschool</td>
<td>Bachelor’s</td>
<td>$32,580 - $45,160</td>
<td>Growing</td>
</tr>
</tbody>
</table>

**Outlook**

*Note: ~Denotes .5 credits per semester @ Denotes off-campus course equals 3.0 credits per year OJT Denotes On the Job Training Visit: [http://myconnections.lsr7.org](http://myconnections.lsr7.org)*
# Area of Focus: Education

**Concentration:** Secondary/Postsecondary

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator</td>
<td></td>
<td>Courses selected must equal 4.0 credits:</td>
</tr>
<tr>
<td>Business Manager</td>
<td>English = 4</td>
<td>IB Psychology</td>
</tr>
<tr>
<td>Childcare Worker</td>
<td>Math = 3</td>
<td>~Intro to Human Services</td>
</tr>
<tr>
<td>Coach/Scout</td>
<td>Science = 3</td>
<td>~General Psychology</td>
</tr>
<tr>
<td>College Professor</td>
<td>Social Studies = 3</td>
<td>~Sociology I/II</td>
</tr>
<tr>
<td>Curriculum Director</td>
<td>Physical Education = 1</td>
<td>~Intro to Human Services</td>
</tr>
<tr>
<td>Homebound Teacher</td>
<td>Health = .5</td>
<td>~Speech Communications</td>
</tr>
<tr>
<td>Library/Media Specialist</td>
<td>Personal Finance = .5</td>
<td>~Child &amp; Adolescent Psychology</td>
</tr>
<tr>
<td>Public Health Ed.</td>
<td>Fine Arts = 1</td>
<td></td>
</tr>
<tr>
<td>Speech Pathologist</td>
<td>Practical Arts = 1</td>
<td></td>
</tr>
<tr>
<td>School Counselor</td>
<td>Focused Electives = 4</td>
<td></td>
</tr>
<tr>
<td>Secondary Teacher</td>
<td>General Electives = 5</td>
<td></td>
</tr>
<tr>
<td>Special Ed Teacher</td>
<td>26 credits to graduate</td>
<td></td>
</tr>
<tr>
<td>Superintendent</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**High School**

*Gain education, training and work experience to further your career!*

- **Postsecondary**
  - **Gain education, training and work experience to further your career!**
  - **Community College Majors**
    - Associate’s Degree: Teaching
  - **College/University Majors**
    - Bachelor’s/Graduate Degree:
      - Mathematics
      - Mathematics/Statistics
      - Physics
  - **Other Options**

**Sample Occupation**

<table>
<thead>
<tr>
<th>Sample Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced (Salary based on info missourieconomy.org)</th>
<th>Employment Outlook (Through 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Postsecondary</td>
<td>Bachelor’s or higher + work experience</td>
<td>$35,500 - $68,400</td>
<td>Growing</td>
</tr>
<tr>
<td>Education Secondary</td>
<td>Bachelor’s + License</td>
<td>$39,810 - $59,210</td>
<td>Steady</td>
</tr>
<tr>
<td>Coach and Scout</td>
<td>Long-term OJT</td>
<td>$17,200 - $47,400</td>
<td>Growing</td>
</tr>
<tr>
<td>Speech/Language Pathologist</td>
<td>Master’s</td>
<td>$40,110 - $58,580</td>
<td>Growing</td>
</tr>
<tr>
<td>School Counselor</td>
<td>Master’s</td>
<td>$29,650 - $46,150</td>
<td>Growing</td>
</tr>
</tbody>
</table>

**Outlook**

- Education Postsecondary  
- Education Secondary  
- Coach and Scout  
- Speech/Language Pathologist  
- School Counselor

**Note:** ~Denotes .5 credits per semester  
@ Denotes off-campus course equals 3.0 credits per year  
Visit: http://myconnections.lsr7.org
Area of Focus: International Studies

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance Officer</td>
<td>High School</td>
<td>English = 4 Math = 3 Science = 3 Social Studies = 3 Physical Education = 1 Health = .5 Personal Finance = .5 Fine Arts = 1 Practical Arts = 1 Focused Electives = 4 General Electives = 5</td>
<td>Courses selected must equal 4.0 credits: Modern Languages I/II Business Administration IB Business Management SL ~Comparative Government ~Origins of Western Civilization</td>
</tr>
<tr>
<td>Diplomat</td>
<td></td>
<td></td>
<td>Int’l Studies @ STA</td>
</tr>
<tr>
<td>Educators</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Service Officer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpreter/Translator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Politician</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Relations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reporter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tour Guide</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Gain education, training and work experience to further your career!

Postsecondary

<table>
<thead>
<tr>
<th>Community College Majors</th>
<th>College/University Majors</th>
<th>Other Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate’s Degree:</td>
<td>Bachelor’s/Graduate Degree:</td>
<td>Other Options</td>
</tr>
<tr>
<td>Youth Care Services</td>
<td>Sales</td>
<td>Military</td>
</tr>
<tr>
<td>Travel Agent, Tour Guide</td>
<td>Missionary Work</td>
<td>Missionary Work</td>
</tr>
<tr>
<td>Travel Services</td>
<td>Telecommunications</td>
<td></td>
</tr>
<tr>
<td>Airline Industry</td>
<td>Aid Agencies</td>
<td></td>
</tr>
<tr>
<td>Health Care</td>
<td>Hotel/Restaurant Industries</td>
<td></td>
</tr>
<tr>
<td>Law Enforcement</td>
<td>Tutor</td>
<td>Construction</td>
</tr>
<tr>
<td>Hospitality/Convention Industries</td>
<td></td>
<td>Peace Corps</td>
</tr>
</tbody>
</table>

Sample Occupation | Degree Required | Entry-Level/Experience (Salary based on info missourieconomy.org) | Employment Outlook (Through 2018)

| Public Relations Specialist | Bachelor’s or higher | $30,800 - $62,200 | Growing |
| Market Research Analyst     | Bachelor’s or higher + work experience | $34,900 - $75,300 | Growing |
| Business Ops Specialist     | Bachelor’s            | $33,300 - $74,600 | Growing |
| Interpreter/Translator      | Long-term OJT         | $26,200 - $50,100 | Steady |

Note: ~Denotes .5 credits per semester  @ Denotes off-campus course equals 3.0 credits per year  Visit: http://myconnections.lsr7.org

OJT Denotes On the Job Training
# Area of Focus: Protective Services

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aviation</td>
<td>High School</td>
<td>English = 4</td>
<td>Courses selected must equal 4.0 credits:</td>
</tr>
<tr>
<td>Accident Investigator</td>
<td></td>
<td>Math = 3</td>
<td>IB Psychology</td>
</tr>
<tr>
<td>Arson/Fire Investigator</td>
<td></td>
<td>Science = 3</td>
<td>Biology I</td>
</tr>
<tr>
<td>Child Protection (DCS)</td>
<td></td>
<td>Social Studies = 3</td>
<td>Physics I/II</td>
</tr>
<tr>
<td>Corrections Officer</td>
<td></td>
<td>Physical Education = 1</td>
<td>Principles of Biomed Sciences</td>
</tr>
<tr>
<td>Criminal Law</td>
<td></td>
<td>Health = .5</td>
<td>Aerospace Science/Leadership I/II/III/IV</td>
</tr>
<tr>
<td>Criminal Profiler</td>
<td></td>
<td>Personal Finance = .5</td>
<td>~General Psychology</td>
</tr>
<tr>
<td>Emergency Mgmt</td>
<td></td>
<td>Fine Arts = 1</td>
<td>~Multimedia</td>
</tr>
<tr>
<td>Fed Law Enforcement</td>
<td></td>
<td>Practical Arts = 1</td>
<td>~Business Law</td>
</tr>
<tr>
<td>Fingerprint Expert</td>
<td></td>
<td>Focused Electives = 4</td>
<td>~Speech Communications</td>
</tr>
<tr>
<td>Forensic Psychologist</td>
<td></td>
<td>General Electives = 5</td>
<td>~Child &amp; Adolescent Psyh</td>
</tr>
<tr>
<td>Hostage Negotiator</td>
<td></td>
<td></td>
<td>~First Aid-Essentials of Athletic Training</td>
</tr>
<tr>
<td>Homeland Security</td>
<td></td>
<td></td>
<td>~Child Development: Parenting</td>
</tr>
<tr>
<td>Military</td>
<td></td>
<td></td>
<td>~Contemporary Issues</td>
</tr>
<tr>
<td>Park Ranger</td>
<td></td>
<td></td>
<td>~Sociology I/II</td>
</tr>
<tr>
<td>Police/Fire</td>
<td></td>
<td></td>
<td>Cyber Security @ STA (1.5 credits)</td>
</tr>
<tr>
<td>Public Service</td>
<td></td>
<td></td>
<td>Fire Fighter I/II/EMT @ Cass</td>
</tr>
<tr>
<td>Security Officer</td>
<td></td>
<td></td>
<td>Law Enforcement/Police Science I/II @ Herndon</td>
</tr>
<tr>
<td>State/Local Law Enforcement</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>US Marshal</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Postsecondary</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gain education, training and work experience to further your career!</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Community College Majors</td>
<td>College/University Majors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Associate’s Degree:</td>
<td>Bachelor’s/Graduate Degree:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Criminal Justice</td>
<td>Criminal Justice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fire Science Technology</td>
<td>Psychology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Police Science</td>
<td>Emergency Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Paramedic</td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Sample Occupation</td>
<td>Degree Required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Forensic Science Tech</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Police/Sheriff’s Patrol</td>
<td>Long-term OJT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Security Guard</td>
<td>Short-term OJT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Forensic Science Tech.</td>
<td>Bachelor’s</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$34,190 - $46,970</td>
</tr>
</tbody>
</table>

Note: ~Denotes .5 credits per semester
@ Denotes off-campus course equals 3.0 credits per year
OJT Denotes On the Job Training
Visit: http://myconnections.lsr7.org
### Area of Focus: Public Service

#### Career Options

- Ambassador
- Benefits Coordinator
- City Official
- Contracts Coord
- Coord Not-for-profit
- Cosmetology/Stylist
- Court Clerk
- Court Reporter
- Election Supervisor
- Emer. Disaster Relief
- Federal Auditor
- Health Insurance Specialist
- Health Care Investigator
- Human Rights Worker
- Lawyer
- Lobbyist
- Paralegal
- Political Strategist
- Politician
- Policy Analyst
- Tattoo Artist
- Urban/Regional Planner

#### Education Level

**High School**

<table>
<thead>
<tr>
<th>Coursework</th>
<th>Required Credits for Graduation</th>
</tr>
</thead>
<tbody>
<tr>
<td>English = 4</td>
<td></td>
</tr>
<tr>
<td>Math = 3</td>
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</tr>
<tr>
<td>Science = 3</td>
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</tr>
<tr>
<td>Social Studies = 3</td>
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</tr>
<tr>
<td>Physical Education = 1</td>
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<tr>
<td>Health = .5</td>
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</tr>
<tr>
<td>Personal Finance = .5</td>
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</tr>
<tr>
<td>Fine Arts = 1</td>
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</tr>
<tr>
<td>Practical Arts = 1</td>
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<tr>
<td>Focused Electives = 4</td>
<td></td>
</tr>
<tr>
<td>General Electives = 5</td>
<td></td>
</tr>
<tr>
<td><strong>26 credits to graduate</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Area of Focus Coursework**

Courses selected must equal 4.0 credits:

- IB Psychology
- Debate
- Adv Debate
- Marketing 101
- Aerospace Science/Leadership I/II/III/IV
- Business Administration
- IB Business Management SL
- IB History of Americans
- ~IB Theory of Knowledge
- ~Economics
- ~General Psychology
- ~Sociology I/II
- ~Intro to Business Management
- ~Business Law
- ~Comparative Government
- ~Origins of Western Civilization
- ~Contemporary Issues
- ~Non-Western History

- Int'l Studies @ STA
- Cosmetology @ Herndon
- Information Tech in a Global Society @ STA (1 credit)

**Postsecondary**

Gain education, training and work experience to further your career!

#### Community College Majors

**Associate’s Degree:**

- Applied Science
- Paralegal Practice

#### College/University Majors

**Bachelor’s/Graduate Degree:**

- Law
- Political Communication
- Crisis/Disaster Mgmt
- Internal Studies

#### Other Options

- Apprenticeship
- Military
- On-the-Job Training

#### Sample Occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced</th>
<th>Employment Outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lawyer</td>
<td>First professional degree</td>
<td>$50,800 - $136,200</td>
<td>Growing</td>
</tr>
<tr>
<td>Court Reporter</td>
<td>Professional Certificate</td>
<td>$26,500 - $60,700</td>
<td>Growing</td>
</tr>
<tr>
<td>Cosmetologist</td>
<td>Professional Certificate</td>
<td>$17,850 - $28,600</td>
<td>Steady</td>
</tr>
<tr>
<td>Comp. Benefits Specialist</td>
<td>Bachelor’s</td>
<td>$32,700 - $51,010</td>
<td>Growing</td>
</tr>
</tbody>
</table>

#### Note:

- ~Denotes .5 credits per semester
- @ Denotes off-campus course equals 3.0 credits per year
- OJT Denotes On the Job Training

Visit: [http://myconnections.lsr7.org](http://myconnections.lsr7.org)
### Area of Focus: Social Sciences

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropologist</td>
<td>High School</td>
<td></td>
<td>Courses selected must equal 4.0 credits:</td>
</tr>
<tr>
<td>Archaeologist</td>
<td></td>
<td></td>
<td>IB Psychology</td>
</tr>
<tr>
<td>Archivist</td>
<td></td>
<td></td>
<td>Chemistry I</td>
</tr>
<tr>
<td>Genealogist</td>
<td></td>
<td></td>
<td>Algebra II</td>
</tr>
<tr>
<td>Historian</td>
<td></td>
<td></td>
<td>IB History of the Americas</td>
</tr>
<tr>
<td>Sociologist</td>
<td></td>
<td></td>
<td>Pre-Calculus</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Calculus</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Courses selected must equal 4.0 credits:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IB Psychology</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>Chemistry I</td>
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<td>Algebra II</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IB History of the Americas</td>
</tr>
<tr>
<td></td>
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<td>Pre-Calculus</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Calculus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26 credits to graduate</td>
<td>Int’l Studies @ STA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Postsecondary</th>
<th>Community College Majors</th>
<th>College/University Majors</th>
<th>Other Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain education, training and work experience to further your career!</td>
<td>Associate’s Degree: Human Services</td>
<td>Bachelor’s/Graduate Degree: Archaeology Anthropology History</td>
<td>Apprenticeship Military On-the-Job Training</td>
</tr>
<tr>
<td>Outlook</td>
<td>Sample Occupation</td>
<td>Degree Required</td>
<td>Entry-Level/Experienced</td>
</tr>
<tr>
<td>Anthropologist/Archaeologist</td>
<td>Master’s</td>
<td>$31,800 - $67,800</td>
<td>Growing</td>
</tr>
<tr>
<td>Archivist</td>
<td>Master’s</td>
<td>$27,900 - $55,200</td>
<td>Steady</td>
</tr>
<tr>
<td>Historian</td>
<td>Master’s</td>
<td>$35,700 - $53,830</td>
<td>Steady</td>
</tr>
<tr>
<td>Curator</td>
<td>Master’s</td>
<td>$36,600 - $51,740</td>
<td>Growing</td>
</tr>
</tbody>
</table>

Note: ~Denotes .5 credits per semester  @ Denotes off-campus course equals 3.0 credits per year
OJT Denotes On the Job Training
Visit: [http://myconnections.lsr7.org](http://myconnections.lsr7.org)
### Area of Focus: Social Services

#### Career Options
- Behavior Analyst
- Child Protection (DCS)
- Clergy
- Counselor
- Criminal Profiler
- Elderly Advocate
- Family Therapist
- Funeral Director
- Gerontologist
- Life Coach
- Mental Health Counselor
- Probation Officer
- Psychologist
- Social Worker
- Sociologist
- Substance Abuse Services

#### Education Level
- High School
- Postsecondary

#### Required Credits for Graduation
- **Education Level**
  - **High School**:
    - English = 4
    - Math = 3
    - Science = 3
    - Social Studies = 3
    - Physical Education = 1
    - Health = 5
    - Personal Finance = .5
    - Fine Arts = 1
    - Practical Arts = 1
    - Focused Electives = 4
    - General Electives = 5
    - 26 credits to graduate

#### Area of Focus Coursework

**Courses selected must equal 4.0 credits:**
- IB Psychology
- Modern Languages I/II
- ~Intro to Human Services
- ~General Psychology
- ~Sociology I/II
- ~Contemporary Issues
- ~Child & Adolescent Psych
- ~Child Dev: Parenting Issues
- ~Child Development Preschool Experiences
- ~Business Law
- ~Speech Communications
- ~Economics
- ~Intro to Human Services

#### Community College Majors
- **Associate's Degree:**
  - Sociology
  - Mental Health
  - Youth Care
  - Drug Addiction

#### College/University Majors
- **Bachelor’s/Graduate Degree:**
  - Social Work
  - Psychology
  - Sociology

#### Other Options
- Apprenticeship
- Military
- On-the-Job Training

#### Sample Occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced (Salary based on info missourieconomy.org)</th>
<th>Employment Outlook (Through 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychologist</td>
<td>Master’s</td>
<td>$49,800 - $87,300</td>
<td>Growing</td>
</tr>
<tr>
<td>Human Resource/Labor Relations</td>
<td>Bachelor’s</td>
<td>$36,100 - $65,800</td>
<td>Growing</td>
</tr>
<tr>
<td>Social Worker</td>
<td>Bachelor’s</td>
<td>$26,600 - $59,900</td>
<td>Growing</td>
</tr>
<tr>
<td>Substance Abuse Counselor</td>
<td>Bachelor’s</td>
<td>$22,940 - $38,230</td>
<td>Growing</td>
</tr>
</tbody>
</table>

#### Outlook

- Psychologist: Master’s
- Human Resource/Labor Relations: Bachelor’s
- Social Worker: Bachelor’s
- Substance Abuse Counselor: Bachelor’s

#### Employment Outlook
- Psychologist: Growing
- Human Resource/Labor Relations: Growing
- Social Worker: Growing
- Substance Abuse Counselor: Growing

### Note:
- ~Denotes .5 credits per semester
- OJT Denotes On the Job Training
- @ Denotes off-campus course equals 3.0 credits per year

Visit: http://myconnections.lsr7.org
# Area of Focus: Architectural Design

## High School

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architect</td>
<td>High School</td>
<td>English = 4 &lt;br&gt;Math = 3 &lt;br&gt;Science = 3 &lt;br&gt;Social Studies = 3 &lt;br&gt;Physical Education = 1 &lt;br&gt;Health = 5 &lt;br&gt;Personal Finance = .5 &lt;br&gt;Fine Arts = 1 &lt;br&gt;Practical Arts = 1 &lt;br&gt;Focused Electives = 4 &lt;br&gt;General Electives = 5 &lt;br&gt;26 credits to graduate</td>
<td>Courses selected must equal 4.0 credits: &lt;br&gt;Intro Engineering &amp; Design &lt;br&gt;Civil Eng Arch &lt;br&gt;Painting I &lt;br&gt;Pre-Calculus &lt;br&gt;Advanced Concepts in CAD</td>
</tr>
<tr>
<td>Interior Architect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landscape Architect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drafter</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Courses selected must equal 4.0 credits:**
- Intro Engineering & Design
- Civil Eng Arch
- Painting I
- Pre-Calculus
- Advanced Concepts in CAD

## Postsecondary

- **Gain education, training and work experience to further your career!**

<table>
<thead>
<tr>
<th>Postsecondary</th>
<th>Community College Majors</th>
<th>College/University Majors</th>
<th>Other Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architect</td>
<td>Bachelor’s Engineering, Engineering Tech, Architectural</td>
<td>Bachelor’s/Graduate Degree: Mathematics</td>
<td></td>
</tr>
<tr>
<td>Landscape Architect</td>
<td>Bachelor’s</td>
<td>$36,100 - $83,400</td>
<td></td>
</tr>
<tr>
<td>Urban/Regional Planner</td>
<td>Master’s</td>
<td>$39,000 - $60,500</td>
<td>Growing</td>
</tr>
<tr>
<td>Drafters</td>
<td>Bachelor’s</td>
<td>$34,880 - $55,900</td>
<td>Steady</td>
</tr>
</tbody>
</table>

## Sample Occupation

<table>
<thead>
<tr>
<th>Outlook</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced</th>
<th>Employment Outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architect</td>
<td>Bachelor’s</td>
<td>$39,000 - $79,100</td>
<td>Growing</td>
</tr>
<tr>
<td>Landscape Architect</td>
<td>Bachelor’s</td>
<td>$36,100 - $83,400</td>
<td>Growing</td>
</tr>
<tr>
<td>Urban/Regional Planner</td>
<td>Master’s</td>
<td>$39,000 - $60,500</td>
<td>Growing</td>
</tr>
<tr>
<td>Drafters</td>
<td>Bachelor’s</td>
<td>$34,880 - $55,900</td>
<td>Steady</td>
</tr>
</tbody>
</table>

**Note:** ~Denotes .5 credits per semester <br>OJT Denotes On the Job Training <br>@ Denotes off-campus course equals 3.0 credits per year <br>Visit: [http://myconnections.lsr7.org](http://myconnections.lsr7.org)
**Area of Focus: Construction Trades**

### Career Options
- Carpenter
- Cement Mason
- Electrician
- HVAC
- Heavy Equip Operator
- Home Builder
- Home/Building Inspector
- Insurance Adjuster
- Material Manager
- Metal Worker
- Millwright
- Painter
- Pipe Fitters
- Project Manager
- Roofer
- Telecom Line Installer/Repair
- Welder

### Required Credits for Graduation

<table>
<thead>
<tr>
<th>Education Level</th>
<th>High School</th>
<th>Postsecondary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Courses selected must equal 4.0 credits:</strong></td>
<td>Intro Engineering &amp; Design</td>
<td>Machine Tool Technology - LSHS only</td>
</tr>
<tr>
<td></td>
<td>Civil Eng Arch</td>
<td>Advanced Concepts in CAD</td>
</tr>
<tr>
<td></td>
<td>Metal Technology - LSHS only</td>
<td>&quot;Auto &amp; Home Care</td>
</tr>
<tr>
<td></td>
<td>Furniture Making – LSH/LSN</td>
<td>&quot;Basic Electricity/Electronics</td>
</tr>
<tr>
<td></td>
<td>Woodworking Tech - LSHS only</td>
<td>&quot;Materials &amp; Processing Tech</td>
</tr>
<tr>
<td></td>
<td>Adv Materials &amp; Processing Tech</td>
<td>&quot;Power &amp; Energy Technology</td>
</tr>
<tr>
<td></td>
<td>Climate &amp; Energy Control Tech I/II @ Herndon</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Welding/Metal Fabrication I &amp; II @ Herndon</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construction Trades @ Herndon</td>
<td></td>
</tr>
<tr>
<td></td>
<td>26 credits to graduate</td>
<td></td>
</tr>
</tbody>
</table>

### Community College Majors

- **Associate's Degree:**
  - Applied Science
  - Industrial Technologies Construction Management

### College/University Majors

- **Bachelor’s/Graduate Degree:**
  - Construction Engineering Tech
  - Construction Management
  - Safety/Health/Environmental Mgmt.

### Other Options

- Certificates (less than 2 yr):
  - Carpenter
  - Carpenter On-the-Job Training
  - Union Apprenticeship

### Outlook

<table>
<thead>
<tr>
<th>Sample Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced (Salary based on info missourieconomy.org)</th>
<th>Employment Outlook (Through 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Manager</td>
<td>Bachelor’s</td>
<td>$46,000 - $100,800</td>
<td>Steady</td>
</tr>
<tr>
<td>Electrician</td>
<td>Long-term OJT</td>
<td>$32,400 - $63,400</td>
<td>Growing</td>
</tr>
<tr>
<td>Plumber, Pipe-fitter</td>
<td>Long-term OJT</td>
<td>$32,600 - $65,000</td>
<td>Steady</td>
</tr>
<tr>
<td>Carpenter</td>
<td>Long-term OJT</td>
<td>$26,280 - $45,750</td>
<td>Steady</td>
</tr>
</tbody>
</table>

**Note:** ~Denotes .5 credits per semester  @ Denotes off-campus course equals 3.0 credits per year  OJT Denotes On the Job Training  Visit: http://myconnections.lsr7.org
# Area of Focus: Drafting & Design (CAD)

## Career Options

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-D Designer</td>
<td>High School</td>
<td>English = 4</td>
</tr>
<tr>
<td>Architectural Tech</td>
<td></td>
<td>Math = 3</td>
</tr>
<tr>
<td>Automotive Design Tech</td>
<td></td>
<td>Science = 3</td>
</tr>
<tr>
<td>Drafter</td>
<td></td>
<td>Social Studies = 3</td>
</tr>
<tr>
<td>Drafting Designer</td>
<td></td>
<td>Physical Education = 1</td>
</tr>
<tr>
<td>Drafting Designer</td>
<td></td>
<td>Health = .5</td>
</tr>
<tr>
<td>Engineer Tech</td>
<td></td>
<td>Personal Finance = .5</td>
</tr>
<tr>
<td>Graphics Designer</td>
<td></td>
<td>Practical Arts = 1</td>
</tr>
<tr>
<td>Industrial Designer</td>
<td></td>
<td>Focused Electives = 4</td>
</tr>
<tr>
<td>Job Planner/Completion Scheduler</td>
<td></td>
<td>General Electives = 5</td>
</tr>
<tr>
<td>Landscape Drafter</td>
<td></td>
<td>26 credits to graduate</td>
</tr>
</tbody>
</table>

## Area of Focus Coursework

Courses selected must equal 4.0 credits:
- Principles of Engineering
- Intro Engineering & Design
- Civil Eng Arch
- Advanced Concepts in CAD
- Adv Materials & Processing Tech
- Engineering Design and Development @ STA

## Gain education, training and work experience to further your career!

### High School
- Gain education, training and work experience to further your career!
- Courses selected must equal 4.0 credits:
  - Principles of Engineering
  - Intro Engineering & Design
  - Civil Eng Arch
  - Advanced Concepts in CAD
  - Adv Materials & Processing Tech
  - Engineering Design and Development @ STA

### Postsecondary
- Gain education, training and work experience to further your career!
- Community College Majors: Associate's Degree: Applied Science, Engineering Technology, Civil Engineering Technology, Architectural
- College/University Majors: Bachelor's/Graduate Degree: Civil and Environmental Engineering, Architectural Studies
- Other Options: Certificates: (less than 2 yr.) Computer Aided Drafting/Design (CADD) Certification

## Sample Occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced (Salary based on info missourieconomy.org)</th>
<th>Employment Outlook (Through 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphic Designer</td>
<td>Bachelor's</td>
<td>$25,400 - $52,300</td>
<td>Steady/Decline</td>
</tr>
<tr>
<td>Engineering Tech</td>
<td>Associate Degree</td>
<td>$32,900 - $65,600</td>
<td>Growing</td>
</tr>
<tr>
<td>Architecture Teacher, Postsecondary</td>
<td>Doctoral</td>
<td>$50,560 - $72,900</td>
<td>Growing</td>
</tr>
<tr>
<td>Operating Engineer</td>
<td>Moderate OJT</td>
<td>$30,390 - $46,570</td>
<td>Steady</td>
</tr>
</tbody>
</table>

Note: ~Denotes .5 credits per semester
@ Denotes off-campus course equals 3.0 credits per year

Visit: http://myconnections.lsr7.org
# Area of Focus: Electronics

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Service/Repair Tech</td>
<td>High School</td>
<td>English = 4</td>
<td><strong>Courses selected must equal 4.0 credits:</strong></td>
</tr>
<tr>
<td>Comp/ATM/Office Machine Repair</td>
<td></td>
<td>Math = 3</td>
<td>Adv Materials &amp; Processing Tech</td>
</tr>
<tr>
<td>Electrical Technician</td>
<td></td>
<td>Science = 3</td>
<td>Intro Engineering &amp; Design</td>
</tr>
<tr>
<td>Robotic Technician</td>
<td></td>
<td>Social Studies = 3</td>
<td>~Power &amp; Energy Technology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Physical Education = 1</td>
<td>Intro Engineering &amp; Design</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Health = .5</td>
<td>~Materials &amp; Processing Tech</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Personal Finance = .5</td>
<td>~Basic Electricity/Electronics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fine Arts = 1</td>
<td>~Computer Hardware/Operating Systems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Practical Arts = 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Focused Electives = 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>General Electives = 5</td>
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<tr>
<td></td>
<td></td>
<td><strong>26 credits to graduate</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Postsecondary</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Community College Majors</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>College/University Majors</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other Options</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Gain education, training and work experience to further your career!</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Associate’s Degree:</strong></td>
<td><strong>Bachelor’s/Graduate Degree:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Applied Science</td>
<td>Electronics Tech, Computer/Networking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Engineering Technology, Electronics</td>
<td>Electronics Tech, Electrical/Electronics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Engineering Technology, Computers &amp; Electronics</td>
<td>Communication Tech</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Electrical Tech</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Electrical Technician:</strong></td>
<td><strong>Certificates:</strong> (less than 2 yr.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Electrical + Electronics Equipment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Installation/Repair, General</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Electronic Install/Repair:</strong></td>
<td><strong>Sample Occupation</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Professional Certificate</strong></td>
<td><strong>Degree Required</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Entry-Level/Experienced</strong> (Salary based on info missourieconomy.org)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Employment Outlook</strong> (Through 2018)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Comp. Hardware Engineer:</strong></td>
<td><strong>Computer Specialist</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Bachelor’s</strong></td>
<td><strong>Associate’s</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>$50,800 - $86,300</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Growing</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Electrical/Electronic Eng Tech</strong></td>
<td><strong>$35,400 - $62,400</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Associate’s</strong></td>
<td><strong>Steady</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Electronic Install/Repair</strong></td>
<td><strong>$26,100 - $43,500</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Professional Certificate</strong></td>
<td><strong>Steady</strong></td>
</tr>
<tr>
<td></td>
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<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td><strong>Comp. Hardware Engineer:</strong></td>
<td><strong>$60,210 - $116,730</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Bachelor’s</strong></td>
<td><strong>Growing</strong></td>
</tr>
</tbody>
</table>

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OJT Denotes On the Job Training
Visit: http://myconnections.lsr7.org
## Area of Focus: Engineering

### Career Options

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astronaut</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineer</td>
<td>High School</td>
<td>English = 4</td>
</tr>
<tr>
<td>*Aerospace</td>
<td>Math = 3</td>
<td></td>
</tr>
<tr>
<td>*Agricultural</td>
<td>Science = 3</td>
<td></td>
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<tr>
<td>*Architectural</td>
<td>Social Studies = 3</td>
<td></td>
</tr>
<tr>
<td>*Biosystems</td>
<td>Physical Education = 1</td>
<td></td>
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<tr>
<td>*Chemical</td>
<td>Health = .5</td>
<td></td>
</tr>
<tr>
<td>*Civil</td>
<td>Personal Finance = .5</td>
<td></td>
</tr>
<tr>
<td>*Electrical</td>
<td>Fine Arts = 1</td>
<td></td>
</tr>
<tr>
<td>*Environmental</td>
<td>Practical Arts = 1</td>
<td></td>
</tr>
<tr>
<td>*Geological</td>
<td>Focused Electives = 4</td>
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</tr>
<tr>
<td>*Geotechnical</td>
<td>General Electives = 5</td>
<td></td>
</tr>
<tr>
<td>*Industrial</td>
<td>26 credits to graduate</td>
<td></td>
</tr>
<tr>
<td>*Mechanical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Petroleum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Structural</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Biomedical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Nuclear</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### High School

- **Career Focus Coursework**
- **Courses selected must equal 4.0 credits:**
  - Civil Eng Arch
  - Pre-Calculus
  - Physics I/II
  - Calculus or IB Math
  - Chemistry I
  - AP Physics
  - Principles of Engineering
  - Adv Materials & Processing Tech
  - Intro Engineering & Design
  - ~Materials & Processing Tech
  - Advanced Concepts in CAD
  - Engineering Design & Development @ STA
  - Internship in STEM Careers @ STA

- **Digital Electronics/CIM PLTW @ STA**

### Postsecondary

- **Gain education, training and work experience to further your career!**

- **Community College Majors**
  - Associate’s Degree:
    - Applied Science
    - Engineering Tech, Architectural
    - Engineering Tech, Civil
    - Engineering Tech, Manufacturing
    - Engineering Tech, Electronics
    - Engineering Tech, Comp/Electronics
    - Engineering/Land Survey

- **College/University Majors**
  - Bachelor’s/Graduate Degree:
    - Civil Environmental Engineering
    - Architectural Studies
    - Mechanical/Aerospace Engineering
    - Nuclear Engineering
    - Industrial/Manufacturing Systems
    - Engineering Technology-Electronics
    - Electrical Engineering

- **Other Options**

### Sample Occupation and Degree Required

<table>
<thead>
<tr>
<th>Sample Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced (Salary based on info missourieconomy.org)</th>
<th>Employment Outlook (Through 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Engineer</td>
<td>Bachelor’s</td>
<td>$51,100 - $88,100</td>
<td>Growing</td>
</tr>
<tr>
<td>Electrical Engineer</td>
<td>Bachelor’s</td>
<td>$57,400 - $91,100</td>
<td>Growing</td>
</tr>
<tr>
<td>Industrial Engineer</td>
<td>Bachelor’s</td>
<td>$51,600 - $81,200</td>
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</tr>
<tr>
<td>Petroleum Engineer</td>
<td>Bachelor’s</td>
<td>$72,550 - $87,550</td>
<td>Growing</td>
</tr>
</tbody>
</table>

### Outlook

- **Note:** ~Denotes .5 credits per semester
- **OJT** Denotes On the Job Training
- **@** Denotes off-campus course equals 3.0 credits per year
- **Visit:** [http://myconnections.lsr7.org](http://myconnections.lsr7.org)
## Area of Focus: Environmental Studies

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemist</td>
<td></td>
<td></td>
<td>Conservation of Natural Resources @ Cass, Landscape Design &amp; Turf Mgmt @ Cass, Medical Interventions/Biomedical Innovations @ STA</td>
</tr>
<tr>
<td>Envtl.-Biologist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Envtl. Engineer</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Envtl. Lawyer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPA Regulator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish/Wildlife Tech</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Scientist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Health Inspector</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Geologist</td>
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<tr>
<td>Hydrologist</td>
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<tr>
<td>Marine Biologist</td>
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<tr>
<td>Meteorologist</td>
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<tr>
<td>Microbiologist</td>
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<td></td>
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</tr>
<tr>
<td>Smokejumper</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste Reduction Coord</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research &amp; Dev. Spec.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Community College Majors
- **Associate’s Degree:** Applied Science

### College/University Majors
- **Bachelor’s Degree:**
  - Environmental Biology
  - Environmental Geology
  - Environmental Instrumentation and Measurement
  - Agricultural Economics
  - Agricultural Business
  - Chemistry
  - Biochemistry

### Other Options
- **Graduate Degree:**
  - Applied Ecology
  - Bioinformatics
  - Community Ecology
  - Organism Ecology
  - Plant Ecology
  - Food Inspector

### Sample Occupation
- **Natural Sciences Manager:** Bachelor’s or higher + work experience
- **Environmental Engineer:** Bachelor’s
- **Food Scientist/Technologist:** Bachelor’s
- **Agricultural & Food Technician:** Associate’s

### Degree Required
- **Entry-Level/Experienced** (Salary based on info missourieconomy.org)
  - Natural Sciences Manager: $64,300 - $126,000
  - Environmental Engineer: $49,600 - $83,000
  - Food Scientist/Technologist: $36,400 - $81,400
  - Agricultural & Food Technician: $26,460 - $38,030

### Employment Outlook
- Growing

### Postsecondary
- Gain education, training and work experience to further your career!

Note: ~Denotes .5 credits per semester, @ Denotes off-campus course equals 3.0 credits per year. Visit: http://myconnections.lsr7.org

OJT Denotes On the Job Training
## Area of Focus: Fabrication/Manufacturing

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airplane Assembling</td>
<td></td>
<td>English = 4</td>
<td>Courses selected must equal 4.0 credits:</td>
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<tr>
<td>CNC Programmer/Operator</td>
<td></td>
<td>Math = 3</td>
<td>FurnitureMaking - LSHS only</td>
</tr>
<tr>
<td>Foundry Tech</td>
<td></td>
<td>Science = 3</td>
<td>Woodworking Technology – LSHS/LSN</td>
</tr>
<tr>
<td>Gas/Oil Driller</td>
<td></td>
<td>Social Studies = 3</td>
<td>Metal Technology - LSHS only</td>
</tr>
<tr>
<td>Locksmith</td>
<td></td>
<td>Physical Education = 1</td>
<td>Adv Materials &amp; Processing Tech</td>
</tr>
<tr>
<td>Operating Engineer</td>
<td></td>
<td>Health = .5</td>
<td>Machine Tool Technology - LSHS only</td>
</tr>
<tr>
<td>Machinist</td>
<td></td>
<td>Personal Finance = .5</td>
<td>Principles of Engineering</td>
</tr>
<tr>
<td>Metallurgical Tech</td>
<td></td>
<td>Fine Arts = 1</td>
<td></td>
</tr>
<tr>
<td>Quality Contract Inspectors</td>
<td></td>
<td>Practical Arts = 1</td>
<td></td>
</tr>
<tr>
<td>Sheet Metal</td>
<td></td>
<td>Focused Electives = 4</td>
<td></td>
</tr>
<tr>
<td>Structural Tech</td>
<td></td>
<td>General Electives = 5</td>
<td></td>
</tr>
<tr>
<td>Tool &amp; Die</td>
<td></td>
<td>26 credits to graduate</td>
<td></td>
</tr>
<tr>
<td>Welder</td>
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**High School**

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
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<tbody>
<tr>
<td>Airplane Assembling</td>
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<tr>
<td>Foundry Tech</td>
<td>Science = 3</td>
<td>Woodworking Technology – LSHS/LSN</td>
</tr>
<tr>
<td>Gas/Oil Driller</td>
<td>Social Studies = 3</td>
<td>Metal Technology - LSHS only</td>
</tr>
<tr>
<td>Locksmith</td>
<td>Physical Education = 1</td>
<td>Adv Materials &amp; Processing Tech</td>
</tr>
<tr>
<td>Operating Engineer</td>
<td>Health = .5</td>
<td>Machine Tool Technology - LSHS only</td>
</tr>
<tr>
<td>Machinist</td>
<td>Personal Finance = .5</td>
<td>Principles of Engineering</td>
</tr>
<tr>
<td>Metallurgical Tech</td>
<td>Fine Arts = 1</td>
<td></td>
</tr>
<tr>
<td>Quality Contract Inspectors</td>
<td>Practical Arts = 1</td>
<td></td>
</tr>
<tr>
<td>Sheet Metal</td>
<td>Focused Electives = 4</td>
<td></td>
</tr>
<tr>
<td>Structural Tech</td>
<td>General Electives = 5</td>
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</tr>
<tr>
<td>Tool &amp; Die</td>
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**Postsecondary**

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<tr>
<th>Career Options</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
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</thead>
<tbody>
<tr>
<td>Airplane Assembling</td>
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</tr>
<tr>
<td>CNC Programmer/Operator</td>
<td>Math = 3</td>
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</tr>
<tr>
<td>Foundry Tech</td>
<td>Science = 3</td>
<td>Woodworking Technology – LSHS/LSN</td>
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<tr>
<td>Gas/Oil Driller</td>
<td>Social Studies = 3</td>
<td>Metal Technology - LSHS only</td>
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<tr>
<td>Locksmith</td>
<td>Physical Education = 1</td>
<td>Adv Materials &amp; Processing Tech</td>
</tr>
<tr>
<td>Operating Engineer</td>
<td>Health = .5</td>
<td>Machine Tool Technology - LSHS only</td>
</tr>
<tr>
<td>Machinist</td>
<td>Personal Finance = .5</td>
<td>Principles of Engineering</td>
</tr>
<tr>
<td>Metallurgical Tech</td>
<td>Fine Arts = 1</td>
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<tr>
<td>Quality Contract Inspectors</td>
<td>Practical Arts = 1</td>
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<td>Welder</td>
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**Community College Majors**

<table>
<thead>
<tr>
<th>Degree Required</th>
<th>Entry-Level/Experienced</th>
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<tbody>
<tr>
<td>Associate’s Degree:</td>
<td>$49,800 - $67,900</td>
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<tr>
<td>Applied Science</td>
<td>$26,100 - $48,200</td>
</tr>
<tr>
<td>Engineering Tech, Manufacturing Tech-CNC emphasis</td>
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</tr>
<tr>
<td>Manufacturing Tech-Manual emphasis</td>
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</table>

**College/University Majors**

<table>
<thead>
<tr>
<th>Degree Required</th>
<th>Entry-Level/Experienced</th>
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<tbody>
<tr>
<td>Bachelor’s/Graduate Degree:</td>
<td>$22,900 - $38,000</td>
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<tr>
<td>Industrial/Manufacturing Systems Engineering</td>
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<tr>
<td>Manufacturing Engineering Tech</td>
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**Other Options**

<table>
<thead>
<tr>
<th>Degree Required</th>
<th>Entry-Level/Experienced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificates: (less than 2 yr.)</td>
<td>$24,010 - $34,280</td>
</tr>
<tr>
<td>Manufacturing Computer Numerical Control Operator Manufacturing Tech Welding/Fabrication Job Ready</td>
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</tbody>
</table>

**Sample Occupation**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Repairer</td>
<td>Professional Certificate</td>
<td>$49,800 - $67,900</td>
</tr>
<tr>
<td>Substation/Relay</td>
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<td>$26,100 - $48,200</td>
</tr>
<tr>
<td>HVAC Mechanic/Installer</td>
<td>Long-term OJT</td>
<td>$22,900 - $38,000</td>
</tr>
<tr>
<td>Welder</td>
<td>Short-term OJT</td>
<td>$24,010 - $34,280</td>
</tr>
<tr>
<td>Structural Metal Fabricator</td>
<td>Moderate OJT</td>
<td>Growing</td>
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</table>

**Outlook**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced</th>
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</thead>
<tbody>
<tr>
<td>Welder</td>
<td></td>
<td>Growing</td>
</tr>
</tbody>
</table>

**Note:** ~Denotes .5 credits per semester

Visit: [http://myconnections.lsr7.org](http://myconnections.lsr7.org)

52
Area of Focus: Mechanical/Automotive Technology

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
<th>Other Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Body Repair</td>
<td>High School</td>
<td></td>
<td>Metal Technology - LSHS only</td>
<td>~Power &amp; Energy Technology</td>
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<tr>
<td>Auto Customizer</td>
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<td></td>
<td>Adv Materials &amp; Processing Tech</td>
<td>~Materials &amp; Processing Tech</td>
</tr>
<tr>
<td>Automotive Tech</td>
<td></td>
<td></td>
<td>Intro Engineering &amp; Design</td>
<td>~Auto &amp; Home Care</td>
</tr>
<tr>
<td>Automotive Tech Consultant</td>
<td></td>
<td></td>
<td>Principles of Engineering</td>
<td>~Small Engine Repair</td>
</tr>
<tr>
<td>(Damage Estimator)</td>
<td></td>
<td></td>
<td>Machine Tool Technology - LSHS only</td>
<td></td>
</tr>
<tr>
<td>Aviation Technician</td>
<td></td>
<td></td>
<td>Auto Collision &amp; Repair Technology I/II @ Herndon</td>
<td></td>
</tr>
<tr>
<td>Heavy Equip Tech</td>
<td></td>
<td></td>
<td>Automotive Technology I/II @ Herndon</td>
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</tr>
<tr>
<td>Machinist</td>
<td></td>
<td></td>
<td>Diesel, Industrial &amp; Agricultural Mechanics I/II @ Herndon</td>
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<tr>
<td>Marine Tech</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycle Tech</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Engine Tech</td>
<td></td>
<td></td>
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</tbody>
</table>

Postsecondary

Gain education, training and work experience to further your career!

Community College Majors

<table>
<thead>
<tr>
<th>Associate’s Degree:</th>
<th>College/University Majors</th>
<th>Other Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Science</td>
<td>Bachelor’s/Graduate Degree:</td>
<td>Certificates: (less than 2 yr.)</td>
</tr>
<tr>
<td>Mechanical</td>
<td>Automotive Tech</td>
<td>Auto Body + Collision/Repair</td>
</tr>
<tr>
<td>Automotive Merchandising</td>
<td>Auto Tech Mgmt. Design Tech</td>
<td>Tech + Technician</td>
</tr>
<tr>
<td>Collision Repair Tech</td>
<td>Auto Service Management</td>
<td>Auto + Auto Mechanics Tech +</td>
</tr>
<tr>
<td></td>
<td>Mechanical Engineering Tech</td>
<td>Technician</td>
</tr>
<tr>
<td></td>
<td>Product Design</td>
<td>Auto Collision Repair</td>
</tr>
<tr>
<td></td>
<td>Mechanical &amp; Aerospace Engineering</td>
<td>Auto Technology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Undercar Job Ready</td>
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</table>

Sample Occupation

<table>
<thead>
<tr>
<th>Entry-Level/Experienced (Salary based on info missourieconomy.org)</th>
<th>Employment Outlook (Through 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Service Tech/Mechanic</td>
<td>Growing</td>
</tr>
<tr>
<td>Motorcycle Mechanic</td>
<td>Growing</td>
</tr>
<tr>
<td>Aircraft Mechanic/Service Tech</td>
<td>Steady</td>
</tr>
<tr>
<td>Heavy Equip. Mechanic</td>
<td>Growing</td>
</tr>
</tbody>
</table>

Outlook

Note: ~Denotes .5 credits per semester @ Denotes off-campus course equals 3.0 credits per year
OJT Denotes On the Job Training

Visit: http://myconnections.lsr7.org
## Area of Focus: Agriscience

### Concentration: Landscape Design/Horticulture

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arborist</td>
<td>High School</td>
<td></td>
<td>Courses selected must equal 4.0 credits:</td>
</tr>
<tr>
<td>Agri. Educator</td>
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<td></td>
<td>Science of Nature</td>
</tr>
<tr>
<td>Agronomist</td>
<td></td>
<td></td>
<td>Biology II</td>
</tr>
<tr>
<td>Florist</td>
<td></td>
<td></td>
<td>Intro Engineering &amp; Design</td>
</tr>
<tr>
<td>Fruit/Veg. Grader</td>
<td></td>
<td></td>
<td>IB Environmental Sys &amp; Societies</td>
</tr>
<tr>
<td>Golf Course Sup.</td>
<td></td>
<td></td>
<td>Greenhouse Op &amp; Management @ Cass</td>
</tr>
<tr>
<td>Gardens Keeper</td>
<td></td>
<td></td>
<td>Conservation of Natural Resources @ Cass</td>
</tr>
<tr>
<td>Hort. Therapist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horticulturalist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irrigation Specialist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landscape Architect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orchardist</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Soil Scientist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports/Turf Mgmt.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USDA (Agri. Inspector)</td>
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<td></td>
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</tr>
<tr>
<td><strong>Total Credits:</strong></td>
<td></td>
<td></td>
<td><strong>26 credits to graduate</strong></td>
</tr>
</tbody>
</table>

### High School

| **Gain education, training and work experience to further your career!** |
|-----------------------------|--------------------------|--------------------------|

### Postsecondary

<table>
<thead>
<tr>
<th>Community College Majors</th>
<th>College/University Majors</th>
<th>Other Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate’s Degree:</td>
<td>Bachelor’s/Graduate Degree:</td>
<td>Gardner</td>
</tr>
<tr>
<td>Business Management</td>
<td>Plant Pathology</td>
<td>Lawn Care</td>
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<tr>
<td>Plant/Nursery Management</td>
<td>Landscape Designer</td>
<td>Groundskeeper</td>
</tr>
<tr>
<td>Turf/Grass Management</td>
<td>Landscape Architect</td>
<td>Floral Design</td>
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<tr>
<td>Ornamental Horticulture</td>
<td>Ornamental Horticulture</td>
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<tr>
<td>Floriculture/Florist Management/Operations</td>
<td>Turf/Grass Management</td>
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<tr>
<td>Management/Operations</td>
<td>Conservation/Land Management</td>
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### Sample Occupation

<table>
<thead>
<tr>
<th>Sample Occupation</th>
<th>Degree Required</th>
<th>Entry-Level/Experienced</th>
<th>Employment Outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape Architect</td>
<td>Bachelor’s</td>
<td>$36,100 – $83,400</td>
<td>Growing</td>
</tr>
<tr>
<td>Ag Inspector</td>
<td>Work experience in related occupation</td>
<td>$28,200 - $45,600</td>
<td>Steady</td>
</tr>
<tr>
<td>Landscape/Grounds Keeper</td>
<td>Short-term OJT</td>
<td>$17,500 - $28,600</td>
<td>Steady</td>
</tr>
<tr>
<td>Forest &amp; Conservation Tech</td>
<td>Associate’s</td>
<td>$17,780 - $27,270</td>
<td>Steady</td>
</tr>
</tbody>
</table>

### Outlook

<table>
<thead>
<tr>
<th>Note: ~Denotes .5 credits per semester</th>
<th>@ Denotes off-campus course equals 3.0 credits per year</th>
<th>Visit: <a href="http://myconnections.lsr7.org">http://myconnections.lsr7.org</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>OJT Denotes On the Job Training</td>
<td></td>
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</table>
## Area of Focus: Animal Science/Natural Resources

### Natural Resources Career Path

<table>
<thead>
<tr>
<th>Career Options</th>
<th>Education Level</th>
<th>Required Credits for Graduation</th>
<th>Area of Focus Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High School</strong></td>
<td></td>
<td></td>
<td>Courses selected must equal 4.0 credits:</td>
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<tr>
<td>Animal *Behaviorist</td>
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<td>English = 4</td>
<td>Biology II</td>
</tr>
<tr>
<td>*Breeder</td>
<td></td>
<td>Math = 3</td>
<td>Human Body Systems</td>
</tr>
<tr>
<td>*Health Tech</td>
<td></td>
<td>Science = 3</td>
<td>Science of Nature</td>
</tr>
<tr>
<td>*Nutritionist</td>
<td></td>
<td>Social Studies = 3</td>
<td>Pre-Calculus</td>
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<tr>
<td>*Physiologist</td>
<td></td>
<td>Physical Education = 1</td>
<td>Human Anatomy Physiology</td>
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<tr>
<td>*Trainer</td>
<td></td>
<td>Health = .5</td>
<td>Principles of Biomed Sciences</td>
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<tr>
<td>*Scientist</td>
<td></td>
<td>Personal Finance = .5</td>
<td>IB Biology</td>
</tr>
<tr>
<td>Conservation Agent</td>
<td></td>
<td>Fine Arts = 1</td>
<td></td>
</tr>
<tr>
<td>Fish/Game Warden</td>
<td></td>
<td>Practical Arts = 1</td>
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</tr>
<tr>
<td>Forestry</td>
<td></td>
<td>Focused Electives = 4</td>
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</tr>
<tr>
<td>Environmental Scientist</td>
<td></td>
<td>General Electives = 5</td>
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</tr>
<tr>
<td>Exotic Animal Farmer</td>
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<td>26 credits to graduate</td>
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</tr>
<tr>
<td>Park Ranger</td>
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<tr>
<td>Pedigree Analyst</td>
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</tr>
<tr>
<td>Rodeo Stock Coord</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Veterinarian</td>
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<tr>
<td>Vet. Technician</td>
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<td></td>
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</tr>
<tr>
<td>Zoologist</td>
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<tr>
<td>Gain education, training and work experience to further your career!</td>
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<td></td>
</tr>
<tr>
<td><strong>Community College Majors</strong></td>
<td></td>
<td>Associate’s Degree:</td>
<td>Bachelor’s/Graduate Degree:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Food Product Processing</td>
<td>Zoo/Aquarium Curator</td>
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<td>Animal Health/Training</td>
<td>Conservation Agent/Management</td>
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<td>Dairy Science</td>
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<td>Equestrian/Equine Studies</td>
<td>Range Science/Management</td>
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<td>Veterinarian Technician</td>
<td>Marine Biologist</td>
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<td>Animal/Livestock Husbandry</td>
<td>Wildlife Biologist</td>
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<td>Range Science/Management</td>
<td>Poultry Science</td>
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<td>Diary Husbandry</td>
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<td><strong>College/University Majors</strong></td>
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<td>Groomer</td>
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<td><strong>Other Options</strong></td>
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<td><strong>Outlook</strong></td>
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<td><strong>Sample Occupation</strong></td>
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<td>Entry-Level/Experienced</td>
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<tr>
<td>Animal Scientist</td>
<td>Bachelor’s</td>
<td>$37,600 - $87,400</td>
<td>(Salary based on info missourieconomy.org)</td>
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<td>Zoologists Wildlife Biologist</td>
<td>Bachelor’s</td>
<td>$33,100 - $55,800</td>
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<td>Veterinarian</td>
<td>First Professional Degree</td>
<td>$45,200 - $84,000</td>
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<td>Natural Science Manager</td>
<td>Bachelor’s</td>
<td>$64,290 - $105,450</td>
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Note: *Denotes .5 credits per semester
OJT Denotes On the Job Training

Visit: http://myconnections.lsr7.org
COMMUNICATION
ARTS
Typical Course Progression: Communication Arts

**Middle School Electives**
- Grade 7: Exploring Speech & Theatre
- Grade 8: Speech & Theatre, Broadcasting & Video Technology

**High School Electives**
- Speech Communication (9-12)
- Journalism (10-12)
- News for Print and Online I (9-12)
- News for Print and Online II (10-12)
- Competitive Dramatics (9-12)
- Yearbook (9-12)
- Adv. Yearbook (10-12)
- Creative Writing (11-12)
- Adv. Video Technology (10-12)
- Intro. to Broadcasting/Video Tech. (9-12)
- Theatre 1 (9-12)
- Stagecraft (10-12)
- Adv. Stagecraft (10-12)
- Adv. Broadcasting (10-12)
- IB Film (11-12)
- Theatre II (10-12)
- IB Theatre (11-12)
- Repertory Theatre (11-12)
- Debate (9-12)
- Adv. Debate (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
PREREQUISITE: Teacher approval
This course is designed to refine skills in reading, analysis, and interpretation of literature. Students write multiple paragraphs and essays in response to literature. In addition to grammar practice and vocabulary development, this class emphasizes oral presentations, group activities, independent reading, and career research.

ADVANCED STUDIES ENGLISH 9
Grade: 9 Credit: 1 unit
WEIGHTED: 0.5
PREREQUISITE: Teacher approval; above average reading and writing skills
This course utilizes an accelerated, analytical approach to literature, grammar, composition, and vocabulary. Students read extensively, practice note taking, analyze literary pieces, and complete a wide variety of written and oral assignments.

ENGLISH 10
Grade: 10 Credit: 1 unit
PREREQUISITE: Teacher approval; students must have attempted a freshman English class.
This course focuses on extensive reading and literary analysis. 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.

ADVANCED STUDIES ENGLISH 10
Grade: 10 Credit: 1 unit
WEIGHTED: 0.5
PREREQUISITE: Teacher approval; strongly recommend B average in freshman English class.
This course is for students completing Advanced Studies English 9 and preparing to study IB English. Students improve grammar, usage, and vocabulary through sustained practice. Students engage in critical thinking, literary analysis, clear and concise writing, and authoritative oral communication. Reading logs, papers, and final oral examinations help develop analytical and presentation skills.

ENGLISH 11
Grade: 11 Credit: 1 unit
PREREQUISITE: Teacher approval; must have attempted freshman and sophomore English
This course focuses on thematic units that explore a variety of genres in American literature. Students practice literary analysis and complete writing projects including personal responses, essays and oral and written presentations. A research paper is included in the course work as well as grammar and vocabulary study.

ENGLISH 11 HONORS
Grade: 11 Credit: 1 unit
WEIGHTED: 0.666
PREREQUISITE: Teacher approval; strongly recommend B average in sophomore English
This course offers students an opportunity for in-depth study of American literature selections. Thematic units provide a basis for extensive literary analysis and multiple writing projects including a formal research paper. 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. Student writing includes reflective, professional, persuasive, expository, analytical, and evaluative
The following courses DO NOT count toward fulfilling the Communication Arts graduation requirement:

**COMMUNICATION ARTS ELECTIVES**

**CREATIVE WRITING**
Grade: 11–12
Credit: 0.5 unit

**DEBATE**
Grade: 9-12
Credit: 1 unit
ADVANCED DEBATE
Grade: 10-12
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.

JOURNALISM
Grade: 10-12
Credit: 0.5 unit
PREREQUISITE: Teacher approval; strongly recommend B average in English
This course prepares students to work on the newspaper, the yearbook, and in broadcasting. Students study newsgathering, interviewing, publication styles, feature writing, sports coverage, broadcast news, and student press responsibility.

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.
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.

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.

IB FILM
Grade: 11-12
PREREQUISITE: Intro to Broadcast/Video Technology and/or permission of the instructor
IB Film is an advanced level course for juniors and seniors. It is taught within the Advanced Video Technology course. The student will participate in all lessons in Advanced Video Technology (see that course description). In addition, the course develops students’ skills so they become adept in interpreting and making film texts. Through the analysis of film texts and exercises in film-making, the IB film course explores film history, theory and socio-economic background. It also develops students’ critical abilities, enabling them to appreciate the variety of cultural and historical perspectives in film. Writing skills will be utilized extensively in this course, as well as performance skills. Refer to page 5 for IB grading and testing requirements. Class may be taken for elective credit or practical art credit.

ACT PREPARATION
Grades: 10-12 Credit: 0.5 Unit
For course description, see Post High School Admissions Requirements section of the Career and Educational Planning Guide, page 3.
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  
WEIGHTED: 0.666
Grade: 10-12  
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, family relationships, 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  
WEIGHTED: 0.666
Grade: 11-12  
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 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. See page 7.

IB SPANISH V  
WEIGHTED: .666 or 1.0
Grade: 12  
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 education, health, the environment, women in society, politics 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. Refer to page 5 for IB grading and testing requirements. This class may be offered for dual credit to eligible students. See page 7.

SPANISH FOR HERITAGE SPEAKERS I/II
Grade: 9-12  
Credit: 1 unit
PREREQUISITE: Spanish and ESL 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: Students may be enrolled in this course more than 1 year based on their individual needs. 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 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 IV
Grade: 11-12 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. See page 7. The class may meet with and be combined with German V.

IB GERMAN V
Grade: 12 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. Refer to page 5 for IB grading and testing requirements. The class may meet with and be combined with German IV. The class may be offered for dual credit to eligible students. See page 7.

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 household chores. 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.
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, technology, health, daily routines and artists. Grammar topics include reflexives, various verb tenses and the subjunctive. 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**

**WEIGHTED: 0.666**

**Grade: 11-12**

**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 the media, the environment, relationships and leisure. 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. See page 7.

**IB FRENCH V**

**WEIGHTED: 0.666 or 1.0**

**Grade:** 12

**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 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. **Refer to page 5 for IB grading and testing requirements.** **NOTE:** The class may meet with and be combined with French IV. This class may be offered for dual credit to eligible students. See page 7.

**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 (greetings, school, leisure activities, family, food); and elementary grammar. 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. 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**

**WEIGHTED: 0.666**

**Grade:** 11-12

**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. 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**

**WEIGHTED: 0.666**

**Grade:** 11-12

**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 art, history, the environment, music, technology, and transportation. 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. See page 7.

IB MANDARIN CHINESE V WEIGHTED: 0.666 or 1.0
Grade: 12 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. 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. Refer to page 5 for IB grading and testing requirements. This class may be offered for dual credit to eligible students. See page 7.

SUMMIT INTERNATIONAL STUDIES ACADEMY
Grade: 11-12 Credit: 3 units
For course description, see the Summit Technology Academy section of the Career and Educational Planning Guide.
SOCIAL STUDIES
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 both a U.S. Constitution and a Missouri Constitution test. A student who successfully completes the two-year (11th & 12th) 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.

**AMERICAN HISTORY**

**Grad:** 9  
**Credit:** 1 unit  
**Required course for all 9th grade students:**  
**PREREQUISITE:** None  
**NOTE:** Also offered through R-7 Online Academy  
This class provides a broad survey of America's past from Industrial Revolution (late 1800s) to present. 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.

**ADVANCED STUDIES AMERICAN HISTORY**  
**WEIGHTED:** 0.5  
**Grad:** 9  
**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.

**WORLD HISTORY**  
**Grad:** 10  
**Credit:** 1 unit  
**Required course for all 10th grade students**  
**PREREQUISITE:** None  
This class provides a broad survey of world history from the Renaissance to modern day. Work includes use of resource materials, note taking and examinations.

**ADVANCED STUDIES WORLD HISTORY**  
**WEIGHTED:** 0.5  
**Grad:** 10  
**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 course parallels the content of World History, with more in-depth coverage of selected events. In addition to textbook, additional 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.

**MODERN GLOBAL ISSUES**  
**Grad:** 11  
**Credit:** 0.5 unit  
**Required course for all 11th grade students**  
**PREREQUISITE:** None  
**NOTE:** Also offered through R-7 Online Academy  
This course focuses on the Cold War, its effects upon the third world, the stresses of rapid modernization in both the United States and developing countries, and on the movement towards globalization since the end of World War II. Through readings, videos, and discussion, the course will examine the integration of national economies, the blending of cultures and the impact of technological change. **NOTE: High School Graduation Requirement**

**AMERICAN GOVERNMENT**  
**Grad:** 11  
**Credit:** 0.5 unit  
**Required course for all 11th grade students**  
**PREREQUISITE:** None  
**NOTE:** Also offered through R-7 Online Academy  
**NOTE:** 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 students’ final grade in the course. This is an introductory course to meet state requirements for the study of U.S. and Missouri governments.

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 11th grade  WEIGHTED: 1.0
Grade: 11  Credit: 1 unit
IB HISTORY OF THE AMERICAS HL 12th grade  WEIGHTED: 1.0
Grade: 12  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 drops out of IB History after 11th grade, they 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.
Year – I (From European Contact to 1899)
Year – II (From 1899 to Present)

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 students’ final grade in the course. Refer to page 5 for IB grading and testing requirements. This may be offered for dual credit to eligible students. See page 7.

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

<table>
<thead>
<tr>
<th>SOCIAL STUDIES ELECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ORIGINS OF WESTERN CIVILIZATION</strong>  WEIGHTED: 0.666</td>
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<tr>
<td>Grade: 11-12  Credit: 0.5 unit</td>
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<tr>
<td>PREREQUISITE: Teacher approval and a grade of B or above in 10th grade World History class is recommended</td>
</tr>
</tbody>
</table>
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.

| NON-WESTERN HISTORY  WEIGHTED: 0.666 |
| Grade: 11-12  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.

| 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.

| 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, 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
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.

AP AMERICAN HISTORY
Grade: 11-12
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
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 to receive 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 19th Century; Europe’s World Supremacy; WWI; Russian Revolution; Europe between wars/origin of WWII; and Postwar World.

COMPARATIVE GOVERNMENT
Grade: 11-12
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.

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.

IB PSYCHOLOGY
IB PSYCHOLOGY SL 11th grade
Grade: 11 or 12
Credit: 1 unit
IB Psychology Standard Level (SL) is a one-year course students may take either 11th or 12th grade. Students who take SL during 11th grade will have the option with teacher approval to take IB Psychology Higher Level (HL) during their 12th grade year.
Students who choose this option will not test their junior year.

IB PSYCHOLOGY HL 12th grade
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. NOTE: Course may be taken for 3 hours of college credit. See page 7. Refer to page 5 for IB grading and testing requirements.

**IB THEORY OF KNOWLEDGE**

WEIGHTED: 1.0

Grade: 11-12 Credit: 0.5 unit

**PREREQUISITE:** Teacher approval; previous or concurrent IB classes required course for IB Diploma Candidates.

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 in order 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 presentation. Refer to page 5 for IB grading and testing requirements. While this course is a Social Studies elective, it is also a requirement component of the IB diploma. For this reason, the course enrollment may be limited to only diploma candidates at the discretion of the IB Coordinator and Theory of Knowledge teacher.

**IB APPROACHES TO LEARNING**

WEIGHTED: 1.0

Grade: 11-12 Credit: 0.5 unit

For course description, see the [Summit Technology Academy](#) section of Career and Educational Planning Guide.

**SUMMIT INTERNATIONAL STUDIES ACADEMY**

Grade: 11-12 Credit: 3 units

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.

For course description, see the [Summit Technology Academy](#) section of Career and Educational Planning Guide.
MATHEMATICS
Lee's Summit Secondary Mathematics Courses

7th Grade       8th Grade       9th Grade       10th Grade       11th Grade       12th Grade

7th Grade Math

8th Grade
PreAlgebra

Alg/Geom 1  Alg/Geom 2  Alg/Geom 3

Algebra I  Geometry

Geometry

Algebra II

Advanced Studies Geometry

Advanced Studies Algebra II

Math Studies I

College Prep Mathematics

Precalculus *

IB Math Studies II

College Algebra * * *

Precalculus *

College Prep Mathematics

College Algebra * * *

IB Math 12 **

IB Math 11 *

IB Math Studies II

Precalculus *

College Prep Mathematics

College Algebra * * *

Calculus **

Intermediate Algebra II

Algebra II

Intro to Algebra II

(LSN, LSHS only)

College Algebra * * *

College Prep Mathematics

College Algebra * * *

Calculus **

* Denotes Honors Course
** College credit available
*** Course may be taken only as a dual credit course
ALGEBRA/GEOMETRY I
Grade:  9-10  Credit:  1 unit
PREREQUISITE: Teacher Approval
This course is designed as the first year of a three-year sequence in Algebra and Geometry. The student should enroll in Algebra/Geometry II the following year. Topics include real numbers, patterns and generalizations, function notation, solving linear equations and inequalities, graphing and interpreting linear and exponential functions, solving and graphing systems of equations and inequalities, simplifying radicals, and solving word problems. Daily homework will be assigned.

ALGEBRA/GEOMETRY II
Grades:  10-11  Credit:  1 unit
PREREQUISITE:  Teacher approval/Strongly recommend C- grade or better in Algebra/Geometry I
This course is designed as the second year of a three-year sequence in Algebra and Geometry. The student should enroll in Algebra/Geometry III the following year. Geometry topics include lines, angles, polygons, coordinate geometry, congruent triangles, similar polygons, quadrilaterals, Pythagorean Theorem, right triangle trigonometry, transformations, circles, measurement (area, surface area and volume) and constructions. Logic and reasoning as they apply to Algebra and Geometry are included. Algebra applications are integrated throughout the course. Daily homework will be assigned.

ALGEBRA/GEOMETRY III
Grade:  11-12  Credit:  1 unit
PREREQUISITE:  Teacher approval/Strongly recommend C- grade or better in Algebra/Geometry II
This course is designed as the third year of a three-year sequence in Algebra and Geometry and includes some topics from Algebra II. Topics include polynomials; logarithms; simplifying algebraic, radical and rational expressions; graphing and interpreting linear, quadratic, absolute value, exponential and rational functions; solving linear, quadratic, radical, rational and non-linear equations; an introduction to Probability and Statistics; and problem-solving. Daily homework will be assigned.

INTERMEDIATE ALGEBRA II
Grade:  12  Credit:  1 unit
PREREQUISITE:  Teacher approval/Strongly recommend C- grade or better in Algebra/Geometry III
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
Grades:  9-11  Credit:  1 unit
PREREQUISITE:  Teacher approval/Strongly recommend C grade or better in 8th grade Pre-Algebra
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 rational functions; simplifying radicals; and solving word problems. Work includes independent study. Daily homework will be assigned.

GEOMETRY
Grades:  9-12  Credit:  1 unit
PREREQUISITE:  Teacher approval/Strongly recommend C- grade or better in Algebra I
NOTE:  Also offered through R-7 Online Academy
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.

ADVANCED STUDIES GEOMETRY
Grade:  9  Credit:  1 unit
PREREQUISITE:  Algebra I in Middle School and teacher approval/Strongly recommend B- grade or better in 8th Grade 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.
INTRO TO ALGEBRA II
Grade 11
PREREQUISITE: Teacher approval/Strongly recommend C- grade in Algebra I and Geometry
This course will be offered only to students who complete Geometry at the end of first semester. The student should enroll in Algebra II the following year. Topics include solving equations and inequalities; linear, exponential and quadratic functions and their transformations; systems of equations and inequalities including linear programming; and logarithms. ACT preparation will be included within each unit. Daily homework will be assigned. Graphing calculators are strongly recommended.

ALGEBRA II
Grades: 10-12
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.

ADVANCED STUDIES ALGEBRA II
WEIGHTED: 0.5
Grade: 10
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.

MATH STUDIES I
Grade: 11
PREREQUISITE: Teacher approval/Strongly recommend C- grade in Algebra I and Geometry/Offered to those students pursuing the IB Diploma
MATH STUDIES II/IB MATH STUDIES SL
WEIGHTED: 0.666
Grade: 12
PREREQUISITE: Teacher approval/Offered to those students currently enrolled in Math Studies I as Juniors/Offered to those students pursuing the IB Diploma
Two-year program: Certificate will be issued at the end of the second year.
In the 1st year, the student will study the topics of Algebra II including functions and transformations; sets; logic; solving and graphing equations and inequalities with 1, 2, & 3 variables; exponents; logarithms; radicals; rational expressions; complex numbers; and sequences. Graphing calculators are used extensively in this course. Daily homework will be assigned. Projects are required. The student should enroll in Math Studies II/IB Math Studies SL the following year.

In the 2nd year, the student will study statistics and probability topics including standard deviation, correlation, the chi squared test, statistical analysis; sets and logic, right triangle trigonometry, circular functions, the laws and properties associated with Trigonometric functions, basic topics in differential calculus (gradients of curves, increasing and decreasing functions, basic principles of the limit and tangents to a curve, derivatives), and financial mathematics. Graphing calculators are used extensively in this course. Daily homework will be assigned. Projects are required. Refer to page 5 for IB grading and testing requirements.

COLLEGE PREPARATORY MATHEMATICS
Grade: 11-12
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
WEIGHTED: 0.666
Grades: 11-12
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.

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COLLEGE ALGEBRA

Grade: 12
Credit: 1 unit
PREREQUISITE: Teacher approval/Strongly recommend C- grade or better in Algebra II; completed application with parent approval
NOTE: Also offered through R-7 Online Academy
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. See page 7.

CALCULUS

Grade: 12
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. See page 7.

IB MATHEMATICS SL 11th grade

Grade: 11
Credit: 1 unit
PREREQUISITE: Teacher Approval/Offered only to those students in Advanced Studies Algebra II as 10th graders
IB MATHEMATICS SL 12th grade

Grade: 12
Credit: 1 unit
PREREQUISITE: Teacher approval/Offered only to students in IB Math I as 11th graders
Two-year program: Certificate will be issued at the end of the second year.
In the 1st year, the student will study the statistical concepts of variance, normal distribution and binomial distribution; absolute value, piecewise, power, exponential and logarithmic functions; circular and right triangular Trigonometry; 2 and 3 space vectors; transformations; and conic sections. Graphing calculators are used extensively in this course. Students are expected to have an above average knowledge of Algebra II. Daily homework will be assigned. Projects required. Refer to page 5 for IB grading and testing requirements.

In the 2nd year, the student will study the fundamental concepts of Calculus: differentiation, integration, graphs of functions, related rates, maximum and minimum, differential equations, transcendental functions. Projects are required. Students are expected to have an above average knowledge of trigonometry and math analysis. Daily homework will be assigned. Refer to page 5 for IB grading and testing requirements. The 2nd year course may be offered for dual credit for eligible students. See page 7.

ACT PREPARATION

Grades: 10-12
Credit: 0.5 Unit
For course description, see post High School Admissions Requirements section of the Career and Educational Planning Guide, page 3.
SCIENCE
Teacher Approval for all electives during junior and senior year of High School
(Note all prerequisites and recommendations)
Students may not move to the next level without passing the respective 9th and 10th grade required courses.

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<thead>
<tr>
<th>Course</th>
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<tbody>
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<td>Principles of Engineering (10-12)*</td>
<td>Principles of the Biomedical Science (9-10) – PBS*</td>
<td>Chemistry I</td>
</tr>
<tr>
<td>Physics I*</td>
<td>Human Anatomy &amp; Physiology*</td>
<td>Chemistry II*</td>
</tr>
<tr>
<td>Physics II*</td>
<td>Science of Nature</td>
<td>IB Chemistry 11*</td>
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<tr>
<td>Human Body Systems*</td>
<td>Biology II*</td>
<td>IB Chemistry 12*</td>
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<tr>
<td>Digital Electronics* (STA)</td>
<td>IB Biology I11*</td>
<td>Pre-Allied Health @ STA</td>
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<tr>
<td>Engineering Design &amp; Development*(STA)</td>
<td>IB Biology I12*</td>
<td>Foundations of Nursing @ Herndon</td>
</tr>
<tr>
<td>Astronomy (semester)</td>
<td>Pre-Professional Nursing* (STA)</td>
<td>IB Environmental Systems and Societies*</td>
</tr>
<tr>
<td>Meteorology (semester)</td>
<td>Medical Interventions/Biomedical Innovation*(STA)</td>
<td>AP Physics C*</td>
</tr>
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</table>

* indicated weighted
BIOLOGY I
Grades: 9
Credit: 1 unit
PREREQUISITE: None
This course is required for all 9th grade students (unless enrolled in Advanced Studies Biology I) and must be passed prior to enrollment in another science course. It is designed as a college prep course and is a prerequisite to several other science courses. It is a comprehensive and detailed study of biology which includes the following topics: scientific methodology, chemistry of living things, cell structure and function, genetics, history of life theories, five kingdom system of classification, human biology and ecology. Good study skills and note-taking skills are required. Course involves daily reading or written assignments and laboratory work.

ADVANCED STUDIES BIOLOGY I
Grade: 9
Weighted: 0.5
PREREQUISITE: Teacher recommendation from 8th grade Integrated Science course.
This course is accelerated with an in-depth approach following the standard level curriculum of IB Biology. Topics include: cells, chemistry of life, genetics, ecology, evolution, and human health and physiology. Work includes detailed note-taking; reading and observation; individual and group lab work. Students must demonstrate good lab skills, incorporating scientific method of investigation. IB style lab reports are required.

FUNDAMENTALS OF PHYSICS AND CHEMISTRY
Grade: 10
Credit: 1 unit
PREREQUISITE: Science teacher approval, Biology I or Adv. Studies Biology I After successful completion (C), student may enroll in Chemistry I as an elective their junior/senior year
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.

CHEMISTRY I
Grades: 10-12
Credit: 1 unit
PREREQUISITE: Biology I or Adv. Studies Biology I. One unit of credit in Algebra I or Algebra/Geometry III; strongly recommend minimum C- each semester in both Biology or AS Biology I AND Algebra I or Algebra/Geometry III --not to be taken concurrently; must have earned a C or better in ICP if ICP was taken in the 10th grade; students who’ve completed Adv. Studies Chemistry I cannot enroll
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
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 or Algebra/Geometry III or above
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. **Students may not enroll in Chemistry I upon completion of this course.**

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

**ONE ADDITIONAL SCIENCE COURSE IS REQUIRED FROM THE FOLLOWING ELECTIVES**

**SCIENCE ELECTIVES**

BIOLOGY II
Grades: 11-12
Credit: 1 unit
PREREQUISITE: 2 credits of science including 1 unit of credit required in Biology I or Adv. Studies Biology I; strongly recommend B- or above average
This course provides a more detailed look at topics encountered in Biology I, particularly providing an in-depth study of microbiology, genetics, 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.
SCIENCE OF NATURE
Grades: 11-12 Credit: 1 unit
PREREQUISITE: 2 credits of science including 1 unit of credit required in Biology I or Adv. Studies Biology I
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
Grades: 11-12 Credit: 0.5 unit
PREREQUISITE: 2 credits of science
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
Grades: 11-12 Credit: 0.5 unit
PREREQUISITE: 2 credits of science
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 will be mandated 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.

CHEMISTRY II
Grades: 11-12 Credit: 1 unit
PREREQUISITE: One unit Chemistry I or Adv. Studies Chemistry I; 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 thermo chemistry; 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.

HUMAN ANATOMY/PHYSIOLOGY**
Grades: 11-12 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.
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. See page 7.

IB ENVIRONMENTAL SYSTEMS AND SOCIETIES SL
WEIGHTED: 1.0
Grade: 11-12 Credit: 1 unit
PREREQUISITE: 2 credits of science including 1 unit of credit required in Biology I or Adv. Studies Biology I; 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 page 5 for IB grading and testing requirements. May be offered for dual credit for eligible students. See page 7.
IB BIOLOGY HL 11th grade  
Grade: 11  
IB BIOLOGY HL 12th grade  
Grade: 12  
PREREQUISITE: IB Biology I  
Two-year program: The student will receive a unit of credit for each year. Coursework builds upon knowledge gained in Adv. Studies Biology I and Adv. Studies Chemistry. 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 maintain a detailed laboratory portfolio of investigations, showing competence in using scientific methodology for problem solving, to be submitted for internal assessment by the IB examiner. A mandatory Group 4 project will be completed during the two-year period. Refer to page 5 for IB grading and testing requirements. May be offered for dual credit for eligible students. See page 7.

IB CHEMISTRY HL 11th grade  
Grade: 11  
IB CHEMISTRY HL 12th grade  
Grade: 12  
PREREQUISITE: IB Chemistry I  
Two-year program: Certificate will be issued at the end of the second year. (Students desiring only one year of advanced study should enroll in Chemistry II). 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 page 5 for IB grading and testing requirements.

PHYSICS I (AP B)  
Grades: 11-12  
PREREQUISITE: Concurrent enrollment in Algebra II  
College credit is possible via the AP Physics B examination taken after 2-course sequence. This could be either Physics I and Physics II or Physics II and AP Physics C. The policies for acceptance of AP Physics Exam Credit vary from college to college. Physics I is designed as a college prep course. It is highly recommended for students planning on a college major in science, technology, engineering, medicine, or another advanced field. This class will cover kinematics, Newton’s laws of motion, work, energy, & power, systems of particles and linear momentum, circular motion and rotations, oscillation and gravitation, fluid mechanics, temperature and heat, energy, power and climate change, and geometric optics. Student work includes the application of mathematical formulas to solve problems and analyze lab experiments.

PHYSICS II (AP B)  
Grades: 11-12  
PREREQUISITE: Physics 1 or concurrent enrollment in Pre-calculus or IB Math I  
College credit is possible via the AP Physics B examination taken after 2-course sequence. This could be either Physics I and Physics II or Physics II and AP Physics C. The policies for acceptance of AP Physics Exam Credit vary from college to college. Physics II is designed as a college prep course. It is highly recommended for student planning on a college major in science technology, engineering, medicine, or another advanced field. This class will cover electrostatics, electric circuits, magnetic fields, electromagnetic induction, wave motion, physical optics, atomic physics, nuclear physics, digital technology and astrophysics. Student work includes the application of mathematical formulas to solve problems and analyze lab experiments. NOTE: All students are expected to take the AP Physics B or the AP Physics C exam/s at the end of the senior year and pay the examination fee. The AP examination must be taken to receive weighted credit of 1.0; failure to take the examination will result in a weighted credit of 0.666.

ADVANCED PLACEMENT (AP) PHYSICS C  
Grades: 11-12  
PREREQUISITE: C or higher in Pre-calculus or IB Math I; Department/Teacher Recommendation. College credit is possible via the AP Physics C (Mechanics only) examination required of all students enrolled in AP Physics. The policies for acceptance of AP Physics Exam Credit vary from college to college. This class is designed for college bound students, especially those entering any science, engineering or other advanced technical field of study. The yearlong course provides a calculus-based study of force, motion and energy. Emphasis is placed on the understanding of underlying principles of physics, incorporating mathematical formulas to model physical phenomenon, problem-solving techniques, the use of technology, and student-based research.
**Project Lead the Way (PLTW) for definition, see Summit Technology Academy section of the Career and Educational Planning Guide.**

<table>
<thead>
<tr>
<th>PLTW Biomedical Program Course Sequence: Principles of Biomedical Sciences → Human Anatomy &amp; Physiology/Human Body Systems → Medical Interventions/Biomedical Innovation @ STA</th>
</tr>
</thead>
</table>

**PRINCIPLES OF THE BIOMEDICAL SCIENCES** (PBS)  **WEIGHTED: 0.5**

**Grade:** 9-10  
**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, 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. See page 7.**

**HUMAN BODY SYSTEMS** (HBS)  **WEIGHTED: 0.666**

**Grade:** 11-12  
(Grade 10 upon successful completion of PBS & teacher approval)

**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.

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 Campus and consider the IBCC 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. See page 7.**

**MEDICAL INTERVENTIONS (MI)/BIOMEDICAL INNOVATION (BI) 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.

**PRE-PROFESSIONAL NURSING**  **WEIGHTED: 0.666**

**Grade:** 12  
**Credit:** 3 units

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

**PRE-ALLIED HEALTH ACADEMY**  
**Offered as a semester course Fall and Spring**  **WEIGHTED: 0.666**

**Grade:** 11-12  
**Credits:** 1.5 units

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

**PLTW Engineering Program Course Sequence:**  
Introduction to Engineering Design → Principles of Engineering or Civil Engineering Architecture → Digital Electronics/Computer Integrated Manufacturing @ STA → Engineering Design and Development @ STA

<table>
<thead>
<tr>
<th>PLTW Engineering Program Course Sequence: Introduction to Engineering Design → Principles of Engineering or Civil Engineering Architecture → Digital Electronics/Computer Integrated Manufacturing @ STA → Engineering Design and Development @ STA</th>
</tr>
</thead>
</table>

**PRINCIPLES OF ENGINEERING (POE)**  **WEIGHTED: 0.666**

**Grade:** 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 is can be used as an elective in either Science or Engineering & Industrial Technology department.

**DIGITAL ELECTRONICS/COMPUTER INTEGRATED MANUFACTURING 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.

**ENGINEERING DESIGN & DEVELOPMENT**  **WEIGHTED (0.666)**

**Grade:** 12  
**Credit:** 3 units

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

**ACT PREPARATION**

**Grades:** 10-12  
**Credit:** 0.5 Unit

For course description, see Post High School Admissions Requirements section of the Career and Educational Planning Guide, page 3.
FINE ARTS
(ART)
Art Department Flow Chart – Grades 7-12

**7th Grade**
- Foundations of Design and Drawing I
- (9-12) No prerequisite
  - One semester each

**8th Grade Art**
- Foundations of Drawing
- Visual Arts Painting I
- (8th Grade Advanced) Teacher recommendation

**8th Grade Adv. Art**
- Teacher recommendation

**9th Grade**
- Foundations of Design and Drawing II
- Drawing III
- (11-12) No prerequisite
  - Prerequisite: B- in Drawing II

**10th Grade**
- Drawing I
- Prerequisite: B- in Drawing I
  - Teacher recommendation

**11th Grade**
- Drawing II
- Painting III
- Prerequisite: B- in Painting II

**12th Grade**
- Painting I
- Ceramics III
- Prerequisite: B- in Ceramics III

**Graphic and Computer Arts I**
- (10-12) B- in Foundations of Design and Design, Visual Arts
  - or most recent class with teacher approval

**Graphic and Computer Arts II**
- (11-12) B- in Graphic and Computer Arts I or Teacher approval

**IB Visual Arts SL or HL**
- (11-12) – B- in Drawing, Painting I and Portfolio review with teacher approval

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

The SL course is only available to seniors.

**Portfolio 1**
- (12) B- in Drawing I, Painting I and Portfolio review with teacher approval.

**Portfolio 2**
- (12) B- in Drawing I and Painting I.

Updated 10-20-14
Students may need to provide supplies/materials for individual and/or class projects for any/or all of the following:

**FOUNDATIONS OF DRAWING**
Grade: 9-12  
Credit: 0.5 unit
PREREQUISITE: None
All beginning drawing students are welcome! In this course students will learn to see and draw accurately from direct observation as well as imagination. 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 is a prerequisite for many of the other art 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 is also a prerequisite for many of the other art courses.

**VISUAL ARTS**
Grades: 9-10  
Credit: 1 unit
PREREQUISITE: Teacher recommendation from Art III (middle school) or teacher approval
This is an advanced class that builds on the concepts taught in the foundation classes and Art III and is designed to provide an overview and appreciation of the visual arts. There will be an emphasis on improving drawing and design skills as well as learning about art history, aesthetics and criticism.

**PAINTING I**
Grade: 10-12  
Credit: 0.5 unit
PREREQUISITE: B- in BOTH Foundations of Drawing and Design or Visual Arts or teacher approval
This is an introductory course in watercolor and acrylic where students learn the basic painting techniques in each media. Color theory and art history is also taught. A solid drawing foundation is important for success in this class.

**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. 20th Century artists and art movements will be explored.

**PAINTING III**
Grades 11-12  
Credit: 0.5 unit
PREREQUISITE: B- in Painting II or teacher approval
Painting III is a continuation of Painting II. Students will build on previous painting skills and explore more advanced color theories and concepts using creativity and personal expression.

**DRAWING I**
Grades: 10-12  
Credit: 0.5 unit
PREREQUISITE: B- in BOTH Foundations of Drawing and Design or Visual Arts or teacher approval
This course emphasizes art elements and principles as they apply to drawing. Students will work on observational drawing skills with the majority of subject matter being from life. Drawing I is strongly recommended for students who plan to take upper level painting, graphics and pottery courses.

**DRAWING II**
Grades: 10-12  
Credit: 0.5 unit
PREREQUISITE: B- in Drawing I or teacher approval
Students will improve skills in developing compositions, creating the illusion of depth, showing correct proportion and scale and creating dimension through value. Art history will be an integral part of the class. A good 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.
Drawing III is a continuation of Drawing II. Students will build on previous drawing skills while working from life subjects.
CERAMICS I
Grades: 10-12  Credit: 0.5 unit
PREREQUISITE:  B- in Foundations of Drawing and Design and/or Visual Arts and/or teacher approval
Students will use the hand-building clay construction methods of pinch, coil and slab. Wheel throwing will be introduced. Students will learn clay vocabulary and various methods of decoration. Emphasis on craftsmanship and creativity.

CERAMICS II
Grades: 10-12  Credit: 0.5 unit
PREREQUISITE:  B- in Pottery I or teacher approval
There will be a continued emphasis on design and craftsmanship. Students will learn about mixing materials in their clay pieces, large hand-building and advanced wheel techniques. Students will learn how to create both functional and decorative clay projects.

CERAMICS III
Grades 11-12  Credit: 0.5 unit
PREREQUISITE:  B- in Pottery II or teacher approval
Pottery III is a continuation of Pottery II. Students will develop more complex wheel thrown and/or hand built pieces.

GRAPHIC and COMPUTER ARTS I
Grades: 10-12  Credit: 0.5 unit
PREREQUISITE:  B- in Foundations of Drawing and Design, Visual Arts or most recent class with teacher approval.
Through studio assignments and computer graphics, students will create visual images for graphic design presentations using various software. This course is for the student pursuing art after high school. Students should have sound technical skills in drawing and painting.

GRAPHIC and COMPUTER ARTS II
Grades 11-12  Credit: 0.5 unit
PREREQUISITE:  B- in Graphic and Computer Arts I or teacher approval
This course is a continuation of visual problem solving on the computer. Understanding advanced techniques and vocabulary of software will enable the art student to create additional projects for their art portfolio.

PORTFOLIO I  WEIGHTED: 0.666
Grade: 12  Credit: 0.5 unit
PREREQUISITE:  B- in Drawing I, Painting I and Portfolio review with teacher approval
This course is designed for the student who plans to continue visual art studies after high school. It is recommended that students take drawing and painting courses before Portfolio I. Students will keep Research Workbooks and visit art galleries and exhibits outside of class. Students will create individual art works based on their interests and their research. This course is for the highly motivated and skilled art student only.

PORTFOLIO II  WEIGHTED: 0.666
Grade: 12  Credit: 0.5 unit
PREREQUISITE:  B- in Drawing I and Painting I. Students must have maintained a B- or higher grade in Portfolio I and have teacher approval to take this class.
Continuation of Portfolio I  May be offered for dual credit to eligible students. See page 7.

IB VISUAL ARTS SL or HL  WEIGHTED: 1.0
Grade: 11-12  Credit: 1 unit
PREREQUISITE:  B- in Drawing I, Painting I and Portfolio review with teacher approval
This 2 year course is for the self-directed and skilled art student. Students are expected to complete at least 2 research workbooks during the 2 years they are in class. IB Visual Art can be taken as a 1 year Standard Level (SL) course or as a 2 year Higher Level (HL) course. The SL course is only available to seniors. Refer to page 5 for IB grading and testing requirements. May be offered for dual credit for eligible students. See page 7.
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 or fine arts 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 or fine arts 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
Grade: 11-12  WEIGHTED: 1.0
PREREQUISITE: Theatre Arts I and/or permission of the instructor
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 page 5 for IB grading and testing 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.

CONCERT BAND
Grades: 9-12  Credit: 1 unit
PREREQUISITE: Ability grouped by department through audition:
NOTE: This group combines with Symphonic Band to form marching band during 1st quarter of school year. Marching band fees are required. Auditions from Marching Band into Concert/Symphonic Band are mandatory and will be a part of the 1st semester grade. Select wind players will combine to perform with Symphony Orchestra (LSHS/LSN only). This class is designed around highly advanced musical content and requires quality musicianship and self-discipline. The class also further develops instrumental music skills in tone production, rhythm study, music notation, dynamics, articulation, musical style and expression. 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. Formal dress purchase or tuxedo rental is required for this class. A district activity fee of $50.00 applies to this course.

SYMPHONIC BAND
Grades: 9-12  Credit: 1 unit
PREREQUISITE: Ability grouped by department through audition:
NOTE: This group combines with Concert Band to form marching band during 1st quarter of school year. Marching band fees are required. Auditions from Marching Band into Concert/Symphonic Band are mandatory and will be a part of the 1st semester grade. Select wind players will combine to perform with Symphony Orchestra (LSHS/LSN only). This class is designed around highly advanced musical content and requires quality musicianship and self-discipline. 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. Formal dress purchase or tuxedo rental is required for this class. A district activity fee of $50.00 applies to this course.

CONCERT ORCHESTRA
Grades: 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
Grades: 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
Grades: 9-12  Credit: 1 unit
PREREQUISITE: Ability grouped by department through audition:
Wind and percussion students only
Grades: 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.
FRESHMAN WOMEN'S 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.

WOMEN'S CHOIR
Grades: 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.

MEN'S CHOIR
Grades: 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
Grades: 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
Grades: 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
Grades: 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
Grades: 11-12  Credit: 1 unit
PREREQUISITE: Currently enrolled in a major ensemble or teacher approval.
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. Refer to page 5 for IB grading and testing requirements. The exam involves a listening examination, involving extensive analysis of audio examples and a prescribed work. Analysis is submitted in written form.

OPTIONAL CREDIT COURSES (See your Guidance Counselor for details)

CRIMSON CAMERATA
Grades: 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  
Grades:  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  
Grades:  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 (BUSINESS)
# LSR-7 Business & Marketing Department

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<th>Information Technology Path</th>
<th>2015-2016</th>
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<td>Intro to Business Management 9th-10th Grades</td>
<td>Intro to Business Management 9th-10th Grades</td>
<td>Keyboarding 9th-12th Grades</td>
<td>Intro to Business Management 9th-10th Grades</td>
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<tr>
<td>Intro to Business Essentials 11th-12th Grades</td>
<td>Accounting 9th-12th Grades</td>
<td>Computer Applications I 9th-12th Grades</td>
<td>Computer Hardware &amp; Operating Systems I 9th-11th Grades</td>
</tr>
<tr>
<td>Advanced Business Essentials* 11th-12th Grades</td>
<td>College Accounting* (Honors Course) 10th-12th Grades</td>
<td>Computer Applications II* 9th-12th Grades</td>
<td>Computer Hardware &amp; Operating Systems II 10th-11th Grades (Online Only)</td>
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<tr>
<td>Business Law 11th-12th Grades</td>
<td>Personal Finance 11th-12th Grades</td>
<td>Multimedia 9th-12th Grades</td>
<td>Network Engineering I* (STA) 11th-12th Grades</td>
</tr>
<tr>
<td>Business Administration* (Honors Course) 11th-12th Grades</td>
<td>Business Administration* 11th-12th Grades</td>
<td>Introduction to Web Design 10th-12th Grades</td>
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<tr>
<td>IB Business Management* (Honors Course) 11th-12th Grades</td>
<td>IB Business Management* (Honors Course) 11th-12th Grades</td>
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<td>Business Administration* (Honors Course) 11th-12th Grades</td>
</tr>
<tr>
<td>Cooperative Career Experience (Course) 12th Grade only</td>
<td>IB Business Management* (Honors Course) 11th-12th Grades</td>
<td>Intro to Business Essentials 11th-12th Grades</td>
<td>IB Business Management* (Honors Course) 11th-12th Grades</td>
</tr>
<tr>
<td>Internship Opportunities</td>
<td>Internship in STEM Careers (STA) 12th Grade</td>
<td>Advanced Business Essentials* 11th-12th Grades</td>
<td>Internship in MIC (MIC ONLY) 12th Grade</td>
</tr>
<tr>
<td>Cooperative Career Experience (Internship) 12th Grade only</td>
<td>Supervised Business Experience (Internship) 12th Grade</td>
<td>Software Development* (STA) 11th-12th Grade</td>
<td>Marketing Work Experience (Internship) 12th Grade only</td>
</tr>
</tbody>
</table>

*Dual Credit Course

Please refer to the detailed course guide for prerequisite course information.
KEYBOARDING

Grades: 9-12  
Credit: 0.5 unit

**NOTE:** Recommended only for students who have not learned to type. Teacher approval

Learn to type faster with fewer errors. Students will receive instruction using Microsoft Word and enrichment software. This course includes an introduction to basic computer concepts and development of keyboarding speed and accuracy. Acquire proficient keyboarding skills through daily work, timed writings, objective tests, letters, multi-page reports, emails, and proofreading quizzes.

INTRODUCTION TO BUSINESS MANAGEMENT

Grades: 9-10  
Credit: 0.5 unit

**PREREQUISITE:** None

**NOTE:** Meets prerequisite for Business Administration

Students will discover the world of business by becoming aware of current business practices in everyday life. Be prepared to learn an introduction to the American economic system and business operational procedures. Additional topics included in this course are business structures and management, economics, business and government interaction, small business and entrepreneurship, and international business. Students will develop an awareness of the world of work and career opportunities. Course work will be enhanced by completing projects that will connect you to real-world business situations.

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 helps students prepare for CompTIA’s IT Fundamentals certification.

COMPUTER HARDWARE & OPERATING SYSTEMS II

Grades: 9-12  
Credit: 0.5 unit

**PREREQUISITE:** CHAOS I

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

This course helps students prepare for CompTIA’s A+ Applications 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.

COMPUTER APPLICATIONS I

Grades: 9-12  
Credit: 0.5 unit

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

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

**NOTE:** Meets prerequisite for Business Technology

Instruction using Microsoft Office 2010, including MS Word, Excel, Access, and Power Point. Acquire ability to create publications, analyze spreadsheets, merge documents, deliver presentations and use the Internet as a resource. Learn to integrate software programs to complete assigned projects. Utilizing professional training software, students will obtain the necessary skills to earn an industry certification from the Microsoft Corporation called Microsoft Office Specialist Certification (MOS) in the areas of Word, Excel, PowerPoint and Access 2010.

COMPUTER 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

**NOTE:** Meets requirement for SBE internship program.

Encompasses advanced competencies to strengthen skills in solving complex business problems through the integration of word processing, database management, spreadsheet analysis, desktop publishing, presentation/multimedia production and electronic communications. Utilizing professional training software, students will obtain the necessary skills to earn an industry certification from the Microsoft Corporation called Microsoft Office Specialist Certification (MOS) in the areas of Word, Excel, PowerPoint and Access 2010. **May be offered for dual credit or articulated credit to eligible students. See page 7.**
INTRODUCTION TO BUSINESS ESSENTIALS
Grades: 11-12 Credit: 0.5 unit
Prerequisite: Computer Applications I, Multimedia or Introduction to Business
Note: Course meets requirement for SBE internship program if taken with another semester business course.
Introduction to Business Essentials is designed for development of attitudes, knowledge, skills, and workplace behaviors needed for success in employment and post-secondary education. Demonstrate dynamic workplace behaviors including dynamic workplace and workforce behaviors; communicate effectively including written communication, technology and oral communication; using internet as a business tool, and applying technology to business applications, and begin creating an electronic portfolio.

ADVANCED BUSINESS ESSENTIALS
Grades: 11-12 Credit: 0.5 unit
Prerequisite: Introduction to Business Essentials
Note: Course meets requirement for SBE internship program if taken with another semester business course and Business Administration.
Advanced Business Essentials must be taken after completion of Introduction of Business Essentials. This course is designed to further develop attitudes, knowledge, skills, and workplace behaviors needed for success in employment and post-secondary education. In this course students will continue to use internet as a business tool, further apply technology to business applications, perform records and financial management, develop professional responsibilities and growth, conduct career exploration and further develop their electronic portfolio. May be offered for dual credit or articulated credit for eligible students. See pages 6 & 7.

INTRODUCTION TO WEB DESIGN
Grades: 10-12 Credit: 0.5 unit
PREREQUISITE: Mastery of keyboarding objectives
This one-semester course is designed to familiarize students with the creation and management of websites. The class will focus on website planning, basic design, layout, and construction. Other topics include evaluation of websites, and image editing; students will learn basic html structure, CSS formatting and use the Adobe Web Design Premium software suite. Upon successful completion of this course, students may apply for admission to Advanced Web Design and the opportunity to create and maintain pages on the school website. It is highly recommended that students purchase their own 1 gig or greater memory stick.

ADVANCED WEB-PAGE DESIGN WEIGHTED: 0.5
Grades: 11-12 Credit: 1 unit
PREREQUISITE: Introduction to Web Design, application, and teacher approval, class limit of 15 students
NOTE: Course meets requirement for SBE internship program
In this year-long course, students incorporate advanced web design techniques in the areas of html, css, image creation and manipulation, audio, video, and animation. Instructional strategies include teacher demonstration, peer teaching, and independent research of current web design principles using online articles and tutorials. This class is responsible for the creation and maintenance of some pages on the school website; therefore, good attendance is expected. Final evaluation includes a website portfolio project. It is highly recommended that students purchase their own 1 gig or greater memory stick. May be offered for dual credit or articulated credit to eligible students. See pages 6 & 7.

MULTIMEDIA
Grades: 9-12 Credit: 0.5 unit
PREREQUISITE: Mastery of keyboarding objectives.
This one semester course provides a foundation in digital citizenship, graphic design, audio and video production, and animation. Students will use creative design skills to develop individual and team projects. Time management will be essential to success. Final evaluation includes an electronic portfolio.

PLTW COMPUTER SCIENCE & SOFTWARE ENGINEERING
Grade: 9-12 WEIGHTED: 0.5
PREREQUISITE: None
In this course, students will work in teams to design computer games in Scratch, make Android-based apps using MIT APP Inventor, and design websites using HTML and CSS. Students will learn programming basics using the Python programming language. In addition, the students will be exposed to a broad spectrum of issues in the field of computer science from programming, to software security, to big data.

DATABASE MANAGEMENT I WEIGHTED: 0.5
Grades: 9-12 Credit: 0.5 unit Online-Only
PREREQUISITE: B- OR better in Algebra I
NOTE: Only offered through R-7 Online Academy
This data modeling and relational database design course will teach students to identify patterns or connections between information that is not obviously related and to identify key or underlying issues in complex situations. Students will learn how to transform business information needs into Entity Relationship diagrams and later, into relational database. As the students learn
data modeling, they will have the opportunity to use the most up to date Oracle environment to begin table creation using Structured Query Language (SQL) commands.

**DATABASE MANAGEMENT II**

**Grades:** 9-12

**Weighted:** 0.5

**Credit:** 0.5 unit

**Prerequisite:** Successful completion of Database Management I with a grade of C or better

**Note:** Only offered through R-7 Online Academy

This data modeling and relational database design course will teach students to identify patterns or connections between information that is not obviously related and to identify key or underlying issues in complex situations. Students will learn how to transform business information needs into Entity Relationship diagrams and later, into relational database. As the students learn data modeling, they will have the opportunity to use the most up-to-date Oracle environment using Structured Query Language (SQL) commands.

**ACCOUNTING**

**Grades:** 9-12

**Credit:** 1 unit

**Prerequisite:** None

**Note:** Course meets requirement for SBE internship program and Business Administration

This class is your opportunity to learn the financial world of business. Students will learn the process of gathering, recording, posting and interpreting financial data. We will emphasize sole proprietorships and corporations. QuickBooks and Excel are utilized to enhance accounting skills. May be offered for articulated credit to eligible students. See page 7.

**COLLEGE ACCOUNTING**

**Grades:** 10-12

**Credit:** 1 unit

**Prerequisite:** Required successful completion of Accounting I or a grade of C or better in Algebra II

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

College 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. QuickBooks and spreadsheets are utilized to develop accounting skills. May be offered for dual credit or articulated credit to eligible students. See pages 6 & 7.

**BUSINESS LAW**

**Grade:** 11-12

**Credit:** 0.5 unit

**Prerequisite:** None

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

Students will learn how to demonstrate their legal rights and personal responsibilities. Topics include criminal law; civil law; juvenile law; contractual law; consumer law; and the court system. Class Projects and a mock trial enhance classroom instruction. Understanding and analysis of legal principles for application to case problems.

**PERSONAL FINANCE**

**Grade:** 11-12

**Credit:** 0.5 unit

**Prerequisite:** None

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

Students will focus on their role as a citizen, student, family member, consumer and active participant in the business world. Students will learn various financial responsibilities including money management and credit management. Students will be provided an opportunity for self-awareness, expression and satisfaction in a highly technical and competitive society. **Note:** High School Graduation Requirement

**SUPERVISED BUSINESS EXPERIENCE (SBE) INTERNSHIP**

**Grade:** 12

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

1 units for minimum 20 hours per week supervised employment

**Prerequisite:** Must also enroll in Business Technology, Advanced Web Design, Accounting or College Accounting, or Computer Applications I or II, 90% attendance, teacher approval, and appropriate credits earned for graduation

Earn credit and get paid! Attend school half day and work half day! Job training is provided by participating area businesses such as accounting and consulting firms, attorneys, banks, dental and medical offices, school offices, Internet and computer support providers, etc. Interns must demonstrate desirable workplace skills. Periodic conferences between coordinator and employer help ensure intern's success. Employer makes evaluation each grading period prior to issue of reports. **Note:** Leaving a place of employment during the year requires approval of employer, coordinator, and administration.

**MARKETING 101**

**Grades:** 10-12

**Credit:** 1 unit

**Prerequisite:** None

Introduces students to the broad foundation in marketing functions, as well as the use of technological business tools to perform marketing activities. Units include: pricing, selling, advertising, product development, etc. This is an excellent course for students interested in the field of marketing, management or entrepreneurship. Students have the opportunity to participate in DECA and acquire skills for positions in marketing, management, and entrepreneurship.
CREATIVE MARKETING THROUGH ENTREPRENEURSHIP  WEIGHTED: 0.666
Grade: 11-12  Credit: 1 unit
**PREREQUISITE:** Marketing 101 w/ a B average or higher and teacher approval
Extensive application of marketing concepts and functions to project-based curriculum. Students work with area business partners to complete projects, which include market research, development of marketing strategies, promotional campaign, and business plan. Includes individual research and oral presentation of the project with visuals. Students have the opportunity to participate in DECA and acquire more advanced skills for positions in marketing, management, and entrepreneurship. **May be offered for dual credit or articulated credit to eligible students. See pages 6 & 7.**

SPORTS AND ENTERTAINMENT MARKETING
Grades: 11-12  Credit: 1 unit
**PREREQUISITE:** Marketing 101 w/ a B average or higher and teacher approval
Sports & Entertainment Marketing is an advanced course, which provides students with the opportunity to apply marketing principles in the field of Sports, Recreation, and Entertainment. Emphasis is placed upon the functions of financing, marketing-information management, pricing, product/service management promotion and selling. An individual research project with an oral presentation is required for this course. Students will participate in hands-on projects, field study experiences, and DECA. **May be offered for dual credit or articulated credit to eligible students. See pages 6 & 7.**

MARKETING INTERNSHIP
Grade: 12  Credit: .5 unit for minimum 10 hours per week supervised employment
1 units for average 20 hours per week supervised employment
**PREREQUISITE:** Must also enroll in Marketing 101, Creative Marketing/Entrepreneurship, or Sports and Entertainment Marketing listed above, 90% attendance, teacher approval, and appropriate credits earned for graduation
Cooperative work experience program; job training provided by participating area businesses such as restaurants, general retailers, banks, 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 require approval of employer, coordinator, and administration

COOPERATIVE CAREER EXPERIENCE (CCE)
Grade: 12  Credit: 1 unit
**PREREQUISITE:** None. 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, 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. See page 7.**

COOPERATIVE CAREER EXPERIENCE (CCE) INTERNSHIP
Grade: 12  Credit: .5 unit for minimum 10 hours per week supervised employment
1 units for average 20 hours per week supervised employment
**PREREQUISITE:** Must also enroll in CCE listed above, 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, day care, 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

BUSINESS ADMINISTRATION  WEIGHTED: 0.666
Grade: 11-12  Credit: 1 unit
**PREREQUISITE:** Accounting I, Introduction to Business Essentials and Advanced Essentials, Marketing 101, or Intro. To Business Management
Designed for the college-bound, potential business administration major. Class introduces foundations of business systems, principles and theories of the free enterprise system, entrepreneurship, business economics, and business policy decision-making. Reading assigned materials, taking notes, evaluation of business case history, including decision-making proposals; participation in class discussion; critiquing magazine articles; and a required semester project. **May be offered for dual credit or articulated credit to eligible students. See pages 6 & 7.**

IB BUSINESS MANAGEMENT SL  WEIGHTED: 1.0
Grade: 11-12  Credit: 1 unit
**PREREQUISITE:** Accounting I, Business Tech, Marketing 101, or Intro. To Business Management
Designed for the college-bound, potential business administration major. Class introduces foundations of business systems, principles and theories of the free enterprise system, entrepreneurship, business economics, and business policy decision-making. Reading assigned materials, taking notes, evaluation of business case history, including decision-making proposals; participation in class discussion; critiquing magazine articles; and a required semester project. **Refer to page 5 for IB grading and testing requirements. May be offered for dual credit or articulated credit to eligible students. See pages 6 & 7.**
INFORMATION TECHNOLOGY IN A GLOBAL SOCIETY SL  WEIGHTED: 1.0
Grade: 11-12  Credit: 1 unit
For course description, see the Summit Technology Academy section of the Career and Educational Planning Guide.

SUMMIT INTERNATIONAL STUDIES ACADEMY
Grade: 11-12  Credit: 3 units
For course description, see the Summit Technology Academy section of the Career and Educational Planning Guide.

NETWORK ENGINEERING I  WEIGHTED: .666
Grade: 11-12  Credit: 1.5 units-1st semester
For course description, see Summit Technology Academy section of the Career and Educational Planning Guide.

NETWORK ENGINEERING II  WEIGHTED: .666
Grade: 11-12  Credit: 1.5 units-2nd semester
For course description, see Summit Technology Academy section of the Career and Educational Planning Guide.

CYBER SECURITY
Grade: 12  Credit: 1.5 units
For course description, see Summit Technology Academy section of the Career and Educational Planning Guide.

INTERNSHIP IN STEM CAREERS
Grade: 12  Credit: .5 unit for minimum 10 hours per week supervised employment
1 units for average 20 hours per week supervised employment
For course description, see Summit Technology Academy section of the Career and Educational Planning Guide.

SOFTWARE DEVELOPMENT  WEIGHTED: .666
Grade: 11-12  Credit: 3 units
For course description, see Summit Technology Academy section of the Career and Educational Planning Guide.

INTERNSHIP IN MIC
Grade: 12  Credit: .5 unit for minimum 10 hours per week supervised employment
1 units for average 20 hours per week supervised employment
For course description, see Summit Technology Academy section of the Career and Educational Planning Guide.
PRACTICAL ARTS
(FAMILY & CONSUMER SCIENCES)
R-7 Family and Consumer Sciences

Middle School FACS Program

- Living Skills 8
- Discovering FACS 7
- Personal Skills 8

Senior High FACS Program

- Culinary Foundations 9-12
- Culinary Arts I 10-12
- Culinary Arts 12 (Herndon Career Center)
- Food Science 10-12
- International Foods 10-12
- FACS Internships 12
- Introduction to Human Services 9-12
- Child Dev: Preschool 11-12
- ** Child & Adolescent Psychology 12
- ** Pre-Professional Education Cadet 12
- ** Child Dev: Parenting 11-12
- FACS Internships 12
- Fashion Design and Merchandising 10-12
- Clothing Construction 1 Levels 2-4 9-12
- Interior Design 10-12
- Personal Image 10-12
- FACS Internships 12

** Prerequisite
** Honors
*** College Credit Available
→ Suggested Prerequisite
→ Indicates a Prerequisite

Personal Finance 11-12
(Meets personal finance requirement)

FACS Internships 12
**PERSONAL FINANCE**  
Grade: 11-12  
Credit: 0.5 unit  
**PREREQUISITE:** None  
**NOTE:** Also offered through R-7 Online Academy  
Students will focus on their role as a citizen, student, family member, consumer and active participant in the business world. Students will learn various financial responsibilities including money management and credit management. Students will be provided an opportunity for self-awareness, expression and satisfaction in a highly technical and competitive society. **NOTE:** High School Graduation Requirement

**INTRODUCTION TO HUMAN SERVICES**  
Grades: 9-12  
Credit: 0.5 unit  
**PREREQUISITE:** None  
**NOTE:** Also offered through R-7 Online Academy  
This course introduces students interested in public service, protective service (police/firemen), social work, counseling, nursing, massage therapy, teaching, training, etc. to lifespan issues as they impact careers in the Human Services Pathway. Students explore physical, social, emotional, intellectual and spiritual development issues from birth to death. Life transitions and developing skills as leaders that can affect public policy are an important aspect of this course. Challenge yourself to make a difference as a leader while exploring the Human Services Pathway.

**INTRODUCTION TO HOSPITALITY AND TOURISM**  
Grades: 10-12  
Credit: 0.5 unit  
**PREREQUISITE:** None  
Hospitality and Tourism is one of the world’s largest and fastest growing industries. The class content will provide students information about the numerous segments of the hospitality industry, the many different areas of career opportunities, and career paths. The interrelated nature of hospitality, travel and tourism are explored. Students are introduced to the different segments of the industry such as lodging and cruising, food and beverage service and management, club management, attractions and recreation, and assemblies and even management. It is the foundational course for advanced study in marketing, hospitality, culinary or tourism. The course can lead to an industry recognized front desk hotel services credential.

**CHILD DEVELOPMENT: PARENTING ISSUES**  
Grades: 11-12  
Credit: 0.5 unit  
**PREREQUISITE:** None  
Parenting is for students of today who are planning for tomorrow. Students develop an awareness of the myths and realities of parenting. Topics include readiness to parent; developmental changes in families; balancing work and family; value of play; developing communication; family concerns and crisis; and decision making skills. This class includes sex education following the Missouri comprehensive guidelines (including human reproduction and sexually transmitted infections). The primary focus of Child Development: Parenting Issues is on pregnancy, prenatal development, birth, the first years of life and parenting practices. Adoption of an electronic “Real Care” baby and wearing the “Empathy Belly” are optional simulations for students taking this course. All three major areas of parenting (caring for, nurturing, and guiding children) are explored.

**CHILD DEVELOPMENT: PRESCHOOL EXPERIENCES**  
Grades: 11-12  
Credit: 0.5 unit  
**PREREQUISITE:** None  
**Due to planning and working with young children teacher approval is required.** This course emphasizes the relevance of studying children to aid self-understanding. It includes an overview of principles of human development, from toddler through school-age, with a focus on the preschool years. Childcare observation and a student planned and run preschool represent the major portion of this class. Students will explore career opportunities working with children. This class would be beneficial to any student planning to pursue a career in the education, child care, human service and health science professions.

**CHILD AND ADOLESCENT PSYCHOLOGY**  
Grade: 12  
Credit: 0.5 unit  
**PREREQUISITE:** Required completion of biology and 2.5 GPA and teacher approval  
A comprehensive introduction to developmental psychology from birth through adolescence. This course is designed to help students clearly understand the complex, dynamic process of development in children and adolescents. Balanced selection of topics with extensive reading at a collegiate level; an overview of theorists; a firm foundation of up-to-date research; and an examination of timely issues. This course would be beneficial to any student planning to pursue a career in education, child care, human service and health science professions.

**INTERIOR DESIGN**  
Grades: 10-12  
Credit: 0.5 unit  
**PREREQUISITE:** None  
This class is designed for students who have a personal or career interest in all aspects of interior design; such as: elements and principles of design, past and present housing styles, housing materials, floor plans, selection and arrangement of furnishings and decorations and housing careers. Students will provide supplies/materials for individual and group projects related to topics. Major project is to design and plan five rooms. **May be offered for articulated credit with the Illinois Institute of Art-Schaumburg.** See page 7.
PERSONAL IMAGE
Grades: 10-12 Credit: 0.5 unit
PREREQUISITE: None
This class is designed for students who are seeking to develop skills that make the most of individual characteristics. Topics include self analysis, stress management, personal care, application of elements and principles of design, wardrobe planning and strategies to help them prepare for and be success in the workplace. Self-evaluation and personal involvement are stressed.

FASHION MERCHANDISING AND DESIGN
Grades: 10-12 Credit: 0.5 unit
PREREQUISITE: None
Students explore the various aspects of the business of fashion including merchandising and promotion fashion history, and textiles. A variety of visual merchandising displays including a “store” window will be required. After researching fashion designers, students design an original fashion through inspiration and sketches. Students develop leadership and employability skills essential to a career in fashion designing, fashion buying and retailing. May be offered for articulated credit through the Illinois Institute of Art-Chicago. See page 7.

CULINARY FOUNDATIONS
Grades: 9-12 Credit: 0.5 unit
PREREQUISITE: None
Learn the basics of food safety, selection, storage, preparation and planning meals on a budget. Learn culinary skills that you will use in daily life. Work in groups to plan, prepare and serve food products in a lab setting. Missed labs must be made up at home following any absences. Students will be responsible for purchasing the course cookbook. This course is a prerequisite to Culinary Arts I. You must earn a B Average or higher to advance to Culinary Arts I.

CULINARY ARTS I
Grades: 10-12 Credit: 1.0 unit
Prerequisite: Teacher approval. Must have completed Culinary Foundations with a B average
Interested in a career that creates 300,000 new jobs each year? The restaurant/food service industry is looking for you. The restaurant industry focuses on fine dining restaurants, hotel restaurants, chef-owned bistros, resorts, casinos, stadiums and theme parks, colleges and cruise lines to name a few. Culinary Arts I is the first year of a two year industry-based curriculum that prepares high school students for careers in the restaurant and food service industry. Students are required to purchase a chef coat and hat and participate in FCCLA competitions. NOTE: Students that successfully complete Culinary Foundations, Culinary Arts I and pass the ProStart I examination may proceed to year two of the Culinary Arts program. This is a nationally recognized program developed by the National Restaurant Association. A 2nd year certified ProStart student may receive college credit hours and scholarships from university hospitality programs and culinary arts schools.

FOOD SCIENCE
Grades: 10-12 Credit: 0.5 unit
PREREQUISITE: Must have completed Culinary Foundations prior to this class
Advanced science-based foods course; investigate food and explain the processes of food chemistry and food microbiology. Work with a variety of complex food systems including nutrients, food preservation, leaveners (yeast bread) and crystallization (candy and ice cream). Course work includes experiments/lab work. Prior skills in analyzing recipes and preparing foods are beneficial.

INTERNATIONAL FOODS
Grade: 10-12 Credit: 0.5 unit
PREREQUISITE: Must have completed Culinary Foundations prior to this class
Travel around the tables of the world and the regional areas of the United States learning about world-wide cuisine and culture. Experience food preparation, techniques, serving and eating styles of the various peoples of the world. Student research projects and presentations are an integral part of this course. Missed labs must be made up at home following absences. Students will be responsible for purchasing the course cookbook.

FACS INTERNSHIPS
Grade: 12 Credit: 1 unit One semester /2 hours per day
PREREQUISITE: Student must be a senior with 90% attendance who has taken an introductory Family and Consumer Sciences class in their chosen career path. From this initial course, the student must apply and obtain a recommendation from the FACS teacher. (C+ grade is highly recommended). Student must furnish own transportation. The class emphasizes a strong school-to-careers focus by linking Family and Consumer Sciences course work to a related career. Interns will experience shadowing a professional to understand day-to-day activities of an employee in their chosen career path. Examples of FACS internships include day care director, preschool teacher, visual merchandiser, interior designer, elder care dietitian and chef. Students will not receive pay for the internship because they are not employees.

PRE-PROFESSIONAL EDUCATION CADET WEIGHTED: 0.666
Grade: 12 Credit: 2 units
For course description, see Summit Technology Academy section of Career and Educational Planning Guide.
PRACTICAL ARTS (ENGINEERING & INDUSTRIAL TECHNOLOGY)
INTRODUCTION TO ENGINEERING & DESIGN (IED)**  WEIGHTED: 0.500
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.

PRINCIPLES OF ENGINEERING (POE)**  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.

PLTW ENGINEERING ELECTIVE COURSES

CIVIL ENGINEERING AND ARCHITECTURE (CEA)**  WEIGHTED: 0.666
Grade: 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.

DIGITAL ELECTRONICS PLTW / COMPUTER INTEGRATED MANUFACTURING  WEIGHTED: 0.666
Grade: 11-12 Credits: 3 units, 1.5 Fall Semester, 1.5 Spring Semester
DUAL CREDIT:  UCM ET 1026, ET 1050 (8 hrs credit for eligible students)
PREREQUISITE:  GPA: 2.5 cumulative or better; Attendance: 90% or better; Math: Algebra I, B- or better; Reading/Writing: 10th grade level
Recommended:  Geometry, Internet access outside of class is highly recommended.
PREREQUISITE for PLTW Member Schools:  Introduction to Engineering Design, Principles of Engineering
This is a course in applied logic that gives students the opportunity to learn how computers/logic circuits think and control the world around us. Computer simulation software is used 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, which includes robot applications.
Dual Credit:  UCM ET 1026, ET 1050 (8 hrs credit for eligible students)

COMPUTER INTEGRATED MANUFACTURING  WEIGHTED: 0.666
Dual Credit:  UCM ENGT 1012 (2 hrs credit for eligible students)
PREREQUISITE for PLTW Member Schools:  Introduction to Engineering Design, Principles of Engineering
This course is designed to expose students to the fundamentals of computerized manufacturing technology. The course is built around several key concepts: Computer Modeling-using a three dimensional, solid modeling software package with mass property analysis. CNC Equipment - understanding the machine tools and its operating and programming aspects. CAM Software - converting computer generated geometry into a program to drive CNC machine tools. Robotics-using a robot for materials handling and assembly operations. Flexible Manufacturing Systems - working in teams to design manufacturing work cells and table top factory simulations.

PLTW ENGINEERING CAPSTONE COURSE

ENGINEERING DESIGN AND DEVELOPMENT
Grade: 12 Credits: 3 units, 1.5 Fall Semester, 1.5 Spring Semester
PREREQUISITE:  GPA: 2.5 cumulative or better; Attendance: 90% or better; Math: Algebra II B or better. Other requirements: Completion of Digital Electronics with C or better, PLTW Principles of Engineering or high school Physics with a B or better.
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) or Civil Engineering/Architecture (CEA).
Recommended:  Pre-calculus (completed or concurrent enrollment)
**Fall semester (EDD)** Student design teams work on an open-ended problem in which they research, design, and construct 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.

**Spring Semester** The Engineering Field Experience (EFE) course requires that students (AM section only) travel two days per week to Lee’s Summit City Hall, Public Works Engineering Department. The engineering staff at HDR travel to STA on two days per week. It is the goal of these organizations to provide students with real, on-going or planned infrastructure (roads, traffic, waste-water conveyance, rainwater runoff, etc.) projects. Students will learn the fundamentals of fluid statics, and dynamics which will be applied directly to the projects for LSPW and HDR.

### INDUSTRIAL TECHNOLOGY COURSES

#### 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 small class fee.

#### 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.

#### GRAPHICS TECHNOLOGY
Grades: 9-12
Credit: 0.5 unit

**PREREQUISITE:** None

Graphics Technology is a course which is designed to introduce the students into many new and exciting technologies used in the world today as well as techniques that have been used for years. Students will learn Black and White and Digital Photography, Screen-Printing, Desk Top Publishing and CAD (Computer Aided Drafting). Hands-on activities and computer work will be used to accomplish the course objectives and projects. There is a small course fee for this class to help cover the cost of take home projects.

#### ADVANCED CONCEPTS IN CAD
**WEIGHTED: 0.666**
Grades 11-12
Credit: 1 unit

**PREREQUISITE:** C or above in Civil Engineering and Architecture (CEA) and 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. Students enrolling in this course will participate in SkillsUSA and have the opportunity to hold leadership positions and compete in the SkillsUSA contest.

#### WOODWORKING TECHNOLOGY
Grade: 10-12
Credit: 1 unit

**PREREQUISITE:** None

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. Cost of the projects will vary depending on the project.

#### FURNITURE MAKING
Grades: 11-12
Credit: 1 unit

**PREREQUISITE:** C- or better 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. Project choices and cost will vary with the individual students. Good working habits are essential.

#### METAL TECHNOLOGY
Grades: 10-12
Credit: 1 unit

**PREREQUISITE:** None

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, the cost of which will vary depending on student choice.
MACHINE TOOL TECHNOLOGY  
Grades: 11-12  
Credit: 1 unit

**PREREQUISITE:** Recommended C or above in Metal Technology or Advanced Material and Processing Technology

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, the cost of which will vary depending on student choice. Students enrolling in this course will participate in SkillsUSA and have the opportunity to hold leadership positions and compete in the SkillsUSA contest.

### 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 small fee.

### ADVANCED MATERIALS & PROCESSING TECHNOLOGY

Grades: 10-12  
Credit: 1 unit  
**LSNHS & LSWHS Only**

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

Students develop advanced skills and knowledge in the areas of woods, metals, and plastics. Processes studied include separating, combining, forming, conditioning, and finishing. Students will construct individual projects, the cost of which will vary depending on student choice.

### 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 and repairs.

### 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. This class does have a small fee.
PHYSICAL EDUCATION & HEALTH
Health / Physical Education Course Sequence

**Foundations of Fitness***

Select one PE elective from the following courses:

- Fitness 4 Life
- Team Sports
- Boys Weight Training
- Girls Aerobics & Weights

**ELECTIVE COURSES:**

- Co-ed Weights (Teacher approval)
- Co-ed Weights (Teacher approval)
- Swimming II (Teacher approval)

- Essentials of Athletic Training & First Aid
- IB Sports, Exercise and Health Science

*Foundations of Fitness and Health are required courses for graduation.

Health – Wellness for Life*

(This class DOES NOT count towards a PE credit)

Summer school offerings: (all co-ed classes)
- Foundations of Fitness
- Health-Wellness for Life
- Swimming I
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.

**TEAM SPORTS (Boys)**
Grades: 9-12  
Credit: 0.5 unit

**TEAM SPORTS (Girls)**
Grades: 9-12  
Credit: 0.5 unit
PREREQUISITE: None
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/$25.

**AEROBIC AND WEIGHT CONDITIONING (GIRLS)**
Grades: 9-12  
Credit: 0.5 unit
PREREQUISITE: None
This class is structured to emphasize total body fitness, specifically in the areas of cardiorespiratory endurance and strength improvement. Aerobic conditioning will utilize various activities, such as: jogging/walking up to 2 miles per conditioning session, aerobic dance, step, circuit training and toning exercises. Strength conditioning will be developed using various types of weightlifting programs. General health topics will also be covered throughout the semester. Class can be repeated and taken both semesters if desired.

**WEIGHT TRAINING (BOYS)**
Grades: 9-12  
Credit: 0.5 unit
PREREQUISITE: None
The class is structured to emphasize muscular strength development. Students are provided principles and practice techniques for a beginning strength program. Progression concepts are taught and practiced as students develop and work at their individual performance levels. Knowledge of general anatomy and its application in this area is also included. Class can be repeated and taken both semesters if desired.

**WEIGHT CONDITIONING (CO-ED)**
Grades: 10-12  
Credit: 1 unit
PREREQUISITE: Teacher approval and a ‘B’ or higher in Weight Training or Aerobics & Weights course
This class builds on techniques and training methods introduced in the prerequisite classes. Emphasis is placed on developing advanced techniques in the field of power and strength. The use of plyometric training modalities is a primary method of enhancing targeted areas of physical performance. The amount of physical activity performed in class will be at an increased rate with higher expected outcomes. Students will be required to research a nutritional topic, discussing how it relates to performance as well as design a detailed exercise plan with the goal of increasing one’s level of fitness.

**HEALTH - WELLNESS FOR LIFE**
Grades: 9-10  
Credit: 0.5 unit
PREREQUISITE: None
This course is an overview of wellness topics including; personal health, nutrition, human growth & development, mental health issues, ATOD, STD’s, HIV/AIDS, and other health related areas. The students will be expected to design a nutritional plane as well as use technology, where appropriate, for research and project assignments.
ESSENTIALS OF ATHLETIC TRAINING AND FIRST AID
Grades:  11-12   Credit:  0.5 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.

SWIMMING I
Grades:  9 -12   Credit:  1 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. 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. Students do not need to have any swimming ability to enroll in this course. This class is taught at the LS Aquatics Center on the campus of Summit Lakes Middle School. Class begins at 7:10 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.

SWIMMING II
Grades:  10 -12   Credit:  1 unit
PREREQUISITE:  Swimming I with teacher approval or pass a Swimming Competency Test
This course is designed for the strong intermediate or advanced swimmer who wishes to improve swimming stroke development, endurance conditioning, and receive the American Red Cross Lifeguard Training certification. Instruction and certification are offered in advanced swimmer level swimming, community water safety, and lifeguard training as well as CPR for the Professional Rescuer and First Aid Instruction. There is a fee for certification cards and lab equipment through the American Red Cross (approximately $40). Students must be 15 years of age on or before the final scheduled class session in order to be Lifeguard certified. This class is taught at the LS Aquatics Center on the campus of Summit Lakes Middle School. Class begins at 7:10 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.

IB SPORTS, EXERCISE AND HEALTH SCIENCE SL
Grade: 11-12   Weighted:  1.0  Credit:  1 unit
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 page 5 for IB grading and testing requirements.
AIR FORCE
JUNIOR ROTC
The Air Force Junior ROTC 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.

**AIR FORCE JUNIOR ROTC--AEROSPACE SCIENCE 100/LEADERSHIP 100 (ASL-1 or AFJROTC-1)**
Grades: 9-12 Credit: 1 unit

**PREREQUISITE:** None
This course acquaints the student with the development of flight and the role of the military in our United State’s history. The course also teaches the fundamentals necessary to assume leadership responsibilities within the cadet corps, school and community, including the wear of the uniform, proper standards of conduct, customs and courtesies, basic drill, study habits, and time management.

**AIR FORCE JUNIOR ROTC--AEROSPACE SCIENCE 220 or 200/LEADERSHIP 200 (ASL-2 or AFJROTC-2)**
Grades: 9-12 Credit: 1 Elective Science Credit

**PREREQUISITE:** None
The AS-220 course introduces students to various regions of the world from a geographic, historical and cultural perspective. The course provides increased international awareness and insight into foreign affairs that permits a more educated understanding of other cultures and enhanced knowledge of America’s interests and role in the world.

The AS-200 course is devoted to “The Science of Flight” and is designed to acquaint the student with the aerospace environment, the human requirements of flight, principles of aircraft flight, and principles of navigation. Discussions include the forces of lift, drag, thrust and weight as well as basic navigation including map reading, course plotting, and the effects of wind.

**NOTE:** AS-200 is the prerequisite course for AS-500. LE 200, the Leadership portion of the course, stresses communications skills and cadet corps activities.

**AIR FORCE JUNIOR ROTC--AEROSPACE SCIENCE 300 or 220/LEADERSHIP 300 (ASL-3 or AFJROTC-3)**
Grades: 10-12 Credit: 1 unit

The AS-300 course examines our Earth, the Moon and the planets, the latest advances in space technology, and continuing challenges of space and manned-space flight. Issues critical to travel in the upper atmosphere are examined. These issues include orbits and trajectories, unmanned satellites, space probes, and guidance and control systems. For units that teach AS-500 (Honors Ground School), AS-200 is a prerequisite in the second year. In this case, AS-220 (Cultural Studies: An Introduction to Global Awareness) may be taught in the third year. If a unit desires, AS-220 may be taught in one semester and AS-300 in the other semester.

The leadership portion, LE-300, emphasizes career paths after high school with information on how to apply for admission to college, how to begin the job search including filling out the job application, writing the resume, and preparing for the job interview.

**AIR FORCE JUNIOR ROTC--AEROSPACE SCIENCE 400 or 500/LEADERSHIP 400 (ASL-4 or AFJROTC-4)**

When offered as "Management of the Corps" (AS 400) the course focuses on putting management principles into practice by managing the cadet corps. When offered as "Honors Ground School" (AS 500) this course is the foundation for students interested in receiving a private pilot’s license and is weighted 0.666. When this course is completed students will be prepared to take and pass the Federal Aviation Administration (FAA) written examination. The leadership portion (LE 400) focuses on management skills, stress and finances; citizenship, and ethics. Fourth year cadets put these skills into practice by holding key leadership positions in the cadet corps. When AS 500 is taught the course may be offered for dual credit to eligible students. See pages 7 and 8.
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 (including excellent attendance), efficiency of tasks, maintenance of correct shelving, and proper circulation of materials are major factors in determining a student's grade. Students will be given assignments pertaining to information literacy skills.

CLERICAL AIDE
Grade: 12 Credit: None
PREREQUISITE: Application and approval by counselor/staff
NOTE: Students may NOT be concurrently enrolled in Library Science or Cadet.
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 Guidance Office.

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 Guidance 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
** denotes a Project Lead The Way (PLTW) course, which is a nationally recognized engineering and biomedical curriculum being offered through the Lee’s Summit School District. Introduction to Engineering Design, Civil Engineering and Architecture (CEA), Computer Science & Software Engineering, and Principles of Engineering are introductory engineering courses being offered at LSHS, LSN and LSW. In addition, Principles of Biomedical Sciences and Human Anatomy & Physiology/Human Body Systems are introductory biomedical courses offered at all three high schools. Students can advance these studies through Digital Electronics, Computer Integrated Manufacturing, Engineering Design and Development or Medical Interventions/Biomedical Innovations offered at Summit Technology Academy. Ask your Guidance Counselor about information regarding PLTW or go to www.pltw.org. Courses marked with double asterisk (**) are approved Project Lead the Way courses.

✓ denotes an International Baccalaureate Career-Related Certificate 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 IBCC encourages students to benefit from an IB education, through a selection of two or more Diploma Programme courses in addition to a unique IBCC core, comprised of an Approaches to Learning (ATL) course (see description below), a reflective project, language development, and community service. The career related courses marked with ✓ meet the IBCC.

★ denotes Missouri Innovation Campus (MIC) program, which is a progressive initiative by the University of Central Missouri, Metropolitan Community Colleges, as well as numerous business partners such as Cerner Corporation, DST, Burns & McDonnell, Grundfos, and Kiewit. The selection of students to be part of the MIC will encompass numerous steps. Each step of the student's plan towards a baccalaureate degree will include industry immersion with local businesses that are in need of developing a skilled workforce. MIC students must meet more rigorous standards, such as a 3.0 GPA, 95% attendance, and appropriate COMPASS or ACT scores. For more information visit, http://ucmo.edu/mic or ask your guidance counselor.

**PLTW ENGINEERING ELECTIVE COURSES**

**DIGITAL ELECTRONICS/COMPUTER INTEGRATED MANUFACTURING**(✓ ★ WEIGHTED: 0.666 AM & PM

Grade: 11-12 Credits: 3 units, 1.5 Fall Semester, 1.5 Spring Semester

DUAL CREDIT: UCM ET 1026, ET 1050 (8 hrs credit for eligible students)

PREREQUISITE: GPA: 2.5 cumulative or better; Attendance: 90% or better; Math: Algebra I, B- or better; Reading/Writing: 10th grade level

Recommended: Geometry. Internet access outside of class is highly recommended.

**PLTW ENGELINEERING CAPSTONE COURSE**

**ENGINEERING DESIGN AND DEVELOPMENT** (✓ ★ WEIGHTED: 0.666

Grade: 12 Credits: 3 units, 1.5 Fall Semester, 1.5 Spring Semester

PREREQUISITE: GPA: 2.5 cumulative or better; Attendance: 90% or better; Math: Algebra II B or better. Other requirements: Completion of Digital Electronics with C or better, PLTW Principles of Engineering PLTW or high school Physics with a B or better.

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) or Civil Engineering/Architecture (CEA).
Recommended: Pre-calculus (completed or concurrent enrollment)

**Fall semester (EDD)** Student design teams work on an open-ended problem in which they research, design, and construct 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.

**Spring Semester** The Engineering Field Experience (EFE) course requires that students (AM section only) travel two days per week to Lee’s Summit City Hall, Public Works Engineering Department. The engineering staff at HDR travel to STA on two days per week. It is the goal of these organizations to provide students with real, on-going or planned infrastructure (roads, traffic, waste-water conveyance, rainwater runoff, etc.) projects. Students will learn the fundamental structures, fluid statics, and dynamics which will be applied directly to the projects for LSPW and HDR.

**NETWORK ENGINEERING I & II**

Grade: 11-12 Credits: 3 units, 1.5 Fall Semester, 1.5 Spring Semester

**Dual Credit:** UCM Net 1060, 1061, 2060, & 2061 (3 hrs credit each course for eligible students) or State-wide Articulated Credit

**PREREQUISITE:** GPA: 2.5 cumulative or better; Attendance: 90% or better; Math: Algebra I, B- or better; Reading/Writing: 10th grade level; Other requirement: Keyboarding, minimum 30 WPM. **Home Internet access required.**

**Recommended:** Computer Hardware and Operating Systems I (offered traditional or through R7 Online); Algebra II

**Fall semester** The course introduces the architecture, structure, functions, components and models of the Internet and other computer networks. It uses the OSI and TCP/IP layered models to examine the roles of protocols and services. This includes the principles and structure of IP addressing, LAN and WAN specifications, and network management which provide a foundation for the course. Hands on and simulation based activities in this course assist with the configuration, operation, and troubleshooting of routers and switches in a small to medium sized internetwork.

This course helps the student prepare for the Cisco Certified Entry Network Technician certification exam.

**Spring semester** 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 helps the student prepare for the Cisco Certified Network Associate certification exam.

**CYBER SECURITY**

Grade: 12 Credits: 1.5 units CHAOS I & II Required

**PREREQUISITE:**

This course teaches the skills needed to obtain entry-level security specialist jobs. It provides a hands-on introduction to network security. Student in the course will examine, design and implement security rules and policies that govern corporate networks. Security + certification exam.

**SOFTWARE DEVELOPMENT**

Grade: 11-12 Credits: 3 units, 1.5 Fall Semester, 1.5 Spring Semester

**Dual Credit:** MCC CSIS 123, 222, 223 (available to eligible students)

**MCC requires COMPASS placement into Math 110+ or equivalent ACT score.**

**PREREQUISITE:** GPA: 2.5 cumulative or better; Attendance: 90% or better; Math: Algebra II, B- or better or previous programming knowledge; Reading/Writing: 10th grade or higher; **home internet access is required;** keyboarding, min. 30 wpm

**RECOMMENDED:** One of the following courses: PLTW Computer Science & Software Engineering OR CHAOS I OR Database Management I (offered through R7 Online)

**Fall semester:** This course is the C++ programming language. The student will focus on structured programming techniques, proper program design and object-oriented programming concepts and skills. Topics include basic object-oriented programming, events, logic structures and simple input/output techniques.

**Spring semester:** Using the Java programming language, the student will focus on structured programming techniques, proper program design and object-oriented programming concepts and skills.

**INTERNSHIP IN MIC**

Grade: 12 Credits: 3 units, 1.5 Fall Semester, 1.5 Spring Semester

**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. Student 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.

**DIGITAL MEDIA TECHNOLOGY**

Grade: 11-12 Credits: 3 units, 1.5 Fall Semester, 1.5 Spring Semester

**PREREQUISITE:** GPA: 2.0 cumulative or better; Attendance: 90% or better; Math: Algebra I, C or better; Reading/Writing: 10th grade level; one credit in Fine Arts

**Recommended:** Computer Applications or Programming; proficiency in keyboarding.

The Digital Media Technology program at Summit Technology Academy gives students an opportunity to explore and prepare for careers in the entertainment and media communications industries. Students will focus on audio production technologies including sound generation, studio recording and live sound reinforcement. They will work in teams to integrate music, graphics and...
and video technologies in entrepreneurial projects for their schools and/or communities. Students have the opportunity to earn an industry-recognized certification in Apple Final Cut Pro.

MEDICAL INTERVENTIONS/BIOMEDICAL INNOVATION PLTW ** WEIGHTED: 0.666
Grade: 11-12 Credits: 3 units, 1.5 Fall Semester, 1.5 Spring Semester
** Dual Credit: College Credit: Missouri S&T Bio Sci 188 & 175 (3 hrs credit each course for students completing the course with a B- or higher and receiving a 6 or higher score on the EOC)
PREREQUISITE: GPA: 2.5 cumulative or better; Attendance: 90% or better; 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
Learner Profile: independent learner; able to apply knowledge to new situations and concepts; strong desire to pursue a career in medicine
Medical Interventions™ Students investigate the variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the lives of a fictitious family. The course is a “How-To” manual for maintaining overall health and homeostasis in the body as students explore how to prevent and fight infection, how to screen & evaluate the code in human DNA, how to prevent, diagnose and treat cancer, and how to prevail when the organs of the body begin to fail. Students are exposed to a wide range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

** Biomedical Innovation™ In this capstone course students design and conduct experiments related to the diagnosis, treatment, and prevention of disease or illness. They apply their knowledge and skills to solve problems related to Bio-Medical science. They may work with a mentor or advisor from a university, hospital, physician’s office, or industry as they complete their work. Students may present the results of their work to an adult audience, which may include representatives from the local healthcare or business community, or partnership team. Projects include: problems in emergency medicine, forensic autopsy dissection, anatomy and physiology, and water quality. A background check and TB test may be necessary for hospital placements.

PRE-PROFESSIONAL NURSING WEIGHTED: 0.666
Grade: 12 Credits: 3 units, 1.5 Fall Semester, 1.5 Spring Semester
** Dual Credit: MCC BIO 150 (2 credit hours for eligible students); UCM NURS 1700, 2000/2070 (4 hrs credit for eligible students)
PREREQUISITE: GPA: 2.5 cumulative or better; Attendance: 90% or better; Math: Algebra I, C or better; Reading/Writing: 10th grade level; Biology and Chemistry, C or better
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
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, pharmaceutical math, CPR/First Aid, nursing skills, and medical terminology. The course will introduce students to the nursing process, nursing documentation, effective communication skills and medical ethics. Students will learn and use APA style in the production of a research paper. Dual college credit options are subject to change based on instructor qualifications and college requirements. Student must provide their own transportation for clinical experiences.

PRE-PROFESSIONAL EDUCATION CADET WEIGHTED: 0.666
Grade: 12 Credits: 2 units
** Dual Credit: UCM EDFL 2100 Foundations of Education & EDFLDX 2150 Field Experience (3 hrs credit for eligible students)
PREREQUISITE: GPA: 2.5 cumulative or better; Attendance: 95% or better; Math: Algebra I, C or better; Reading/Writing: 10th grade level; home internet access is required.
COURSE PREREQUISITE: Any one full credit of child development: pre-school and parenting, child and adolescent psychology, psychology, or sociology
This class is designed for students who are seriously considering the elementary or secondary teaching profession or corporate educator. Each student is assigned to a district school within the high school attendance boundaries. Cadets complete weekly journals, prepare and present a lesson(s) and work closely with students of the assigned supervising teacher. Students will demonstrate good moral character, good work habits, responsibility, punctuality and organizational skills. Online instruction is used as an instructional delivery method. Student must provide their own transportation. Students must have access to a computer to complete weekly assignments online. Participation in FEA (Future Educators Association) is required.

PRE-ALLIED HEALTH ACADEMY WEIGHTED: 0.666
Grade: 11-12 Credits: 1.5 units
** Dual Credit: MCC B IOL 150 Medical Terminology & ALHT 100 Introduction to Health Care Careers (2 hrs. credit each course)
MCC requires COMPASS placement into Math 110+, Eng 101, and no reading recommendation or equivalent ACT scores.
PREREQUISITE: GPA: 2.5 cumulative-or better; Attendance: 90% or better; home internet access is required.
Other requirements: Algebra I, Biology or Chemistry, with a C or better
Recommended: Anatomy/Physiology; Psychology
This one-semester (offered fall and spring) 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 Dental Assisting; Health Information Technology; Occupational Therapy/Occupational Therapy Assistant; Paramedic/EMT; Physical Therapy/Physical Therapy Assistant; Radio-logic Technology and Respiratory Care, Surgical Technology, Nursing, Polysomnography, Chiropractic, Athletic Training, Laboratory, Pharmacy, and other allied health careers. Students will have to provide transportation approximately four times during the semester in order to accommodate outside lab experiences.

**INTERNATIONAL STUDIES ACADEMY**

Grade: 11-12 Credit: 1 unit

**PREREQUISITE:** GPA: minimum 2.5 GPA cumulative or better; Attendance: 90% or better. Completed or enrolled in at least level two Modern Language Course; 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 wish to pursue an in-depth understanding of world cultures, languages, and diversity. Students will learn multiple languages through online programs as well as develop cultural understanding through case studies, guest speakers, and international video conferencing. Students considering SISA should have a love of cultures, languages, and diversity. They should also be comfortable using technology, presenting in front of groups, and understand the expectations of professionalism. Students will be expected to think “out-of-the-box” as they explore our global society. Students will work in teams to prepare cultural presentations for real business clients and learn about being a professional. In addition, student teams will lead classroom presentations over specific cultures of their own choosing. SISA is a flexible classroom environment that simulates a realistic intercultural consulting company. Student grades are determined through a unique system where students receive a simulated salary and bonuses. Students in this program are expected to think for themselves and be able to manage projects on their own. Students will also be given the chance to develop their leadership and collaboration skills through their cultural projects. **Student must provide their own transportation to off-site presentations.**

**INFORMATION TECHNOLOGY IN A GLOBAL SOCIETY SL**

Grade: 11-12 Credit: 1 unit

**PREREQUISITE:** Previous or concurrent IB course or IB Coordinator approval; keyboarding skills

**Location:** Summit Technology Academy campus

**Students taking only the one-hour ITGS course will need to provide their own transportation to and from STA.** Information technology permeates twenty-first century culture. In Information Technology, students examine the social significance and ethical considerations arising from information technology and how these issues influence individuals, communities, nations, and organizations. **NOTE:** Students enrolled in IB courses are expected to pay the exam fee the culminating year of the course. Completion of the exam is required for weighted credit. All IB courses also require a portfolio, a written paper, an oral presentation, a notebook, and/or a project.

**IB APPROACHES TO LEARNING**

Grade: 11-12 Credit: 0.5 unit

**PREREQUISITE:** IB/IBCC Coordinator approval; previous or concurrent IB classes; required course for IB Career Certificate

Students will develop skills in intercultural awareness, ethical thinking, and critical thinking. These skills will be applied to various context, such as technologies, communities, environments and workplaces. The skills and attitudes learned in this course can be applied in a range of workplaces. Students will develop personal qualities and values, such as responsibility, perseverance, resilience, self-esteem, and honesty. **There is no IB examination fee for this course; however, students are required to complete all parts of the IB assessment in order to receive weighted credit.** While this course is an elective, it is also a requirement component of the IB Career-related Certificate. For this reason, the course enrollment may be limited to only IBCC students at the discretion of the IB/IBCC Coordinator and ATL teacher.
FEES: Upon acceptance into the student’s chosen program, parent(s)/guardian(s) and the student must begin saving and planning for course fees. Course fees are due at the time that the student starts his/her class. All fees for programs must be paid during the first week of classes (Friday of the first week of school). Fees not paid by the first Friday of school require the student/parent/guardian to submit a written request for extension by the end of the student’s attendance session on that Friday and the proposed payment plan must be approved by the Director; however, all fees must be paid in full by the last Friday of September. Families with special circumstances can file a written request for a further extension, if half of the full amount of fees is paid by September 15th and the full amount is paid by October 31.

* Center of Excellence is the site of a specialty career-related program. Acceptance into a Center of Excellence program 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.

Gainful employment information is available at [http://www.raytownschools.org/schools/hs/rgs/hcc/](http://www.raytownschools.org/schools/hs/rgs/hcc/) for adult students.

**ADVERTISING ART AND GRAPHIC DESIGN**

**Location: Herndon Bldg. C**

**Grades: 11/12**

**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 10th 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 for entry-level employment in the field of graphic design, or to continue their education in college. This program is organized into two one-year programs. The student may take one or both years. There is no prerequisite of taking this course sequentially.

**1st Year Curriculum:** First year curriculum consists of an in-depth study and application of Adobe Creative Suite Software, 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.

**2nd Year Curriculum:** Second year students will build on their foundation by studying Internet coding, and animation Adobe Dreamweaver (web site development) and Adobe Flash (animation) are the software students will study. Students will manually code pages for the internet and develop skills in HTML (Hyper Text Markup Language) and CSS (Cascading Style Sheets).

**College credit:** An articulation agreement exists with the Metropolitan Community College and the Art Institute of America for up to 8 hours of college credit.

--Industrial Internship

**AUTO COLLISION AND REPAIR TECHNOLOGY I**

**Location: Herndon Bldg. B**

**Grade: 11/12**

**Credit:** 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections

**PREREQUISITE:** Min 2.0 GPA; 90% attendance record; reading, writing, and math at 10th 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.

**College credit:** Agreements with the Metropolitan Community Colleges enable qualified students to earn up to 26 hours of college credit during the two-year Auto Collision Technology Program.

**AUTO COLLISION AND REPAIR TECHNOLOGY II**

**Location: Herndon Bldg. B**

**Grade: 12**

**Credits:** 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections

**PREREQUISITE:** Successful completion of Auto Collision and Repair Technology I

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 Colleges enable qualified students to earn up to 26 hours of college credit during the two-year Auto Collision Technology Program.

---Industrial Internship

**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, & math at 10th grade level  
**RECOMMENDED:** Basic technical writing course, 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.

---Industrial Internship

**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  
**RECOMMENDED:** Physical Science and Basic Algebra

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. Approximately 75% of the student's time will be spent repairing customer-owned vehicles 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. Classroom instruction will involve the introduction of more technical information pertaining to the power plant, power train, automotive electronics, transmissions, and automotive air conditioning.

---Industrial Internship

**CLIMATE AND ENERGY CONTROL TECHNOLOGIES I (formerly HVAC/R)**  
*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, & math at 10th grade level  
**RECOMMENDED:** Basic technical writing course, power technology or equivalent course.

These courses are the first year of a two-year course developed by industry to provide documentation and national certification recognized by employers. The application of these principals will be demonstrated in various real-world applications such as residential heating and cooling, commercial refrigeration such as food storage, and industrial process refrigeration. Students' progress in a self-paced manner utilizing this equipment and interactive computer training modules which have been developed by industry to provide documentation and national certification recognized by employers.

**EXPECTATIONS:** Self-motivation is a must. Prospective students should have an interest in psychical science and how things work in general. Students will work with others to develop interpersonal communication skills, and the ability to acquire info and use critical thinking to resolve technical issues. **Students considering a career in this program should plan to purchase their own hand tools and supplies for use in the program. The cost of these items is approximately $75.**

**COLLEGE CREDIT:** State Articulation Agreements enable qualified students to earn up to 12 hours of college credit toward an HVAC/R Degree Program. National Industry Certifications: HVAC Excellence (ESCO) Employment Ready, 608 Refrigerant, with several additional equipment specific certifications. 10 Hour Occupational Safety and Health Administration (OSHA) certification. National Center for Construction Education and Research (NCCER) Core, HVAC 1, 2 and 3.

**CLIMATE AND ENERGY CONTROL TECHNOLOGIES II (formerly HVAC/R)**  
*Grade 12*  
*Location: Herndon Bldg. A*  
*CREDIT: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections*  
**PREREQUISITE:** Successful completion of Climate and Energy Control Technologies I  
**RECOMMENDED:** Basic technical writing course, power technology or equivalent course.

This course is the second year of a two-year program intended to prepare the student for entry-level employment as a technician in the Climate and Energy Control (HVAC/R) industry. This allows the student to purchase the necessary refrigerants, which are now controlled by Federal Law. **The study guide is $10 and the exam cost is $35. These costs are the responsibility of the students and must be paid in advance of sitting for the exam. Students considering a career in this program should plan to purchase their own hand tools and supplies for use in the program. The cost of these items is approximately $75.**

**COLLEGE CREDIT:** State Articulation Agreements enable qualified students to earn up to 12 hours of college credit toward an HVAC/R Degree Program. National Industry Certifications: HVAC Excellence (ESCO) Employment Ready, 608 Refrigerant, with several
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 10th 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. (HCC instructor must approve student's plan prior to actual enrollment for 2nd 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. Articulated college credit up to 12 hours are also available.

--Industrial Internship

COSMETOLOGY*

Grade 12

Location: Herndon Bldg. A

Credit: 8 Units, 2 Semesters, 7.5 Hours Daily

**PREREQUISITE:** Min. 2.0 GPA; 90% attendance record; reading, writing, and math at the 10th grade level. Applicants must have completed all high school graduation requirements (except Practical Arts electives) by the beginning of their senior year.

**Recommended:** Art, anatomy and physiology, biology, chemistry, business management and speech courses

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 $760 and including items that prepare students for the State Board of Cosmetology exam and giving 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 everyday 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 the first Monday in August in order to earn enough training to take the state board exam.

CULINARY ARTS*

Grade 11/12

Location: Herndon Bldg. B

Credit: 3 units, 2 semesters, 3 Hours Daily, AM/PM Sections

**PREREQUISITE:** Minimum 2.0 GPA & 90% attendance record; reading and writing at the 10th grade level; Algebra I with a C grade or better. Applicants must successfully complete the Year-One ProStart curriculum if it is available at their high school or the equivalent food preparation curriculum. Applicants from high schools without ProStart curriculum available must complete an advanced foods and nutrition class with a min. B grade AND have a written recommendation from their advanced foods teacher.

**Recommended:** Foods and nutrition courses, health courses, business courses

The Culinary Arts program is a one-year program constituting the second year of the two-year ProStart commercial culinary arts curriculum. Major units of study include ServSafe certification; potatoes and grains; desserts and baked goods; meat, poultry and seafood; stocks, soups and sauces; the history of food service; the lodging industry; the art of service; marketing and the menu; purchasing and inventory control; standard accounting practices; tourism and the retail industry; and communicating with customers.

**Expectations:** Students must supply and wear a “chef’s” coat at all times when attending the culinary arts program. Students may occasionally be required to work after regular school hours in order to participate in catered events. Students will be required to pay a $150 consumable materials charge and a $35 ServSafe certification fee. In addition, students must provide their own uniform. (Total student contribution to course expenses will be approximately $188.)

**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 the Arts Institute, 9 hours from Le Cordon Bleu and their affiliated colleges, 7 hours from Johnson and Wales. --Industrial Internship
DIESEL, INDUSTRIAL & AGRICULTURAL MECHANICS I* Location: Herndon Bldg. B
Grade 11/12 Credit: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections
PREREQUISITE: Min. 2.0 GPA; 90% attendance record; reading, writing, and math at the 10th 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.
College credit: Students can earn up to three hours of college credit at Linn State Technical College.

DIESEL, INDUSTRIAL & AGRICULTURAL MECHANICS II* Location: Herndon Bldg. B
Grade 12 Credit: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections
PREREQUISITE: Successful completion of Diesel, Industrial, & Agricultural Mechanics I
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. The second year of instruction will involve extensive shop experience on customer-owned equipment.
College credit: Students can earn up to three hours of college credit at Linn State Technical College.
--Industrial Internship

EARLY CHILDHOOD PROFESSIONALS* Location: Herndon Bldg. C
Grade 11/12 Credit: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections
PREREQUISITE: Min. 2.0 GPA; 90% attendance record; reading, writing and math at the 10th grade level; Biology I with C or better; B or better in Parenting and/or Child Development classes.
Recommended: Psychology, Sociology, Nutrition & Wellness & Advanced Child Development
The Early Childhood Professional program prepares students to pursue two- or four-year postsecondary education or work with children ages birth to eight in occupations such as early childhood and elementary teachers, teacher assistants, and child care center directors. Major units of study include careers in early childhood; health, safety and nutrition; child development observation; child growth and development; curriculum and instruction; working and communicating with families; managing and maintaining early childhood programs; early childhood laws, regulations and policies; and professional and leadership development. The Herndon Preschool adjacent to the Early Childhood Professionals classroom provides the opportunity for hours of observation and hands-on lab experience. In addition students are required to apply their skills and knowledge in both observations and a volunteer internship in other early childhood centers and public school programs. The education and hands-on experience students obtain working with children lays the foundation to obtain the Child Development Associate (CDA) credential.
A second-year Special Topics class is available to students who excel in year one. Second year students will participate in an internship and complete requirements to apply for the Child Development Associate (CDA) Credential.
Expectations: Prospective students should have an interest in becoming an early childhood professional and possess a true desire to nurture, motivate, teach and influence young children in a positive way. Students must (1) provide transportation to and from assigned locations for observations and internship; (2) complete a ‘new’ TB test, physical examination and background check prior to participating at early childhood centers or preschools; (3) pay a $50.00 fee for materials, services and lamination; and (4) provide additional minimal supplies as needed.
College credit: Students may earn up to 9-11 hours of college credit through a combination of college credit by examination and dual credit. In order to obtain credit by examination, students must have a 2.5 GPA on a 4.0 scale both in the ECP program and in their cumulative GPA.
--Industrial Internship

FOUNDATIONS OF NURSING* Location: Herndon Bldg. C
Grade 12 (Grade 11 with recommendation) Credit: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections
PREREQUISITE: Min 2.0 GPA; 90% attendance record; Biology I with C or better; reading, writing, & math at 10th grade level.
Recommended: Anatomy and Physiology, Intro to Health Careers, Chemistry, Psychology
This is a one year program 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 Association 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. Uniforms will be required for clinical experiences, paid directly by the student to the uniform company. Student contributions to course expenses are approximately $240 (for registration, equipment, etc.).

LAW ENFORCEMENT/POLICE SCIENCE I* Grade 11/12 Credit: 3 units, 2 semesters, 3 Hours Daily, AM/PM sections
PREREQUISITE: Min. 2.0 GPA and will provide students’ 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. 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 learn to march in unison.

POWERSPORTS, PERFORMANCE & REPAIR

Building A
Grade 11/12
Credit: 3 Units, 2 semesters, 3 Hours Daily, AM/PM sections

PREREQUISITE: 2.0 GPA; 90% attendance record; Math, Reading & Writing at a 10th grade level

Recommended: Small engines, power technology or equivalent course, math skills and English skills

Powersports, performance & repair is a fast growing industry that includes motorcycles, ATV’s, UTV’s and personal watercraft. The program prepares students to either move into an entry-level technician position or further education in a post-secondary facility. This program is a one-year course aimed at students who are enthused about the exciting use of both off-road and on-road vehicles. In the first year the program introduces the student to the workings of a small engine, basic electricity, theory and repair on tires and brakes, plus routine maintenance. Suspension, fuel systems and accessories will be addressed along with shop safety and personal safety. Students will also be required to work on math skills related to the field, resumes and technical writing applicable in the industry. As a returning student, the emphasis will be on screening and maintaining a career in a transportation field. Suspension, fuel systems, brakes, engine performance, and accessories will be the main focus of the class. Students will be required to obtain and finish a class project.

WELDING/METAL FABRICATION I*

Location: Herndon Bldg. A
Grade 11/12
Credit: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections

PREREQUISITE: Min. 2.0 GPA; 90% attendance record; reading, writing and math at the 10th 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 postsecondary 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.

College credit: Students who complete the qualifications below will receive articulated credit to the Missouri two-year postsecondary institution of their choice in the Welding area. Student must: Achieve a min. of 3.0 GPA (4.0 = “A”); Complete coursework in an American Welding Society (AWS) Schools Excelling through National Skills Education (SENSE) accredited program; Achieve a score of 75% or higher on the American Welding Society (AWS) Schools Excelling through (SENSE) examination(s) center or postsecondary institution. Upon meeting the requirements students will receive minimum college credits as listed below: Postsecondary institutions may, but are not required to limit credits awarded to those areas related to comparable courses –Shielded Metal Arc Welding (3 hrs.), Gas Metal Arc Welding (3 hrs.), Flux Cored Arc Welding (3 hrs.), Gas Tungsten Arc Welding (3 hrs.).

WELDING/METAL FABRICATION II*

Location: Herndon Bldg. A
Grade 12
Credit: 3 Units, 2 Semesters, 3 Hours Daily, AM/PM Sections

PREREQUISITE: Successful completion of Welding/Metal Fabrication I

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 postsecondary 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.

College credit: Students who complete the qualifications below will receive articulated credit to the Missouri two-year postsecondary institution of their choice in the Welding area. Student must: Achieve a min. of 3.0 GPA (4.0 = “A”); Complete coursework in an American Welding Society (AWS) Schools Excelling through National Skills Education (SENSE) accredited program; Achieve a score of 75% or higher on the American Welding Society (AWS) Schools Excelling through (SENSE) examination(s) center or postsecondary institution. Upon meeting the requirements students will receive minimum college credits as listed below: Postsecondary institutions may, but are not required to limit credits awarded to those areas related to comparable courses –Shielded Metal Arc Welding (3 hrs.), Gas Metal Arc Welding (3 hrs.), Flux Cored Arc Welding (3 hrs.), Gas Tungsten Arc Welding (3 hrs.)–Industrial Internship

SPECIAL TOPICS*

Grade 12
Credit: 1 1/2 unit per Semester or 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.

**CASS CAREER CENTER**

For more complete information see our web site [http://www.casscareercenter.com](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)**

Offered school years beginning with an even # – alternating every other year with Firefighter I/II
 Grade: 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 to take the examinations. Student may be eligible for 8 college credits through Metropolitan Community College if certain criteria are met.

**FIREFIGHTER I AND II**

Offered school years beginning with an odd # – alternating every other year with Emergency Medical Technician (EMT)
 Grade: 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 drivers license, and high school diploma to receive certification, though the student may test before they are 18. Student may be eligible for 13 credits through Metropolitan community college system if certain criteria are met.

**LIFE CAREERS**
 Grade: 10-12  
Credit: 3 units

Open to special needs students

The purpose of the program is to prepare the students to be self-sufficient, employable citizens. Students in Life Careers will learn about career opportunities available to them. Juniors and Seniors second semester have the chance to select rotations at a variety of settings such as Animal Care, Dental Offices, Custodial Maintenance, Child Care, Pharmacy, Dietary, Physical Therapy. Seniors may choose to certify as a nurse assistant. Sophomores cover entry-level skills for a variety of careers. Emphasis is placed on study skills and career exploration.
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
Grade: 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 introduction 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
Grade: 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
Grade: 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
Grade: 11-12
Credit: 1 unit
PREREQUISITE: Ag Science I or concurrent enrollment
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
Grade: 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
Grade: 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.
LIVESTOCK MANAGEMENT
Grade: 11-12 Credit: 1 unit
PREREQUISITE: Ag Science I
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
Grade: 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
Grade: 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
Grade: 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
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
COURSE DESCRIPTIONS

7th Grade Sample Schedule:
1) Eastern Hemisphere - Social Studies Required
2) Language Arts - Reading-Writing Required
3) Science 7 Required
4) Mathematics Required
5) Physical Education Required / Alternating elective course
6) Health Required / Exploratory offering
7) Exploratory or elective offering

8th Grade Sample Schedule:
1) American History Required
2) Language Arts - Reading-Writing Required
3) Mathematics Required
4) Science 8 Required
5) Physical Education Required / Alternating elective course
6) Exploratory or elective offering
7) Exploratory or elective offering

7TH AND 8TH GRADE REQUIRED COURSE DESCRIPTIONS

Communication Arts

Language Arts 7
Grade: 7
Credit: Full Year
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, student will gather, analyze, and evaluate a variety of media in the information literacy strand.

Advanced Studies Language Arts 7
Grade: 7
Credit: Full Year
This course parallels the content of the 7th 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.

Language Arts 8
Grade: 8
Credit: 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 8
Grade: 8
Credit: Full Year
This course extends units in the 8th 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.
Social Studies

Eastern Hemisphere
Grade: 7  Credit: Full Year
This course studies the development of civilizations of the ancient Eastern hemisphere. Content themes include: government, religion/culture, geography, technology, social structures and economics. Connections to current events in the Eastern hemisphere are also explored. Emphasis will be given to Africa, the Middle East, Europe and Asia. Through class topics, students will further develop critical thinking skills, including: analysis, examination, inference, and prediction.

Advanced Studies Eastern Hemisphere
Grade: 7  Credit: Full Year
This course parallels the content of the 7th grade Eastern Hemisphere course with a more rigorous and in-depth focus on selected topics. Research, individual and/or group projects, as well as more independent, exploratory learning are emphasized. This course will prepare students for Advanced Studies courses at the high school level.

Early American History
Grade: 8  Credit: Full Year
This course will survey our nation's early history from 1492 to 1890. 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
Grade: 8  Credit: Full Year
This course parallels the content of the 8th 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.

Mathematics

7th Grade Mathematics
Grade: 7  Credit: Full Year
Students are recommended for this class based on their achievement and previous successful experience with mathematics. 7th Grade Mathematics 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.

Advanced Studies 7th Grade Mathematics
Grade: 7  Credit: Full Year
Students are recommended for this class based on their achievement and previous successful experience with mathematics. AS 7th Grade Mathematics parallels the content of the 7th Grade Mathematics course and contains a more rigorous and in-depth focus on selected topics. AS 7th Grade Mathematics also includes the topics taught in the 8th Grade Pre-Algebra curriculum which are necessary to prepare students for Algebra I. Students are expected to have a strong background in mathematics. Creative thinking is used in problem solving as well as the decision-making processes used in higher level mathematics. Projects are required. Work includes independent study. Daily homework and projects will be assigned. This course will prepare students for Algebra I.

8th Grade Pre-Algebra
Grade: 8  Credit: Full Year
Students are placed in this class based on their achievement and previous successful experience with mathematics. 8th Grade Pre-Algebra 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
Grade: 8  Credit: Full Year
PREREQUISITE: Semester grades of B- or better in Adv Studies recommended
This course parallels high school Algebra I with a more rigorous and in-depth focus on selected topics. 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 math credit provided the student earns 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.
Science

Science 7
Grade: 7
Credit: Full Year
This course is designed to investigate science using an integrated approach facilitated by introducing laboratory experiences of an exploratory nature. The following units will be studied: Scientific Inquiry; Motion, Forces, and Energy; Cells, Heredity, and Classification; and Plate Tectonics, Rocks, Minerals, and Fossils. The focus is to instill sound investigative and critical thinking skills in our students so they will be able to design their own experiments. Scientific Inquiry, technology, human impact, and relevance is a significant, embedded part of this course.

Advanced Studies Science 7
Grade: 7
Credit: Full Year
PREREQUISITE: Strongly recommended concurrent enrollment in Advanced Studies 7th grade Math
Students are recommended for this class based on their prior achievement and successful experience with science. This course parallels the content of 7th Science with a more rigorous and in-depth investigation of selected topics in science and technology with 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.

Science 8
Grade: 8
Credit: 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. Scientific Inquiry is a significant, embedded part of this course, and integrated units will include the following topics: earth systems including meteorology and natural and human effects on the atmosphere; astronomy; matter and energy including chemistry, and electricity; and science relevance.

Advanced Studies Science 8
Grade: 8
Credit: 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 8th Science with a more rigorous and in-depth investigation of selected topics in science and technology with 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.

Health/Physical Education

Physical Education
Grade: 7 and 8
Credit: Full Year
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
Grade: 7
Credit: Semester
The most important predictors of current and future health include awareness and knowledge of human anatomy and physiology, adolescent health issues, the skills necessary to develop healthy behaviors, and opportunities to practice the behaviors. By participating in this course, students will develop an understanding of and the skills to choose appropriate lifelong personal health habits through a variety of class activities.

7th AND 8th GRADE ELECTIVE AND EXPLORATORY COURSE INFORMATION

Grade: 7 Elective and Exploratory Class Enrollment Information:
To alternate with Physical Education, you must indicate your preference of Art I or Music I, Library, Office, or Science Lab Assistant. (Only students who fill out applications for Library, Office, or Science Lab Assistant will be considered for those classes.) Physical Education meets every other day and you will attend the alternate class on the day your Physical Education class does not meet.
Students in either band or strings will take Health and their choice of two exploratory classes. Students not in band or strings will take Health plus all six exploratory classes. (A) Application must accompany enrollment card

**Alternating Class Choices**

<table>
<thead>
<tr>
<th>Physical Education</th>
<th>Art</th>
<th>Band - full year</th>
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<tbody>
<tr>
<td>Physical Education</td>
<td>Music I</td>
<td>Health - semester</td>
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<tr>
<td>Physical Education</td>
<td>Office (A)</td>
<td>Introduction to Engineering and Industrial Technology - quarter</td>
</tr>
<tr>
<td>Physical Education</td>
<td>- Library (A)</td>
<td>Exploratory Keyboarding - quarter</td>
</tr>
<tr>
<td>Physical Education</td>
<td>- Science Lab Asst. (A)</td>
<td>Exploring Speech &amp; Theatre - quarter</td>
</tr>
</tbody>
</table>

**Daily Elective/Exploratory Class Choices**

<table>
<thead>
<tr>
<th>Strings - full year</th>
<th>Industrial Technology - semester</th>
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<tbody>
<tr>
<td>Band - full year</td>
<td>Engineering Technology - semester</td>
</tr>
<tr>
<td>French I - full year (P)</td>
<td>Living Skills - semester</td>
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<tr>
<td>German I - full year (P)</td>
<td>Personal Skills - semester</td>
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<tr>
<td>Chinese (Mandarin) I – full year (P)</td>
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<tr>
<td>Speech &amp; Theatre - semester</td>
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<tr>
<td>Broadcasting &amp; Video Technology - semester (P) (R)</td>
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<tr>
<td>Computer Concepts - semester (P)</td>
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<tr>
<td>Computer Explorations - semester (P)</td>
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**Grade: 8 Elective and Exploratory Class Enrollment Information:**

Students are required to select one alternating class (opposite physical education) and the equivalent of 4 semesters (full year or semester courses) of daily elective classes. (R) Recommendation needed; (P) Prerequisite - see course description; (A) Application must accompany enrollment card

**Alternating Classes Choices**

<table>
<thead>
<tr>
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<th>– 7th Grade Art</th>
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<tbody>
<tr>
<td>Physical Education</td>
<td>– 8th Grade Art</td>
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<tr>
<td>Physical Education</td>
<td>– 8th Grade Adv. Art (R)</td>
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<tr>
<td>Physical Education</td>
<td>- Music II (P)</td>
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<tr>
<td>Physical Education</td>
<td>- Select Choir (R)</td>
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<tr>
<td>Physical Education</td>
<td>- Library (A)</td>
</tr>
<tr>
<td>Physical Education</td>
<td>- Office (A)</td>
</tr>
<tr>
<td>Physical Education</td>
<td>– Science Lab Asst. (A)</td>
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**Daily Elective/Exploratory Class Choices**

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7th & 8th GRADE ALTERNATE TO P.E. COURSE DESCRIPTIONS

### Fine Arts - Art

**7th Grade Art**

**Grade: 7**

Credit: Semester (Alternating days for a full year)

Through the exploration of a variety of art materials, students are introduced to fundamental concepts and techniques as well as art history and appreciation. Grades are based on mastery of art concepts per art curriculum. Successful completion of this class and a teacher recommendation are required to enroll in 8th Grade Advanced Art.

**8th Grade Art**

**Grade: 8**

Credit: Semester (Alternating days for a full year)

This course is designed for students who would like to continue their art studies as 8th graders, or experience art for the first time at the Middle School level. This course content builds upon fundamental art concepts while introducing students to new media and techniques. Grades are based on mastery of art concepts per art curriculum.

**8th Grade Advanced Art**

**Grade: 8**

Credit: Semester (Alternating days for a full year)

**Teacher recommendation REQUIRED** 8th Grade Advanced Art is designed for students who have excelled in all aspects of the visual art classroom and who have demonstrated their interest and their ability to meet the challenge of a more intensive art curriculum. This class will focus on art history and developing individual problem-solving skills through art concepts, techniques and a variety of media. Students are expected to be self-motivated and disciplined. Grades are based on mastery of art concepts per art curriculum. Teacher recommendation is required.

### Fine Arts - Music

**Music I**

**Grade: 7**

Credit: Semester (Alternating days for a full year)

Vocal music is the first part of a sequential program, Music I and Music II. The first course for either grade level is Music I. This general music class is designed for those who enjoy music regardless of their musical ability. The basic areas included are (1) singing (2) listening and appreciation, and (3) two required performances. This first class is designed primarily as an exploratory course in music. Students who show a desire to continue in music and demonstrate ability in music are recommended for Music II or a select choir for grade eight.
Music II
Grade: 8
Credit: Semester (Alternating days for a full year)

PREREQUISITE: Music I or teacher recommendation
This class is a continuation of Music I in areas of singing, listening, and historical periods, with two required performances. Purchase of concert attire/uniform is required for this class.

Select Choir
Black/Gold Choir (PLMS)
Summit Lakes Singers (SLMS)
Concert Choir (BCMS)
Grade: 8
Credit: Semester (Alternating days for a full year)

PREREQUISITE: 7th grade teacher recommendation
This select choir is an eighth grade auditioned choir. Students meet as a class in place of Music II. Concert Choir sings at two formal concerts yearly, attends the Middle School Choral Clinic and performs at elementary schools in attendance area.

Library Assistant
Grade: 7 and 8 (Must have filled out application)
Credit: Semester (Alternating days for a full year)
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 will be able to use 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
Grade: 7 and 8 (Must have filled out application)
Credit: Semester (Alternating days for a full year)
Office Assistant classes offer an introduction to general office procedures and management for students with no previous training. Students 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.

Science Laboratory Assistant
Grade: 7 and 8 (Must have filled out application)
Credit: Semester (Alternating days for a full year)
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 determine final placement. Students must also choose an art or music class in the event they are not chosen to work in the science laboratory.

7th GRADE EXPLORATORY COURSE DESCRIPTIONS

Exploring Speech & Theatre
Grade: 7
Credit: 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.

Exploratory Keyboarding
Grade: 7
Credit: Quarter
This seventh grade course introduces students to the essential elements of computer keyboarding. Participants cover the concepts of correct technique, touch typing, and computer components. This course is recommended for all seventh students, especially those wanting to take future middle school and high school computer courses.
Students Maximizing Academic Resources to Succeed (SMARTS)
Grade: 7  
Credit: Quarter
This nine week course is designed to help students develop strategies and skills in the areas of organization, time management, note taking, test taking and research. Participants will also be introduced to technological tools necessary for the 21st century student.

Discovering Family & Consumer Sciences
Grade: 7  
Credit: Quarter
In this nine-week Family and Consumer Science course seventh grade students will have the opportunity to explore the following topics: discovering self, family and friends, childcare, nutrition and food preparation, and clothing care and construction. Class projects include hands-on activities and oral and written assignments. A list of supplies needed for sewing will be given to the students at the beginning of the quarter.

Introduction to Engineering and Industrial Technology
Grade: 7  
Credit: Quarter
This is the introductory course of the Gateway to Technology, Project Lead the Way, Industrial Technology and pre-Engineering courses. This nine-week class is a brief 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.

Exploring Languages and Cultures
Grade: 7  
Credit: 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, including greetings, numbers, and colors, as well as some vocabulary to tell simple stories. Through class projects, students will learn about the geography, history and cultures of France, Germany, Spain, and China. Grades will be based on their tests, projects, and daily work. This class is highly recommended for students who are planning to take a Modern Language in eighth grade.

7th AND 8th GRADE ELECTIVES

**Fine Arts - Music**

**Concert Band**
Grade: 7 and 8  
Credit: Full Year
*Placement is determined by audition and director recommendations*
Concert Band is a select group. This group is designed for students who have mastered the concepts of music learned in earlier bands and who demonstrate the maturity and attitude needed for rehearsing and performing higher levels of musical literature. Fundamentals and scales are stressed. This is a performing and competing group. Concert Band provides additional challenges needed by more advanced students. Difficult literature and styles are used to meet the needs of these more gifted students. Purchase of concert attire/uniform is required for this class.

**Honors Mustang Band**
Grade: 7 and 8  
Credit: Full Year
*Offered at BCMS only*
*Placement is determined by audition and director recommendations*
This band is comprised of students who require a less individualized system of study and can handle the maturity requirements of a larger group. This band continues to develop the proficiency acquired in the fifth, sixth, or middle school levels. Fundamentals and scales 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.

**Mustang Band (BCMS) / Cub Band (PLMS) / Falcon Band (SLMS)**
Grade: 7  
Credit: Full Year
*Placement is determined by audition and director recommendations*
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**
Grade: 7 and 8  
Credit: 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.

**Speech & Theatre - Broadcasting/Video Technology**

**Speech & Theatre**
Grade: 8  Credit: 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.

**8th Grade Broadcasting & Video Technology**
Grade: 8  Credit: Semester
The 8th 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.

**Practical Arts - Business**

**Exploratory Keyboarding**
Grade: 7  Credit: Quarter
The seventh grade Exploratory Keyboarding course exposes the student to keyboarding techniques and provides the essential elements of touch-typing. Concepts covered are technique, touch typing, proofreading, computer parts, drill and practice. This course is recommended for all seventh grade students, especially those wanting to take Computer Concepts or Computer Explorations in their eighth grade year.

**Computer Concepts**
Grade: 8  Credit: Semester
This one-semester course provides crucial hands-on experience using Microsoft Office. The students develop skills in word processing, database management, spreadsheet analysis, and desktop publishing. Internet concepts and multimedia presentations are also explored. A culminating project integrates skills acquired in this class to create a concert tour for a musical group. This fast-paced course establishes a critical foundation for future computer classes.

**Computer Explorations**
Grade: 8  Credit: Semester
This course is designed to help students sharpen their computer skills, conduct Internet research, and use application software to complete realistic and practical projects. Projects include developing a business and floor plans, building a website, creating coupons, newsletters & flyers, budgeting, making presentations, simulating stock market investments, conducting comparison shopping and working with digital photographs and video. Participants will also be introduced to Google Drive.

**Practical Arts - Family & Consumer Sciences (FACS)**

**Living Skills**
Grade: 8  Credit: Semester
Living Skills is a semester course exploring the following topics: nutrition and food preparation, health and wellness, childcare, communication skills, family relationships, management and consumerism. Class projects include oral/written assignments, a childcare day, and foods lab opportunities.

**Personal Skills**
Grade: 8  Credit: Semester
Personal Skills is a semester course exploring the following topics: clothing and textiles, clothing construction, self-image and personal care, interior design, personal employability, entrepreneurship, and balancing family and work. Class projects include a variety of sewing projects. The school furnishes sewing machines, bobbins, and basic sewing equipment. A list of other needed sewing supplies will be given to the student.

**Industrial Technology**
Grade: 8  Credit: Semester
This 18 week course will provide an exciting project-based, hands-on approach to learning. 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 use industry standard 3D modeling software to create a virtual image of their design. Projects that will be completed are as follows, Wooden Bridge, Metal Tool Tray, and Trebuchet / Catapult. This course is based around the Design and Modeling unit of the Gateway to Technology, Project Lead the Way program. **There is a $20.00 cost for take home projects.**
Engineering Technology
Grade: 8  Credit: 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. There is a $20.00 cost for take home projects.

- Modern Language

Exploring Languages and Cultures
Grade: 7  Credit: 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 in eighth grade.

French I, German I, Spanish I, Mandarin Chinese I
Grade: 8  Credit: Full Year
Students successfully completing an 8th grade Modern Language course will earn high school graduation credit
PREREQUISITE: A or B average in 7th grade Language Arts and an A or B in Exploring Languages and Cultures (if that class is taken in 7th grade)
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 I enrollment includes the International Baccalaureate program and options for college credit.
The grade earned in the 8th Modern Language course will appear on the high school transcript and the high school GPA.

For a look at the Career & Educational Planning Guide in its entirety online, 7th – 12th grades, go to:
### 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.).

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