

# Jefferson City High School 2024-2025



### ACADEMIC PLANNING GUIDE



Pride through Excellence

Jefferson City High School strives to empower students to become productive citizens in society by fostering intellectual curiosity, critical-thinking skills, and stewardship of their future.

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#### **IMPORTANT INFORMATION:**

#### **Jefferson City High School**

609 Union Street

Jefferson City, Missouri 65101

Phone: (573) 659-3050

Fax: (573) 659-3153

#### **Nichols Career Center**

605 Union Street

Jefferson City, Missouri 65101

Phone: (573) 659-3100

#### **Counseling Department**

Kara Hinton, Counselor

#### **Jefferson City School District**

315 East Dunklin

Jefferson City, Missouri 65101

Phone: (573) 659-3000

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### Welcome to Jefferson City High School!

### What's Your Plan?

The pages in this booklet will be a stepping-stone for you as you enter high school and begin your path towards your future! We will be here to assist you every step of the way, so do not let this seem like an overwhelming leap into adulthood!

The *Programs of Study* will be your roadmap to assist you in your navigation through the maze of decision-making. Your school counselor will work with you to discuss and revise your map each year as you and your parent(s) make decisions regarding your I-CAP (*Individual Career Academic Plan*). It is our desire to assist you in linking what you learn in high school with the skills that are needed to be successful with your post -secondary goals.

There are many opportunities for success while in high school. We encourage you to take advantage of all the opportunities that each academy will offer such as internships, Department Seals of Excellence, Project Lead the Way, CTE Certificate, Bi-Literacy Seal, and AP and Dual Enrollment coursework. All of these opportunities and more will be included in this planning guide.

The secret to success in high school is as follows:

- Get involved!
- Attend Regularly!
- Have a plan! (This is your Academic Course Plan)

# BEST WISHES FOR A WONDERFUL TIME IN HIGH SCHOOL!

# GENERAL

# Information & Expectations

## **Graduation Requirements**



### Class of 2023 & Beyond

•25 credits required for graduation from Jefferson City High School

#### **CLASS OF 2023 & BEYOND**

State of Missouri Graduation Requirements		
Curricular Areas	Credits	
English	4	
Math	3	
Social Studies	3	
Science	3	
Physical Education	1	
Fine Arts	1	
Practical Art	0.5	
Health	0.5	
Personal Finance <sup>1</sup>	0.5	
Electives <sup>2</sup>	8.5	
Total Credits	25	

<sup>&</sup>lt;sup>1</sup> Can be 0.5 units of Practical Art

# PROGRESSION TO NEXT LEVEL

Class	Class of 2023 and Beyond
Credits to be a sophomore	6
Credits to be a junior	12
Credits to be a senior	18
Credits to <b>Graduate</b>	25

### OTHER GRADUATION REOUIREMENTS

- \* All students must pass the MO and US Constitution exams.
- \* All students must earn 1.0 credit of US History and a minimum of 0.5 credit of Government.
- \* All students must pass CPR instruction.
- \* All students, starting with the graduation class of 2021, must pass an American Civics exam.
- \* All students must take their required EOC exam (Alg. I (or Alg II), Eng II, Bio, and Government)

<sup>&</sup>lt;sup>2</sup> 2 credits in the same World Language in the elective are is usually required for college admission.

### CLASS SCHEDULE

Students attend 7 classes a day that meet for approximately 50-minutes. Students receive credit for each course upon successful completion.

### **EARLY GRADUATION**

Students who wish to graduate early must have successfully completed a minimum of six (6) semesters at the secondary level and will be required to meet with their counselor and submit written notification to the principal. The student's counselor will notify the student's parents or guardians of the student's decision if the student is a dependent. The student will receive a diploma if the student has met the Jefferson City School District's graduation requirements. Any exception to the minimum six (6)-semester completion requirement for early graduation must be granted by the Board of Education. The student who chooses early graduation will be allowed to participate in the spring graduation ceremonies, but will be considered an alumnus for all other activities.

### ACADEMIC ACHIEVEMENT CERTIFICATES

**The Presidential Academic Fitness Award**, initiated by President Ronald Reagan, is given to seniors who have met the following criteria:

- Grade point average of 3.5 on a 4.0 scale at the end of seven semesters.
- Score at or above the 85th percentile or higher in mathematics or reading on the ACT.

**The George Washington Carver Award** recognizes graduating seniors who rank in the top 10 percent of their class.

### COLLEGE PREPARATORY CERTIFICATE REQUIREMENTS

Credits	Subject	Required Courses
4	English	
4	Math	Algebra 1 through Pre-Calculus or higher
4	Science	Physical Science/Biomedical Science, Biology/Honors Biology, Chemistry, and 1 additional
4	Social Studies	Government/AP Govt and Politics/AP Comparative Govt, and US/AP US History and 2 additional
1	Fine Art	
.5	Practical Art	**
1	PE	
.5	Health	
.5	Personal Finance	
2	World Language	2 of the same World Language

<sup>\*</sup>Must have a 3.5 GPA.

<sup>\*\*\*</sup>Personal Finance can count as a .50 of the Practical Art requirement.

<sup>\*\*</sup>A Rating of Proficient or Advanced on 2 of 3 of MO Assessment Program tests admin. at the H.S. level.

### **ADVANCED PLACEMENT**

The Advanced Placement Program is an offering of college level courses and exams for secondary students. It is a rigorous learning experience. AP courses are typically more challenging and require more work than other high school courses. An AP exam is required for those students who would like to earn college credit. Exams are given in May on pre-determined dates established by the College Board. College credit is usually accepted for exam scores of 3, 4, or 5 on a 1-5 scale. The fee for this national exam is approximately \$100.00 per test. Weighted grades are given to AP courses. <a href="https://apstudent.collegeboard.org/creditandplacement">https://apstudent.collegeboard.org/creditandplacement</a>

Students and parents should be very sensitive to the demanding nature of AP courses. Reading expectations are extensive. Students will be asked to be involved in college level activities, particularly in the areas of writing skills and test taking. AP courses place a high degree of emphasis on the student's own self-motivation, study skills, and ability to self-direct his/her own learning.

### WEIGHTED GRADES FOR AP COURSES

Since the 1995-96 school year, Advanced Placement (AP) courses began to be weighted. The weight will be .333. For example, a grade of B+ in an advanced placement course will receive the grade points of an A-. Only grades of B- and above will be weighted.

Beginning in the 2022-2023 school year, Pre-AP courses will carry half the weight of the AP courses. The weight will be 0.166.

### **DUAL CREDIT COURSES**

### Dual credit courses through Lincoln University and Drury University Dual Credit Requirements:

- A required 3.0 cumulative G.P.A. at the time of enrollment If less than a 3.0 (2.5 2.99), students must have a signed letter from their parents and from the school's administration. 10<sup>th</sup> grade students must have a 3.0 G.P.A./signed letters. 9<sup>th</sup> grade students must have a 3.0 G.P.A. and score in the 90<sup>th</sup> percentile on the ACT (33 composite)
- Lincoln University requires an 18 on the ACT English for Course 101/102
- Lincoln University requires in Math/Physics courses: 10th, 11th and 12th Grade Students: In order enroll in AP Physics A, PreCalculus, College Algebra, AP Statistics and/or Calculus AB, Lincoln University requires students to pass the math placement test (46+/60 for Calculus AB; 23+/60 for AP Statistics, 31+/60 for PreCalculus, and College Algebra; 33+/60 for AP Physics A) **OR** earn a required ACT mathematics sub-score (18+ for AP Statistics, 22+ for PreCalculus, College Algebra, and AP Physics A; 30+ for Calculus AB).
- Lincoln University requires that a student successfully pass Bio 103/103L in order to take Bio 208/209L
- All ninth grade students wishing to enroll in Dual Enrollment must have 3.0 GPA, score in the 90th percentile on the ACT and have a signed letter of recommendation from both the school and the parents/guardians.

The following courses will be offered providing sufficient demand exists. A brochure is available that provides a website where you can locate the equivalent college course and credit, fees, procedures, requirements and AP testing schedule. Interested students should contact the high school counseling office for this brochure or check on the JCHS counseling webpage.

JCHS Course	AP Exam	Lincoln University	<b>Drury University</b>	Weighted Grade
English 101/102*	No	ENG 101/102		No
Pre AP English I	No			Yes
Pre AP English II	No			Yes
AP English Language	Yes			Yes
AP English Literature	Yes	ENG 200		Yes
College Algebra**	No	MAT 113		No
AP Statistics**	Yes	MAT 117		Yes
Pre-Calculus	No	MAT 121		No
AP Calculus AB	Yes	MAT 123		Yes
AP Calculus BC	Yes	MAT 203		Yes
AP Chemistry	Yes			Yes
AP Physics A	Yes	PHY 101/101L		Yes
AP Physics B	Yes	PHY 102/102L		Yes
AP Biology	Yes	BIO 103/013L		Yes
AP Environmental Science	Yes	ENV 103		Yes
Pre AP World History and Geo	No			Yes
AP US History	Yes	HIS 205 and HIS 206		Yes
AP US Gov't & Politics	Yes	PSC 203		Yes
AP Psychology	Yes	PSY 101		Yes
Military Leadership****	No	MSC 101		No
AP Human Geography	Yes			Yes
AP Music Theory	Yes			Yes
AP Senior Studio	Yes			Yes
AP European History	Yes		HIST 230	Yes
Civil Leadership	No		PDEV 290	No
Legislative Seminar	No		GSTU 107	No
AP 2-D Art and Design (NCC)	Yes			No

<sup>\*</sup> Please note that all dual enrollment offerings will be dictated by staff certifications.

### **COLLEGE SELECTION**

Approximately 70% of JCSD graduates continue their education at two or four year colleges immediately after graduation. Therefore, it is essential to provide accurate and high quality information, assistance, and support concerning college choice, application, and matriculation to our students and their parents. The Counseling Department serves as the resource for students and their parents/guardians. Presently most of the information from colleges/universities is available on the internet. The Counseling Office does have materials including instate college information/applications, financial aid brochures, scholarship lists, college entrance examination information (PSAT, ACT, SAT I, SAT II, AP, and ASVAB) and information in regard to test preparation.

### PROJECT LEAD THE WAY (PLTW)

Jefferson City High School provides students with the opportunity to select from a variety of Project Lead the Way Courses in **Engineering** and **Biomedical Science**.

Many benefits come with taking PLTW courses while in high school. PLTW courses provide students with opportunities for more rigorous coursework and the opportunity to earn college credits prior to high school graduation. The number of credits earned and for which course depends entirely upon the institution the student selects to attend. PLTW instructors and the institutions can provide more specific information regarding college credits. These courses mimic college coursework in requirements, workload, and students in PLTW classes develop the high-level and critical thinking skills typically required within the first year of college. For more information on college credit opportunities through PLTW visit <a href="https://www.pltw.org/experience-pltw/student-opportunities">https://www.pltw.org/experience-pltw/student-opportunities</a>

### SPECIAL EDUCATION PROGRAMS

Special programs are designed for students with a variety of special needs. The Special Education Program concentrates on supporting students with learning difficulties. Students are required to have an Individual Educational Plan (I.E.P.) on file. Please refer questions to the Case Manager.

### COUNSELING CURRICULUM

The counseling department at JCHS uses the JC Schools 9th-12th Grade School Counseling Curriculum as a model for developing services for all students. The following areas are addressed:

- Personal and Social Development
- Academic Development
- Career Development

Each office has a variety of resources to help students plan for the future. Information about admissions requirements for career and vocational/technical schools and colleges both in and out of state; financial aid and scholarship opportunities; and ACT and SAT testing is available. The Missouri Connections website, www.missouriconnections.org, is a useful site for students to research careers and colleges.

### SCHEDULE CHANGE PROCEDURE (ADOPTED 2002-03 SCHOOL YEAR/REVIEWED 2015-16 SCHOOL YEAR)

A student's schedule will be changed for the following reasons only:

- 1. COMPUTER ERROR
- 2. PREREQUISITE COURSES NOT MET
- 3. DUPLICATE CREDIT
- 4. EDUCATIONAL TEAM has the ability to change schedules in the event a student is misplaced Requests for class changes will not be considered for the following reasons: 1) a change of student interest, 2) a negative effect of course grade on GPA, 3) not needing the course to graduate. All semester one schedule changes must be made before the semester begins. All changes must be made prior to the beginning of the semester.

### **EDUCATIONAL OPTIONS**

The high school administration realizes that an effective educational program is one that provides opportunities for student learning both within the classroom and beyond the traditional classroom and school day. These expanded opportunities must be approved before student participation and are viewed as educational options to supplement the regular program and are listed below:

#### **Part-Time Schedules**

Seniors that are interested in a part time schedule of two periods off per semester should arrange a time to speak with their counselor to see if they are eligible. Seniors must be on track to graduate with their graduation cohort group to be considered. Any student participating in a MSHSAA related activity must check with their counselor and athletics office prior to taking a part time schedule to ensure they are eligible to participate. All seniors <u>must</u> have a part time schedule permission form online before they will be granted a part time schedule. You may pick up this form from your counselor.

#### Flex Program

If a student works and averages 5 hours of work (paid or unpaid) per week during their senior year, they could enroll in the Flex Program. Students must volunteer or work in an area that supports their post-secondary plans as evidenced through the application process. No more than 2.0 credits can be earned in a school year. See your counselor for more information and the application.

#### Zero Hour and After School

Students have the opportunity to enroll in select coursework that is offered before or after school. The credits earned in a zero hour and 8<sup>th</sup> period course are counted towards a student's GPA as well as graduation requirements. Please see your counselor for more information.

#### **Summer School**

Summer School classes are offered based on student interest and district approval. Summer School applications are available in early spring. The course choices are created each year based on student's needs and interests. Applications will be available in each middle school and high school counseling office.

#### E2020 Program

The E2020 program offers students an opportunity to recover credit or to take enrichment courses through computer-based instructional programs. This program is Internet-based and allows students to work independently and at their own pace with tests proctored at the school. The program being used 9-12 is E2020. Students should visit with their counselor for more information.

#### **Applied Music**

Students participating in the music program sponsored by UMC can earn 0.50 elective credit.

#### **Correspondence Courses**

Students interested in independent study courses should see their counselor. There are a number of different programs and institutions that offer coursework for high school credit. A student's counselor must approve all courses intended to be used toward graduation requirements.

#### Jefferson City Academic Center (JCAC)

If a student is interested in attending JCAC, they must contact their counselor or administrator for a recommendation from the building that they are currently attending. For inquiries call JCAC at 573-659-2510. JCAC School hours are from 8:40-3:40.

#### Advanced Placement (AP) Testing

Students enrolled in AP courses have the option to take the AP examination for which the course has prepared them. Students must reserve their seat for the exams they wish to take in May. Registration typically begins in September and is an online registration process located in the student's graduation google classroom. The cost for the test is approximately \$100.00 per subject examination. Each college or university determines which of these examination scores they will accept. It is important for students to have accurate information from the college they plan to attend regarding the acceptance of AP credit

(http://www.collegeboard.com/ap/creditpolicy) See AP flyer, or contact Carrie Welch in the counseling office.

#### Library Media Center

The Jefferson City Library Media Center provides students with resources for print and electronic leisure reading, print and database materials for formal and informal research, technology access and training, test preparation materials and tutoring for college- and career- entrance exams, and study space for individuals and small groups. Our two certified library media specialists work with students and teachers to ensure that students receive the assistance and materials they need to be successful at JCHS and beyond. For more information, please visit the JCHS LMC webpage at <a href="http://www.jcschools.us/domain/713">http://www.jcschools.us/domain/713</a>.

### MISSOURI HIGH SCHOOL ACTIVITIES ASSOCIATION

Knowing and following all MSHSAA standards will enable students to protect their eligibility. Also, it is important to know that <u>all</u> the following standards must be met to be eligible. You may reference the MSHSAA Publication, "How to Maintain Your Eligibility" for details available from the Activities Department or <u>www.mshsaa.org</u>.

#### **Academic Requirements**

Students should not change their course schedules or drop courses without first consulting with the activities director to determine whether it will affect eligibility. This applies to both athletic teams and MSHSAA sanctioned activities.

Grades earned the preceding semester will determine eligibility for each semester. To be eligible for participation, a student in grades 9-12 must be currently enrolled in and regularly attending courses that offer a minimum of 80% of the credits of a standard student schedule and must have earned credit in 80% of maximum allowable classes in which a student can be enrolled the preceding semester of attendance; or a student must be enrolled in a full course at his or her level in a special education program approved by the Missouri State Department of Education which, though ungraded, enrolls pupils of equivalent age, and that student must have made standard progress for his or her level the preceding semester. The total number of credits to earn may vary based upon variations within individual schedules. A beginning 9th grade student shall have been promoted from the 8th grade to the 9th grade for first semester eligibility.

Students may count up to 1 unit of credit from summer school toward establishing their eligibility for the fall semester. Only classes that are required and necessary for graduation or core elective courses may be counted toward meeting the academic requirement. Students should receive approval from their counselor and the school activities director prior to summer school enrollment.

Students enrolled in Virtual School coursework (E2020) whether in a classroom or outside the school day should meet with or gather information from the Activities Department regarding eligibility impact.

#### **Semesters of Participation**

A student may not participate in more than four seasons in any interscholastic activity in grades 9-12. A student may have only eight consecutive semesters (four consecutive years) of eligibility in high school in which he/she may participate in one activity per season, and these eight consecutive semesters begin on the twentieth ( $20^{th}$ ) day of the first semester a student enters the  $9^{th}$  grade or the first interscholastic contest in which the student participates, whatever occurs first. A student who participates in any part of an interscholastic event or contest must count such as a season of participation.

### NCAA REQUIRMENTS FOR COLLEGE ATHLETES

The NCAA (National Collegiate Athletic Association) requires students to complete the NCAA Clearinghouse Form to determine eligibility for Division I and Division II schools. Eligibility is determined by grades in core classes (approved by NCAA) and ACT and/or SAT exam scores.

**NOTE:** \*\*\*\*\*E2020 courses DO NOT count towards eligibility for NCAA.\*\*\*\*\*

#### To register, complete the following steps:

- Go to www.eligibilitycenter.org
- Click on: Create an Account (Division I or II) or Create a Profile Page (Division III or uncertain of where you want to complete)
- Jefferson City High School code 261560
- Have a credit card ready to pay the \$80.00 registration fee (subject to change). You may be eligible for a waiver of the registration fee if you have received a waiver of the SAT or ACT fee. This is not the same as a U.S. state voucher. You must have an authorized high school official (your counselor) submit your fee waiver verification online after you complete your registration.
- Before you register with the NCAA, review the Registration Checklist. Make sure you remember the email address you register with and the password or pin you create when you register. You will need this information each time you log into the website. \*Please use an email address you check frequently and will use after high school. (Note: At the end of your senior year, your @student.jcschools email account will be deactivated. Therefore, it is wise to use an email address other than the student address supplied to you by JC Schools.) Having a valid email address is important to receiving information from the NCAA.

### A+ PROGRAM

Some Guidelines have changed in recent years. Please look them over carefully on the website.

Jefferson City High School is designated as an A+ School. The A+ Schools program, administered by the Missouri Department of Higher Education (MDHE), provides scholarship funds to eligible graduates of A+ designated high schools who attend a participating public community college or vocational/technical school, or certain private two-year vocational/technical schools.

#### To be eligible, students must:

- ☑ Be a U. S. Citizen or permanent resident
- ☑ Sign an A+ Agreement Form with your high school prior to graduation.
- ✓ Attend a designated A+ School for two years prior to graduation. (If one of your parents is a member of the military on active duty or has retired from the military and relocated to Missouri within one year of their retirement, you are exempt from this requirement. However, you must attend an A+ designated high school in the school year immediately preceding graduation and meet all of the other high school eligibility requirements.) \*
- ☑ Graduate with an overall grade point average of 2.5 or higher on a 4.0 scale.
- ☑ Have at least a 95% attendance record overall for grades 9-12.
- ☑ Perform at least 50 hours of unpaid tutoring or mentoring, of which up to 25% may include job shadowing.

- ☑ Maintain a record of good citizenship and avoidance of the unlawful use of drugs and/or alcohol.\*\*
- ✓ Have achieved a score of proficient or advanced on the Algebra I, Geometry, or Algebra II end-of-course exams. If you meet all of the eligibility requirements except the end-of-course exam requirement, you may establish eligibility by achieving a qualifying score on the mathematics component of the ACT test. You may achieve the qualifying score as a high school or postsecondary student. If you achieve the score as a postsecondary student you may be eligible for an award in the same term that you take the test. The Missouri Department of Higher Education will announce the qualifying ACT scores annually. \*\*\*

The tuition incentive will be made available only after the student has made a documented good faith effort to first secure all available post-secondary student financial assistance funds that do not require repayment. The tuition incentive will only be made available to reimburse the unpaid balance of the cost of tuition and fees. The student financial incentive program is dependent upon Jefferson City High School maintaining A+ designation and the Missouri Department of Higher Education receiving the state appropriation from the Missouri General Assembly.

\*\* Per school board policy, any student who is assigned to the Student Suspended Classroom or receives an out of school suspension during the four-year period will be ineligible for A+.

\*\*\* The Coordinating Board for Higher Education (CBHE) is responsible for annually establishing the thresholds students may meet as alternatives to scoring proficient or advanced on the Algebra I end-of-course exam. The thresholds are announced in the spring of students' junior year to allow ample time for the students to be aware of and achieve them before graduation the following year. Based on this timeline, the thresholds for the 2023 seniors will be announced early in spring 2022.

New information from MDHE and CBHE may not be available at the time of publishing of this Academic Planning Guide for 2022-23. Please refer to the JCHS A+ website (listed below) for updates from MDHE. As soon as updates are available, they will appear on the website

Contact Dr. Marcia Sankey, A+ Coordinator, 659-3050, if you have further questions. For more information, please visit the JCHS A+ website (<a href="https://www.jcschools.us/domain/38">https://www.jcschools.us/domain/38</a>) or the Missouri Department of Higher Education A+ website. (<a href="https://dhe.mo.gov/ppc/grants/aplusscholarship.php">https://dhe.mo.gov/ppc/grants/aplusscholarship.php</a>)

### PREPARING FOR COLLEGE ADMISSIONS TEST

- 1. Select high school courses that include the recommended core curriculum to include 4 units of English, 3 units of math (completing Pre-Calculus), 3 units of social studies, 2 units of science (one must be a laboratory course), 1 unit of fine art, and 3 additional units of any courses previously listed or world language (2 units strongly recommended).
- **2.** Study current preparation materials, including the practice test, published by ACT or SAT and available free of charge in the counseling office. Students may utilize additional test preparation materials available in libraries, bookstores and through the test publishers. See <a href="https://www.collegeboard.org/">https://www.collegeboard.org/</a> for SAT information or <a href="https://www.act.org/">https://www.act.org/</a> for ACT sample test items and strategies. Students may also visit the JCHS library and sign up on <a href="https://www.learningexpresshub.com">https://www.learningexpresshub.com</a> for free practice tests.
- **3.** Enlist the help of teachers to answer questions and clarify concepts. (Consider making an appointment before or after school to work with a teacher.)

#### **COLLEGE ADMISSION TESTS**

#### **ACT Test**

Thomas Jefferson Middle School is a test center site for all the test dates in the 2024-2025 school year. The regular registration cost for 2023-2024 was \$63 and \$88 for the optional ACT Plus Writing. There is an additional fee for late registration. ACT strongly encourages students to register online at <a href="https://www.actstudent.org">www.actstudent.org</a>. Please visit the counseling office for test dates or online at <a href="https://www.actstudent.org">www.actstudent.org</a>.

#### **SAT Test**

Jefferson City High School is a test center site for the October, December, March and May date. Other sites include Lincoln University and Hickman High School in Columbia. The 2023-2024 regular registration fee was \$60. See the registration booklet for a complete listing. Registration packets are available online and you must register online. You can view test dates at www.collegeboard.com.

Missouri colleges prefer students submit college entrance scores when applying for admission. Students planning to attend a four-year college should take the ACT or SAT tests no later than spring of their junior year. Students planning on attending a 2-year community college or technical school do not have to take the ACT or SAT, they would take a placement test at that college after they have been accepted. Students may take tests on any of the nationally scheduled dates and may retest as often as they choose. Fee waiver information is also available for students participating in the JC Schools free/reduced lunch program. Students who need fee waivers should see their counselor. The Jefferson City High School code or CEEB code is 261-560. This code is needed when filling out the registration information for SAT and/or ACT.

#### ASSESSMENT SCHEDULE

### THE MISSOURI CONNECTIONS CAREER PLANNING SYSTEM

The Missouri Connections career planning website is available to all students. There is no cost to students. Missouri Connections is designed to measure interests and abilities keyed to requirements for the majority of occupations and personal work values. The results will provide students with career path information; skills and abilities needed and related courses of study and post-secondary majors. The website is www.missouriconnections.org.

#### **PSAT TEST**

The Preliminary Scholastic Aptitude Test (PSAT) will be offered to students at Jefferson City High School on the National Testing Date in October. Sophomores may take the test if they wish to be considered for nomination to the Missouri Scholars Academy <u>and</u> as practice for their junior year when they may enter the National Merit Scholarship Competition. Juniors interested in the competition <u>must</u> take the PSAT to be considered. The cost is approximately \$20.00. See <u>www.collegeboard.com</u> for additional information.

#### **END OF COURSE EXAMS**

End of Course Exams will take place at the completion of the following courses: Algebra I, Algebra II, English II/Pre-AP English II, Government/AP Government and Politics/AP Comparative Government, and Biology. Any student classified as a virtual, homebound and/or part time student is required to take the EOC test and/or tests as well.

#### ADVANCED PLACEMENT EXAMINATIONS

Exams will be given during the first two weeks of May on designated dates set by the College Board.

### DEPARTMENT SEAL OF EXCELLENCE

Graduating seniors who demonstrate achievement of the standards of excellence in one or more subject areas will receive a **Seal of Excellence Award**. This award will designate the subject area or areas in which excellence has been achieved.

A student will be eligible for a Seal of Excellence Award upon completion of

- 1) Verification that all subject area standards of excellence have been completed; and
- 2) Recommendation by the department that a "Seal of Excellence Award" be issued.

Guidelines by subject area for achieving a departmental Seal of Excellence Award:

#### **LANGUAGE ARTS:**

#### **ENGLISH**

- \* Student must have completed 5.0 credits of English classes.
- \* In addition to English I, II, and III, students may choose among approved courses which include: College Prep Literature, AP English Language, English IV, English 101/102 Dual Enrollment or AP English Lit.
- \* Student must have a 3.667 grade point average in all English courses.
- \* Student must score "proficient" or "advanced" on the English II End of Course Exam (EOC) exam.

#### **JOURNALISM:**

- \* Student must have taken at least 3.0 credits in journalism, which must include a minimum of 2.0 credits in Journalistic Production.
- \* Student must have a 3.667 grade point average in journalism courses.
- \* Student must have served at least one year in a leadership role/an editor's capacity on the publication staff.

#### **SPEECH/DEBATE:**

- \* Student must have a 3.667 grade point average in speech courses.
- \* Student must have been enrolled in at least two of the following speech courses: Speech I, Debate I or II, or Competitive Speaking and Interpretation.
- \* Student must obtain NSDA membership prior to the senior year.
- \* Student must participate in tournament competition for a minimum of two years.

#### **DRAMA:**

- \* Student must have a 3.667 grade point average in drama courses.
- \* Student must have been enrolled one of these two courses: Drama I and Drama II.
- \* Student must be an active member of J.C. Players and Thespians prior to the senior year.
- \* Student must have participated in at least four school productions: acting, directing, or technical aspects. One production may be in community theater productions.

#### **READING:**

- \* Students read and review four Gateway nominees for the current school year.
- \* Students read and review two books from the college-bound reading list provided by the JCHS Library.
- \* Students read and review four other novels of their choice.
- \* Students participate in at least two book clubs through the JCHS Library. Books read during book club can count towards the required reading.
- \* Students participate in a community service project through either the JCHS Library, Epsilon Beta, or the public library that furthers literacy or service to others, i.e. Reading Buddies Program through MRRL, organizing a charitable drive such as the JCHS Library Giving Tree, a self-directed service project approved by the JCHS Library.

#### **SOCIAL STUDIES:**

- \* Students must have at least 4.0 credits of Social Studies classes.
- \* Students must score "proficient" or "advanced" on the Government End of Course (EOC) exam.
- \* Student must have earned a 3.667 grade point average in Social Studies courses.

#### **MATHEMATICS:**

- \* Students must attain at least a 3.667 grade point average in math courses. All math courses taken in grades 9-12 will be used to determine the math GPA.
- \* Students must complete at least 4.0 credits of Math classes, with at least 1.0 credit being from College Algebra, AP Statistics, Pre-Calculus, Calculus AB, or Calculus BC.
- \* Students must score "proficient" or "advanced" on the Algebra I or Algebra II End of Course (EOC) exam.

#### **SCIENCE:**

- \* Student must have a 3.667 grade point average in science courses. All science courses taken in grades 9-12 will be used to determine the science GPA.
- \* Students must have completed 5.0 credits of science classes.
- \* In addition to Physical Science/Principles of Biomedical, Biology/Honors Biology, Chemistry, and AP Physics A, students may choose for their fifth science class from the advanced placement or dual enrollment science elective options.
- \* Students must score "proficient" or "advanced" on the Biology End of Course (EOC) exam

#### **MUSIC:**

- \* The student must be enrolled in the department for a minimum of 6 units of credit including the senior year.
- \* Awards will be given in categories Vocal Music, Band, Orchestra, and Combined Departmental.
- \* Points to be accumulated: Vocal 30, Band 32, Orchestra 24, and Combined 28 (2 from each area: band/choir or choir/orchestra).
- \* Student must achieve a minimum 3.667 grade point average in each area considered.

#### **ART:**

- \* Student must have 3.667 grade point average in Art classes.
- \* Student must have completed 2.5 credits of Art
- \* Student must submit a portfolio that exhibits originality and understanding of art principles and techniques, in a wide variety of mediums. The portfolio is reviewed by the Art Department staff and becomes the deciding factor after other criteria have been met.

#### **WORLD LANGUAGE:**

- \* Student must have successfully completed 3.0 credits of a world language or 2.0 credits of two or more languages.
- \* Student must have a 3.667 grade point average in world language courses.

#### **BUSINESS & MARKETING EDUCATION:**

- \* Student must have a 3.667 grade point average in all business courses taken.
- \* Student must have completed at least 3.5 credits in the Business or Marketing Education Department.

#### **FAMILY and CONSUMER SCIENCES:**

- \* Student must complete 2.5 credits in the Family and Consumer Sciences department.
- \* Student must have a 3.667 grade point average in Family and Consumer Sciences.

#### **INDUSTRIAL TECHNOLOGY:**

- \* Student must have completed 2.0 credits of industrial technology classes with a grade point average of 3.667.
- \* Student must display mastery of safety and operation of tools and equipment.

#### **PHYSICAL EDUCATION:**

- \* Student must have completed a minimum of 2.0 credits of physical education class and .50 credit in Health and a .50 credit in Athletic Training for 3.0 credits maintaining a grade point average of 3.667 or better.
- \* Students must meet requirements for the Presidential Physical Fitness Award.

#### **PROJECT LEAD THE WAY:**

#### **Engineering and Biomedical Science Requirements:**

- \* Student must complete four courses in Engineering or four courses in Biomedical Science including the Capstone Course.
- \* Student must score accomplished or distinguished on all three EOC exams(no EOC for capstone course).
- \* Student must have at least a 3.667 grade point average in all grades 9-12 PLTW courses.

### NICHOLS CAREER CENTER SEAL OF EXCELLENCE

#### **TRADE & INDUSTRY:**

- \* Complete their respective CTE program of study.
- \* Maintain an attendance rate of 95% or higher.
- \* Earn a cumulative program grade of 3.66 (A- Average) or higher.
- \* Exhibit outstanding work habits, citizenship, leadership, technical knowledge, safety procedures, and possess a cooperative attitude with their program instructors and peers.
- \* Maintain an active CTSO membership for their program.

#### **AGRICULTURAL SCIENCES:**

- \* Student must have a 3.667 grade point average in Agricultural Science Courses.
- \* Student must complete at least 4 units of credit
- \* Student must actively participate in the Nichols Career Center FFA Chapter during enrollment in Agricultural Sciences Department courses.

### Characteristics of a JC Schools Graduate

- ✓ **Social Skills and Personal Character:** The graduate will possess the basic social skills to thrive in society including strong character, high moral and ethical behavior, and self-confidence.
- ✓ **Global awareness**: The graduate will have an appreciation for other cultures; will possess foreign language skills; and they will have an understanding of the value of diversity in our society.
- ✓ **Personal Concept:** The graduate will be resilient, goal-oriented, and possess a strong self-concept with the ability to develop a personal value and belief system.
- ✓ Technology Skills: The graduate benefit from continued access to a mandatory technology curriculum leading to proficiency in the world of technology.
- ✓ **Learning Skills:** A JC Schools graduate will be provided with the tools to be adaptable. They will have the ability to learn, unlearn and relearn. They will be information literate and possess the skills to address their personal intellectual curiosity
- ✓ **Academic Core:** Graduates will be competent/proficient in the academic core subjects.
- ✓ **Life Skills:** The graduate will possess the knowledge and skills to successfully obtain and hold meaningful employment (including interviewing and job application ability); understand and exercise personal financial decisions; and have reliable organizational skills.
- Critical and Creative Thinking Skills: The graduate will possess the skills to think and problemsolve creatively, innovatively, and critically.
- ✓ Communication Skills: The graduate will possess adequate/excellent oral, written and listening communication skills.
- ✓ **Collaboration and Work Dynamics:** The graduate will be self-motivated and possess the skills to work independently or within group dynamics; furthermore, the graduate will understand the opportunities that are available and be resourceful in seizing those opportunities.

#### GETTING THE MOST OUT OF HIGH SCHOOL

#### I. GRADUATE FROM HIGH SCHOOL:

Consider and review the graduation requirements defined for your class and select courses that will meet those requirements. Review prerequisites and length of courses as you develop, refine and adjust ICAP: Individual Career and Academic Plan. In the event that courses are not successfully completed, they should be made up as soon as possible to avoid a delay in graduation.

#### II. PREPARE FOR AND EXPLORE OPTIONS AFTER GRADUATION:

Consider the following questions and select courses that are of interest to you, will meet your needs and help you define the direction in which you would like to go after high school. Don't forget leisure time activities and take advantage of an art class, a computer class or specific area of interest such as the Civil War.

#### KNOW YOURSELF

EDUCATION	What courses have you taken? With how much academic challenge are you comfortable? Do you want to continue with college, vocational training, or on-the-job training?
INTERESTS	What are your interests - working with people, working alone, working indoors or outdoors? Develop a list of the types of jobs and conditions you like best, but be flexible. Have you chosen one of the six career paths?
SKILLS and ABILITIES	Make a list of your skills and abilities. Include your organizing skills, your management skills and your special talents. Refer to your Career Planner.
EXPERIENCE	What has been your involvement in clubs, social activities, travel, volunteer work or paid employment? Include the types of responsibilities you have had in these activities.
VALUES	What are your beliefs and attitudes toward yourself, other people, and the world?
AREAS of IMPROVEMENT	How do you want to improve yourself?
GOALS	What do you want to accomplish in the next four to five years? What do you plan to be doing in ten or twenty years? Develop a plan for immediate and long range goals.

#### **EXPLORE THE OPTIONS**

- -Visit www.Missouriconnections.org to research careers and colleges.
- -Visit work places, observe, shadow, volunteer, work part-time. Talk with people in careers that interest you.
- -Visit technical schools, community colleges, and four-year universities; talk with military recruiters.

#### **DEVELOP A PLAN**

- -Go right to work or enter an apprenticeship program
- -Enter the military
- -Enter a Career or Technical School, Community College or Four-Year College or University.

#### III. QUALIFY FOR PROGRAMS, AWARDS, SCHOLARSHIPS AND POST-SECONDARY OPTIONS:

Consider what you would like to participate in and to earn in addition to a high school diploma during your 4 years of high school. Research and prepare for post-secondary options; maintain your career planner, which is a record of activities, leadership roles, honors, achievements, test scores and courses completed. This organized documentation will assist with application processes.

#### LINKING THE SIX CAREER PATHS WITH CAREER CLUSTERS

#### ARTS AND COMMUNICATION

Occupations in this path are related to the humanities and the performing, visual, literary, and media arts. These may include architecture, interior design, creative writing, fashion design, film, fine arts, graphic design and production, journalism, language, radio, television, advertising, and public relations.

> Arts, A/V Technology and Communications: Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

#### BUSINESS MANAGEMENT AND TECHNOLOGY

Occupations in this path are related to the business environment. These may include entrepreneurship, sales, marketing, computer/information systems, finance, accounting, personnel, economics, and management.

- ➤ **Finance:** Planning, services for financial and investment planning, banking, insurance, and business financial management.
- > Business, Management and Administration: Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Business Management and Administration career opportunities are available in every sector of the economy.
- Information Technology: Building linkages in IT Occupations Framework for entry level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia, and systems integration services.

#### **HEALTH SERVICES**

Occupations in this path are related to the promotion of health and the treatment of disease. These may include research, prevention, treatment, and related technologies.

➤ **Health Science:** Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development

#### NATURAL RESOURCES / AGRICULTURE

Occupations in this path are related to agriculture, the environment, and natural resources. These may include agriculture sciences, earth sciences, environmental sciences, fisheries, forestry, horticulture, food science, and wildlife.

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

#### **HUMAN SERVICES**

Occupations in this path are related to economic, political, and social systems. These may include education, government, law and law enforcement, leisure and recreation, military, religion, childcare, social services, and personal services.

- **Education and Training:** Planning, managing and providing education and training services, and related learning support services.
- ➤ **Hospitality and Tourism:** Hospitality and Tourism encompasses the management, marketing and operations of restaurants and other food services, lodging, attractions, recreation events and travel related services.
- Government and Public Administration: Executing governmental functions to include Governance; National Security Foreign Service; planning revenue and taxation, regulation and management and administration at the local, state, and federal levels
- Marketing Sales and Service: Planning, managing and performing marketing activities to reach organizational objective.
- > Human Services: Preparing individuals for employment in career pathways that relate to families and human needs
- ➤ Law, Public Safety, Corrections and Security: Planning managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.

#### INDUSTRIAL AND ENGINEERING TECHNOLOGY

Occupations in this path are related to the technologies necessary to design, develop, install, and maintain physical systems. These may include engineering, manufacturing, construction, service, and related technologies.

- > Transportation, Distribution and Logistics: Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.
- > Science, Technology Engineering and Mathematics: Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.
- Architecture and Construction: Careers in designing, planning, managing, building and maintaining the built environment.
- Manufacturing: Planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.

# COURSE DESCRIPTIONS

BY DEPARTMENTS

### **ENGLISH LANGUAGE ARTS**

ENGLISH I (1111) Grade 9 Credit 1.0

Students in English I will read literature and nonfiction texts throughout the course. In addition, students will have opportunities to practice expository, narrative, and argumentative writing. Grammar and style will be monitored in all writing assignments. Course projects will also integrate speaking and listening opportunities for students. The state has created an optional End-of-Course (EOC) exam for this course which may or may not be given. **NCAA approved course.** 

-OR-

Pre-AP ENGLISH I (1122) Grade 9 Credit 1.0

Pre-AP English I is an advanced course taught with greater rigor and a more accelerated pace than English I and the previous offering of Honors English I. Students should be on or above grade level and no less than one grade level below in Reading as per their last I Ready diagnostic assessment in 8th grade. Pre-AP courses are **NOT** a prerequisite for any subsequent AP course. Although we want our courses to be accessible to all students, it is also important that we communicate the expectations of the coursework. Pre-AP courses will challenge you. If a student is not sure a Pre-AP course is appropriate for him/her, please consult with your counselor. **NCAA approved course.** 

#### ENGLISH II (1201) ★EOC EXAM

Grade 10

Credit 1.0

English II curriculum builds on the expository writing skills developed in English I. Students use these writing skills to compose at least one narrative, one explanatory, and one persuasive full process paper. English II also continues the development of skills in the fundamentals of grammar and usage. Literature read and analyzed includes variety in both genre and author. The state required End of Course (EOC) exam is administered upon successful completion of this course. **NCAA approved course** 

-OR-

#### Pre-AP ENGLISH II (1222) ★EOC EXAM

Grade 10

Credit 1.0

Pre-AP English II is an advanced course taught with greater rigor and a more accelerated pace than English II and the previous offering of Honors English II. Pre-AP English I is NOT a prerequisite for Pre-AP English II. Additionally, Pre-AP courses are NOT a prerequisite for any subsequent AP course. Although we want our courses to be accessible to all students, it is also important that we communicate the expectations of the coursework. Pre-AP courses will challenge you. If a student is not sure a Pre-AP course is appropriate for him/her, please consult with your counselor. **The state required End of Course (EOC) exam is administered upon successful completion of this course. NCAA approved course.** 

ENGLISH III (1301) Grade 11 Credit 1.0

#### Prerequisite: Successful completion of English II

English III will provide students with reading and writing skills to facilitate lifelong communication. English III provides the student with knowledge of American Literature and higher-level composition skills. Reading and writing assignments are designed to enhance reading comprehension, to improve analytical reasoning, to increase critical thinking, and to familiarize the students with a core group of authors and works in American Literature. **NCAA approved course.** 

#### COLLEGE PREP LITERATURE (1304)

**Grades 11-12** 

Credit 1.0

College Prep Literature adds a greater depth and quantity of writing and the study of American Literature to the junior curriculum and is intended for those students who seek a greater academic challenge. They will show their depth of understanding and their logical reasoning through numerous analytical essays. Students enrolling in this course need to be self-motivated and independent. Students enrolling in this class should be proficient in the writing of the analytical essay as well as be fluent in the structure of the English language. This course meets high school graduation requirements for English and is designed for the student who plans to take AP English Literature or English IV Dual Enrollment and who plans to attend a four-year college/university. NCAA approved course.

#### **AP ENGLISH LANGUAGE & COMPOSITION (1302)**

Grades 11 -12

Credit 1.0

AP English Language and Composition provides challenging work for students who wish to delve deeply into the study of argumentation through an analysis of nonfiction, primarily augmented with several selections from the imaginative genres. This course differs from English III by providing complex rhetorical and writing strategies, challenging critical reading and analytical writing assignments, accelerated coverage of content, short-term and long-term assignments, and in-depth original research. Enrolled students should possess a love for critical reading, competence in analytical writing strategies, language usage, mechanics, organization, and logic; self-motivation to meet high expectations; self-discipline in study habits and time-management; and an eagerness for learning and class participation. This course prepares students to take the AP English Language exam in May for which they may earn college credit.

ENGLISH IV (1412) Grade 12 Credit 1.0

#### ◆Prerequisite: Successful completion of English III, College Prep Literature or AP Language and Composition

English IV is a senior English class designed for those students entering the work force, a junior college, or a four-year college or university. The writing process will be followed for 2 required papers. The course will include units on grammatical elements, sentence structure, Greek and Latin roots, and British literature selections. Other pieces of fiction and nonfiction will be included for reading and writing instruction as needed to strengthen skills in reading, writing, and thinking. Students cannot receive college credit for this course, as it is not offered for dual enrollment. **NCAA approved course.** 

ENGLISH 101 (1414) Grade 12 Credit 0.5

#### ◆Prerequisite: Successful completion of English III, College Prep Literature or AP Lang & Comp

English 101 is a dual credit English course focusing on personal, descriptive, and narrative types of essay writing. Student will have the opportunity to earn three college credits through Lincoln University. Students must take the ACT before the beginning of the course and make at least a score of 18 on the English portion of the ACT and have a 3.0 g.p.a. to take the class for dual enrollment through Lincoln University. **NCAA approved course.** 

ENGLISH 102 (1415) Grade 12 Credit 0.5

#### Prerequisite: English 101 Dual enrollment

English 102 is a dual credit English course focusing on argumentative and persuasive writing. Students will have the opportunity to earn three college credits through Lincoln University. **NCAA approved course.** 

#### **AP ENGLISH LITERATURE (1405)**

Grade 12

Credit 1.0

#### Prerequisite: Successful completion of English III, College Prep Literature or AP Lang & Comp

AP English Literature is a college level class for students who want to read challenging literature with an in-depth analytical approach. It includes the reading of and written analysis of British poetry, novels, and drama. The student enrolling in this class should be a superior reader of difficult literature, have a firm background in literary analysis, and have a high proficiency level in the areas of mechanics, grammar, organization, and logic. Written analysis will be based on literature studied in class as well as literature read independently of class study. This course prepares the student to take the AP English Literature exam in May for which they may earn college credit. **NCAA approved course.** \*Interested Juniors may seek teacher approval to enroll.

#### **JOURNALISTIC WRITING (1303)**

Grades 9-12

Credit 0.5

Journalistic Writing is designed for students with an interest in journalism and those who intend to take Newspaper Production or Yearbook Production. This course provides instruction in news, feature, sports, in-depth, and opinion writing; ethics and media law; interviewing; researching and page design. There will also be opportunities for learning photography and advertising. This course is a prerequisite for Newspaper Production and one of the prerequisite options for Yearbook Production. Seniors must have the instructor's approval to take this course. Journalistic Writing may serve as half of a fourth English credit. NCAA approved course.

SPEECH I (5550) Grades 9-12 Credit 0.5

Speech I is concerned with the fundamentals of communication. It is a public-speaking course designed around the idea that we learn to speak by speaking. It contains a balance of both theory and practice. Speeches are given to peers that have been researched and rehearsed. Students will regularly stand in front of peers and deliver speeches. This is a performance-based class where grades are determined from performances. **Speech I may serve as half of a fourth English credit. NCAA approved course.** 

SPEECH II (5551) Grades 9-12 Credit 0.5

#### Prerequisite: Speech I

Speech II explores communication on an intrapersonal level as well as an interpersonal level. An emphasis will be placed on the speaker in small group situations. This course will give a practical application of how to communicate within the real-life world of meetings and relationships. Students will regularly stand in front of peers and deliver speeches. This is a performance-based class where grades are determined from performances. **Speech I may serve as half of a fourth English credit. NCAA approved course.** 

DEBATE I (5552) Grades 9-12 Credit 0.5

#### Prerequisite: Speech I

Debate I is a course designed to develop student's beginning awareness, understanding, and application of language arts as it applies to oral communication. Emphasis is focused on teaching students the proper procedures of debate and the artful crafting of argumentation. Students will be expected to design and construct well-informed arguments around topics of current significance. **Debate I may serve as half of a fourth English credit. NCAA approved course.** 

DEBATE II (5553) Grades 9-12 Credit 0.5

#### Prerequisite: Debate I

Debate II is designed to further develop and enhance a student's knowledge of debate skills taught in Debate I. The course will focus on advanced research, analysis, and communication skills through the format of Policy Debate, Public Debate and Lincoln Douglas Debate. Debate II is designed for students wishing to debate at the competitive level, meaning that students will travel to tournaments throughout the year to demonstrate mastery of their debate skills. **Debate II may serve as half of a fourth English credit. NCAA approved course.** 

#### **AFRICAN-AMERICAN LITERATURE (1123)**

**Grades 11-12** 

Credit 0.5

African-American Literature is a course designed to introduce students to the genre while analyzing its change through time. Through reading and analyzing texts, students will engage in academic discussions that seek to both understand the works in context and their relevance to our lives today. Students will be asked to stretch their critical thinking and writing skills in this course. This course is designed for students who like to read, who have an appreciation for literature with a clear voice, and who seek to become life-long readers. **NCAA approved course.** 

#### 21st CENTURY COMMUNICATIONS (5331)

**Grades 11-12** 

Credit 0.5

Students enrolled in 21st Century Communication will study, utilize, and assess modern mediums of communication. This will include in-depth studies and analysis of fiction and nonfiction from current podcasts and other media. By utilizing 21st century presentation skills and storytelling skills, students will communicate through writing and recording podcasts, as well as making infographics based on research.

#### **CHILDREN'S AND YOUNG ADULT LITERATURE (1420)**

**Grades 11-12** 

Credit 0.5

Children's and Young Adult Literature introduces topics and trends in this field to students who wish to develop an understanding of the psychology, development, and education of children and young adults. Students will research, analyze, and collaborate with others both within and without our building to study the field of children's literature. Collaboration with local schools and libraries and possibly local businesses will be essential to this course as students can visit these areas and also use technology to communicate with younger students in the district about their interests in reading and their responses to what they read. Students interested in psychology and education will better understand at what points students express interest in various topics, study how the trends in current and past literature reflect the needs of students at various ages and times, and the role censorship plays in the field of literature for youth. Activities will include an in-depth study of various examples of literature and analysis of them in relation to their effectiveness in the development of children as well as research, presenting, and writing using informational texts and field study.

CREATIVE WRITING (1305) Grades 11-12 Credit 0.5

Creative writing requires students to have an understanding of current and historical events as they relate to others and themselves. By internalizing information and assigning it a human association, the students will develop a broader perspective of local, national, and international issues, making them more prepared to address the challenges of an ever-changing world. In the Fine Arts and Communication Academy, many students have taken pathways that allow for self-expression, whether it is through music or communication. A creative writing course would be attractive to learners who have an intrinsic motivation to personalize their pursuits. Participation in the course would also develop skills that enhance a student's academic performance in courses such as broadcasting, journalistic writing, music and art. Activities will include the study of fiction, drama, and poetry; the composition process; and the writing techniques that make reading engaging. Students will develop collaboration skills by assessing work produced by peers and themselves. Through the exchange of criticism and dialogue, students will gain experience in interpersonal activities to benefit themselves and others. **NCAA approved course.** 

#### **MYSTERY, SUSPENSE AND HORROR (1400)**

**Grades 11-12** 

Credit 0.5

Mystery, Suspense and Horror, a reading intensive class, will illustrate the use of mystery, suspense and horror primarily through literature. Students will be given the opportunity to analyze numerous selections individually and/or in small groups. Although this is NOT a writing intensive course, students will be given the chance to write a well-planned mystery and one critical analysis. A variety of activities will be used to sharpen critical, logical and creative thinking skills. This course is designed for the student who wishes to continue his study of literature and language but does not need a college preparatory class. **NCAA approved course.** 

#### **WORLD LITERATURE (1425)**

**Grades 11-12** 

Credit 0.5

World Literature is a course that engages in the study of imaginative literature from cultures all around the world. **NCAA approved course.** 

#### **NEWSPAPER PRODUCTION (1408)**

**Grades 11-12** 

Credit 1.0

◆Prerequisites: Journalistic Writing and Instructor's approval. All students, including transfer students, must have the advisor's approval to take this course.

Newspaper Production is a full-year course in which students produce the school newspaper. In a hands-on laboratory setting, students use technology to highlight the fundamentals of journalism including journalistic writing, photojournalism, graphic design, marketing, and advertising sales. Since the course is co-curricular, students are required to use time in and out of class to fulfill requirements and meet production deadlines. Newspaper Production is a universal elective course. Newspaper Production may be applied as a Practical Arts or an Elective credit.

#### YEARBOOK PRODUCTION (1410)

**Grades 10-12** 

Credit 1.0

◆Prerequisite: Successful completion of least one or more of the following: Journalistic Writing, Desktop Publishing, Digital Photography. All students, including transfer students, must have the yearbook advisor's approval to take this course.

Yearbook Production is a full-year course in which students produce the Yearbook. Students learn about journalism, reporting, interviewing, writing, photography, and design, in addition to marketing, advertising, and book sales. Because the course is co-curricular, students are required to use time in and out of class to fulfill requirements and meet production deadlines. **Yearbook Production is a universal elective course, which may be applied as a Practical Arts or an Elective credit.** 

### ENGLISH SPEAKERS OF OTHER LANGUAGES

ENGLISH SPEAKERS OF OTHER LANGUAGES I (100) ENGLISH SPEAKERS OF OTHER LANGUAGES II (106)

Grades 9-12

Credit 1.0

The goal of the ESL program is to enable ESL students to become communicative, production participants in the English-speaking community and to prepare them to meet the academic needs of the mainstream. This goal is accomplished by implementing and integrated content-based curriculum that focuses on the strategies, vocabulary and concepts used in all mainstream courses. These

mainstream skills are taught through special ESL techniques and methods that emphasize reading, writing, listening, and speaking.

### **ELECTIVES**

A+ TUTORING (5000)

Grades 12

Credit 0.5

**A+ TUTORING (5023)** 

Credit 1.0

#### ◆Prerequisite: 2.5 GPA or A+ Coordinator approval

A+ Tutoring gives students the opportunity to explore the Human Services career path as they assist and encourage younger students under the supervision of a classroom teacher. They will have the opportunity to observe and to develop knowledge, skills, attitudes, and behaviors necessary to be successful in such a career. This course satisfies the mentoring/tutoring hours necessary for the A+ program. An A+ agreement is required and students are responsible for arranging their school site.

CIVIL LEADERSHIP (5002) Grades 11-12 Credit 0.5

Civil Leadership is an elective course that allows students to learn leadership skills, advantages and disadvantages of varying leadership styles, and to apply leadership skills in a culminating service-learning project. This elective presents students with the opportunity for dual enrollment through Drury University.

#### F.A.S.T (Focused Academic Success) (5584)

9-10

Credit 1.0

Students will be placed in this course based on the student's need for additional support beyond Tier 1 instruction. Students in this course will be provided targeted skill support in a small group setting that is flexible and interchangeable based on the student's needs within the core instruction.

### **MATHEMATICS**

#### ALGEBRA IA (3121) & ALGEBRA IB (3152) ★EOC EXAM

Grades 9-12

Credit 2.0

Algebra IA/IB is the Algebra I curriculum over 72 weeks. It is a course designed to prepare students for tomorrow's world by involving them in exploring and discovering math concepts, connecting algebra to the real world and to other subjects and math topics, and by building an understanding of the concepts that provide a strong foundation for future courses and careers The content emphasizes graphing and solving equations/inequalities, factoring, quadratic functions, exponential functions, systems of equations/inequalities, statistics, and data analysis through the integration of technology as a problem-solving tool. Algebra IA/IB is the foundation for higher mathematics courses. The state required End of Course (EOC) exam is administered upon successful completion of this course. **NCAA** approved course.

-OR-

#### ALGEBRA I (3131) ★EOC EXAM

Grades 9-12

Credit 1.0

Algebra I is a course designed to prepare students for tomorrow's world by involving them in exploring and discovering math concepts, connecting algebra to the real world and to other subjects and math topics, and by building an understanding of the concepts that provide a strong foundation for future courses and careers. The content emphasizes graphing, solving equations and inequalities, working with radicals, data analysis, probability, and functions through the integration of technology as a problem-solving tool. Algebra I is the foundation for higher mathematics courses. The state required End of Course (EOC) exam is administered upon successful completion of this course. **NCAA approved course.** 

-OR-

GEOMETRY (3141)

Grades 9-12

Credit 1.0

#### ◆Prerequisite: Successful completion of Algebra IA & IB or Algebra I

Geometry emphasizes reasoning and logical thinking. This course connects geometry to algebra, data analysis, probability, and trigonometry. Specific topics include transformations, polygons, Cartesian coordinate system, area of plane figures, similarity, right triangle trigonometry, surface area and volume of solids and circles. This is a course for students who expect to continue their study of mathematics in high school, technical school, or college. The state has created an optional End-of-Course (EOC) exam for this course which may or may not be given. **NCAA approved course.** 

#### ALGEBRA II (3162) ★EOC EXAM

Grades 9-12

Credit 1.0

#### Prerequisite: Geometry or can be taken concurrently with Algebra II

Algebra II is a course that builds upon skills developed in previous math courses. It is largely a study of functions including polynomial, radical, rational, exponential, logarithmic, cubic, piecewise, step, and absolute value. Other topics include complex numbers, operations with functions, and sequences & series. Intermittent reviews of selected Algebra 1 topics will occur throughout the course. This is a course for students who plan to continue their study of mathematics in high school, technical school, and/or college. The state has created an optional End-of-Course (EOC) exam for this course which may or may not be given. **NCAA approved course.** 

#### PRE-CALCULUS (3203S1/S2)

**Grades 10-12** 

Credit 1.0

#### ◆Prerequisite: Successful completion of Algebra II

The dual-credit Pre-calculus course emphasizes trigonometry using the unit circle approach, graphing trigonometric functions and their transformations, developing and establishing trigonometric identities, solving trigonometric equations including those with inverses, and solving triangles. Other areas of emphasis include topics such as functions (including linear, quadratic, exponential, logarithmic, rational, piecewise, higher degree polynomial, and absolute value); inverses; inequalities; systems of equations; circles; rational expressions, radicals and exponents; the polar coordinate systems'; and vectors. This course is designed for college bound students and is applicable to many areas including math, engineering, constructions, and science. Qualified students may enroll for college credit through dual enrollment with Lincoln University. Dual enrollment offerings will be determined by staff certifications. **NCAA approved course.** 

#### **COLLEGE ALGEBRA (3180)**

**Grades 10-12** 

Credit 1.0

#### Prerequisite: Successful completion of Algebra II.

College Algebra concentrates on the study of properties and graphs of polynomial functions. Solutions of various polynomial, rational, and radical equations and inequalities will be studied, as well as solutions to systems of inequalities. Sequences and series will also be topics of study. Qualified students may enroll for college credit through dual enrollment with Lincoln University. Dual enrollment offerings will be determined by staff certifications. **NCAA approved course.** 

AP STATISTICS (3190) Grades 11-12 Credit 1.0

#### ◆Prerequisite: Successful completion of Algebra II

Advance Placement Statistics is a course equivalent to a one-semester introductory non-calculus based course fin statistics for students who are planning on majoring in mathematics, engineering, psychology, sociology, science, or business. Topics to be studied include: exploring data-observing patterns and departures, planning a study using experimental designs, anticipating patterns by producing models using probability and simulations, and statistical inferences. In addition to solving problems, students will utilize mathematical and statistical writing techniques. This course prepares the student for the AP Statistics Exam. Qualified students may earn college credit through dual enrollment with Lincoln University. Recommended for juniors who will be taking science research class their senior year. **NCAA approved course.** 

AP CALCULUS AB (3201) Grades 11-12 Credit 1.0

#### ◆Prerequisite: Successful Completion of Pre-Calculus

AP Calculus AB is a study of applications of derivatives and integrals in graphing, areas, volumes of solids of revolution, differential equations, exponential growth and decay, displacement, optimization problems, and related rates. Completion of this course will prepare students to take the AP Calculus AB exam or to enroll for college credit through dual enrollment with Lincoln University. Dual enrollment offerings will be determined by staff certifications. **NCAA approved course.** 

AP CALCULUS BC (3202) Grades 11-12 Credit 1.0

#### Prerequisite: AP Calculus AB

AP Calculus BC is the third course offered in the Calculus sequence. It covers polar and parametric equations, vector equations, sequences and series and the applications of calculus to these new concepts. It also covers slope field, Euler's Method of solving differential equations, logistics equations, and other topics. Completion of this class, along with AP Calculus AB II, will prepare students to take the AP Calculus BC test and/or to receive dual credit for Calculus II through Lincoln University. Dual enrollment offerings will be determined by staff certifications. **NCAA approved course.** 

BUSINESS MATH (3150) Grades 11-12 Credit 1.0

Business Math is a course where students will learn the mathematics needed to manage money. Basic math skills and formulas will take students through step-by-step processes addressing wages, taxes, banking, recordkeeping, cash and credit cards, loans, housing, purchasing a vehicle, insurance and investments. Each unit includes a project that allows students to demonstrate their understanding of the concepts presented.

### SCIENCE

PHYSICAL SCIENCE (4125) Grade 9 Credit 1.0

Physical Science is an introductory science course. Upon completion, students will have a general understanding of Motion and Stability, Energy, Structure and Properties of Matter, Chemical Reactions, and Earth and the Universe. The state has created an optional End-of-Course (EOC) exam for this course which may or may not be given.

-OR-

PRINCIPLES OF BIOMEDICAL SCIENCE (9401) Grade 9 Credit 1.0

#### (This course may be taken in place of Physical Science)

In the introductory course of the PLTW Biomedical Science program, students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems.

-OR-

BIOLOGY (4200) ★EOC EXAM

Grades 9-10

Credit 1.0

#### ◆Prerequisite: Physical Science or Principles of Biomedical Science

Biology is a required laboratory course. Topics studied include: experimental design, genetics, cell structure and function, evolution, and ecology. Practical lab assessments are required of all students. All rooms house live and preserved animals, which may affect allergies. The state required End of Course (EOC) exam is administered upon completion of this course. **NCAA approved course.** 

-OR-

#### HONORS BIOLOGY (4204) ★EOC EXAM

Grades 9-10

Credit 1.0

Credit 1.0

◆Prerequisite: Concurrent enrollment in Geometry or higher math curriculum (Necessary for focused application of mathematics to understand and express the quantitative aspects of biology, to record and interpret data, and to model and solve problems as they arise.) and instructor recommendation and acceptance

Within this course, the theories of evolution and inheritance help students see the story of how life has unfolded across Earth's vast history. They provide foundational lenses from which we begin to understand and appreciate extraordinary diversity of life as well as the unity we see across that life. This course also focuses on the complex and dynamic processes that are required to sustain Earth's biodiversity, and to build student understanding of the intricate relationships of interdependence between living and nonliving systems. This course will test in the Biology EOC at end of the semester.

AP BIOLOGY (4202)

Grades 10-12

#### ◆Prerequisite: Biology and Chemistry or concurrent enrollment in Chemistry

AP Biology is a college preparatory laboratory course designed to expose students to a wide range of lab techniques and experiences. AP Biology expands upon the topics of general biology to meet the requirements of the College Board. Practical lab dissection assessments are required, as students are introduced to college-level dissection strategies. Independent work is required in many areas including extended work in: Evolution and Diversity of Life, Homeostasis within Biological Systems, Information in Living Systems and Interactions within Biological Diversity. Chemistry is strongly recommended. This course prepares the student to take the AP Biology exam. Qualified students may enroll for dual enrollment through Lincoln University. Dual enrollment offerings will be determined by staff certifications. **NCAA approved course.** 

CHEMISTRY (4400)

Grades 10-12

Credit 1.0

#### ◆Prerequisite: Completion of, or concurrent enrollment in Geometry

Chemistry is a college-preparatory laboratory course designed to help the student develop problem-solving and analytical thinking skills. Course content includes the study of atomic models, electron arrangement, the periodic table and trends, chemical bonding, inorganic formula writing and nomenclature, chemical equations, scientific measurements, states of matter, Gas Laws, and solutions. Emphasis is placed upon the interpretation and analysis of data collected from laboratory experiments. **NCAA approved course.** 

**AP CHEMISTRY (4403)** 

**Grades 11-12** 

Credit 1.0

#### ◆Prerequisite: Students should have successfully completed Chemistry and Algebra II

AP Chemistry provides students with a college-level foundation to support future advanced course work in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore topics such as atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. This course prepares students to take the AP Chemistry exam in May for which they may earn college credit.

AP PHYSICS A (4500)

**Grades 10-12** 

Credit 1.0

#### Prerequisite: Geometry

Physics A is a college-preparatory laboratory course designed to help the student develop problem-solving and analytical thinking skills. The content of the course includes the qualitative and quantitative interrelationships of force and motion, energy, gravity, simple harmonic motion, mechanical waves, and sound. The course is a prerequisite for AP Physics B. Qualified students may enroll for dual enrollment through Lincoln University. Dual enrollment offerings will be determined by staff certifications. **NCAA approved course.** 

AP PHYSICS B (4501) Grades 11-12 Credit 1.0

Prerequisite: Physics A

AP Physics B is a college-preparatory writing intensive, laboratory course designed to help the student develop problem- solving and analytical thinking skills. AP Physics B will prepare students for the AP Physics 2 exam. Course content includes electricity and magnetism, the nature of matter, the nature of light, nuclear radiation and radioactivity, quantum mechanics, special and general relativity, and the standard model of fundamental particles and interactions. Qualified students may enroll for dual enrollment through Lincoln University. Dual enrollment offerings will be determined by staff certifications. **NCAA approved course.** 

ASTRONOMY I (4302) Grades 11-12 Credit 0.5

This course introduces the science of modern astronomy with a concentration on the solar system. Emphasis is placed on the history and physics of astronomy and an introduction to the solar system, including the planets, comets, and meteors. Upon completion, students should be able to demonstrate a general understanding of the solar systems.

ASTRONOMY II (4303) Grades 11-12 Credit 0.5

This course expands upon the science of modem astronomy. Topics include a deeper knowledge of the planets in our solar system, the sun, stars, galaxies, and the larger universe, including cosmology. Upon completion, students should be able to demonstrate a general understanding of the solar system, space flight, and stars.

GEOSCIENCE (4503) Grades 11-12 Credit 0.5

This course covers the fundamentals of geology: Rocks, minerals, geologic time, plate tectonics, earthquakes, volcanoes, surface processes, and earth resources. The lab delves into the chemistry of minerals, how rocks form, soil profiles, geologic mapping with GIS, geology in the field, and other fundamental topics. Understanding the causes and potential societal consequences of natural Earth processes (e.g. earthquakes, floods, landslides, tsunamis, volcanic eruptions, weather, and global climate change) and the production, availability, and potential depletion of natural resources (e.g. water, soil, mineral, and energy) is of particular importance.

#### **ENVIRONMENTAL SCIENCE (4504)**

Grades 11-12

Credit 0.5

This is an introductory course for students who wish to study topics relating to the environment, its resources, quality and ethical issues. Environmental science is the study of the natural sciences in an interdisciplinary context that always includes consideration of people and how they have influenced various systems around us. It includes many aspects of biology, earth and atmospheric sciences, fundamental principles of sciences, human population dynamics, and an appreciation for the Earth and its natural resources. Units cover topics such as energy and the cycling of matter, forces of stability and change in ecosystems, terrestrial and aquatic ecosystems, conservation, waste and resource management, and identifying and remediating human impacts within the biosphere.

#### **ANATOMY AND PHYSIOLOGY (4203)**

**Grades 11-12** 

Credit 1.0

Prerequisite: Biology and Chemistry. Previous or concurrent enrollment in AP Biology is recommended.

Anatomy and Physiology is an advanced, college preparatory class that is designed to prepare students interested in medicine for a rigorous schedule in a pre-professional college program, or a professional health science program, including animal or veterinary science; athletic training and sports medicine; speech, occupational, or physical therapy nursing, etc. It is also helpful for students who need knowledge of the human body for such diverse careers as physical education or computer graphics. This is a laboratory intensive course that will develop a thorough knowledge and understanding of the anatomy and physiology of human body systems, and the study skills necessary to learn complex terminology and concepts. An in-depth dissection of a preserved cat is required. Qualified students may enroll for dual enrollment through Lincoln University. **NCAA approved course.** 

#### **AP ENVIRONMENTAL SCIENCE (4505 S1/S2)**

**GRDES 10-12** 

Credit 1.0

The AP Environmental Science course provides students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course helps students identify and analyze natural and human induced environmental problems. It enables them to learn how to assess the risks associated with these problems and evaluate alternative solutions for resolving and preventing them. Dual enrollment offerings will be determined by staff certifications. **NCAA approved course.** 

### PROJECT LEAD THE WAY: BIOMEDICAL

#### PRINCIPLES OF BIOMEDICAL SCIENCE (9401)

Grades 9-12

Credit 1.0

#### This course may be taken in place of Physical Science

In the introductory course of the PLTW Biomedical Science program, students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems.

#### **HUMAN BODY SYSTEMS (9404)**

**Grades 10-12** 

Credit 1.0

#### ◆Prerequisite: Biology or Concurrent Enrollment in Biology

The second of the rigorous and relevant four-course PLTW Biomedical Science sequence allows students to examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Exploring science in action, students build organs and tissues; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases.

#### **MEDICAL INTERVENTIONS (9405)**

**Grades 10-12** 

Credit 1.0

#### Prerequisite: Biology

The third of the rigorous and relevant four-course PLTW Biomedical Science sequence allows students to follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

#### **BIOMEDICAL INNOVATIONS (PBS) (9406)**

Grades 12

Credit 1.0

#### Prerequisite: PLTW Medical Interventions (MI)

In this capstone course, students apply their knowledge and skills to answer questions or solve problems related to the biomedical sciences. Students design innovative solutions for the health challenges of the 21st century as they work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. They have the opportunity to work on an independent project and may work with a mentor or advisor from a university, hospital, physician's office, or industry. Throughout the course, students are expected to present their work to an adult audience that may include representatives from the local business and healthcare community.

### SOCIAL STUDIES

WORLD HISTORY (2200) Grade 9

World History is the study of key events, individuals, and ideas in the development of select cultures and civilizations throughout the history of the world. Economic, geographic, and political themes will be utilized to interpret the impact of the environment on these selected cultures and civilizations. Special attention is given to the positive, lasting contributions of these cultures to our present-day way of life. **NCAA approved course.** 

-OR-

#### Pre-AP World History & Geography (2201) 😥

Grades 9-10

Credit 1.0

Credit 1.0

#### This course may be taken in place of World History

Pre-AP World History and Geography focuses deeply on the concepts and skills that have maximum value for high school, college, careers, and civic life. Three enduring ideas this social studies course is built around make it engaging and relevant: 1) **History is an interrelated story of the world.** The course explores the invisible structures and forces that shape and reflect the regions, communities, governments, economies, and cultures of humanity. These big ideas help students develop an organized and meaningful understanding of time and space. 2) **History and geography are inherently dynamic.** As historians and geographers uncover new evidence, current assumptions are challenged, and previous arguments and narratives gain complexity, nuance, and context. This course teaches students how to examine sources and data, establish inferences, and ultimately build and critique arguments. 3) **Historians and geographers are investigators.** Learning in Pre-AP World History and Geography is designed to be a disciplinary apprenticeship where students participate in the process of discovery. Students will play the role of historian and geographer by practicing the detective skills and using the tools of each field of study. **NCAA approved course.** 

#### **AP EUROPEAN HISTORY (2210)**

**Grades 10-12** 

Credit 1.0

AP European History studies the cultural, economic, political and social developments that have shaped Europe from c. 1450 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, an continuity and change over time. Dual enrollment offerings will be determined by staff certifications. **NCAA approved course.** 

U.S. HISTORY (2300)

Grades 10-12

Credit 1.0

US History is the study of United States' History from Reconstruction to the present. Major events, such as Immigration, World War I, The Great Depression, World War II, Civil Rights, The Cold War and The Vietnam War are studied from the United States' perspective, but include relevant events from World History. The state has created an optional End-of-Course (EOC) exam for this course, which may or may not be given. **NCAA approved course**.

-OR-

#### AP U.S. HISTORY (2310)

**Grades 10-12** 

Credit 1.0

AP U.S. History teaches students to compare and contrast the present with the past by surveying American culture from the Colonial Era to the present. The course involves extensive reading and intensive writing on a variety of topics. Students will also learn to take notes from formal lectures, similar to those found in college survey courses. Qualified students may also enroll dual enrollment through Lincoln University. Students seeking dual credit will need to make the request through their counselor for placement in a specific section. Dual enrollment offerings will be determined by staff certifications. **NCAA approved course.** 

#### **AMERICAN CIVIL WAR (2400)**

Grades 9-12

Credit 0.5

American Civil War examines the causes, major events, and short/long term economic, social, and political consequences of the War Between the States. The views of numerous historians since 1865 will be consulted to assist students in developing a better perspective with regards to the lasting cultural impact these crucial years have had on the United States. **NCAA approved course.** 

#### **REVOLUTION AND WAR (2403)**

Grades 9-12

Credit 0.5

Revolution and War will focus on all things military, to possible include but not be limited to, the American Revolution, French Revolution, Russian Revolution, World War I, World War II, Korean War, Vietnam War, 1991 Gulf War, Operation Iraqi Freedom, Operation Enduring Freedom, and other current conflicts. Students will investigate the causes of war and revolution. Students will look at why and how these events have impacted the world. **NCAA approved course.** 

#### **AMERICAN WEST (2408)**

Grades 9-12

Credit 0.5

American West will examine and capture all the grandeur of the West and all of the energy of its people. It is a course that probes the conflicting visions and competing values that made an American nation on this vast land. It will cover the time of the 19<sup>th</sup> century from the opening of the west with the Lewis and Clark expedition to the closing of the frontier in 1890. Areas studied will be Lewis and Clark, the Spanish influence, Native American, Trails West, Gold Rush, Railroads, Cowboys, Indian Wars, Immigration, and the closing of the frontier. **NCAA approved course.** 

#### GOVERNMENT (2111) ★EOC EXAM

**Grades 11-12** 

Credit 1.0

#### Prerequisite: US History

US Government is a one-semester course required for graduation. It is designed to give students a background of our nation's government, and explore how ideas over 200 years old still work today. The goal is to provide enough information and interest to make students active participants in our society. Topics covered include: foundations of government, US Constitution, branches of government, and political participation. The state required End-Of-Course (EOC) exam is administered upon successful completion of this course. **NCAA approved course.** 

-OR-

#### This course may be taken in place of Government.

AP U.S. Government and Politics gives students an analytical perspective on government and politics in the U.S. by studying the basic foundations and general concepts of U.S. Government along with the various institutions of government and the groups, beliefs, and ideas that constitute U.S. politics. The course explores the Constitutional underpinnings of U.S. Government, political beliefs and behavior, political parties, interest groups and mass media, public policy, civil rights and civil liberties, and institutions of national government including Congress, The Presidency, bureaucracy and the federal courts. This course prepares the student to take the AP U.S. Government and Politics Exam. Qualified students may also enroll for dual enrollment through Lincoln University. Dual enrollment offerings will be determined by staff certifications. **NCAA approved course.** 

#### THE MIDDLE EAST: PAST AND PRESENT (2409)

**Grades 11-12** 

Credit 0.5

The Middle East will primarily focus on the development of the region from 1914 to modern day. This study will include the development and contributions of Middle Eastern cultures, geographical limitations and descriptions, post-World War I colonialism, causes and consequences of the Israeli – Palestinian conflict, military conflict and the rise of state sponsored terrorism. **NCAA** approved course.

#### **LEGISLATIVE SEMINAR (2406)**

**Grades 11-12** 

Credit 0.5

Legislative Seminar examines how government really works. Students will have an opportunity to meet and to interact with our Missouri governmental leaders. This course sharpens the writing and communication skills needed in college, and emphasizes research. Students are required to spend time visiting with legislators at the capitol building. This course is offered only during the last term of the 2<sup>nd</sup> semester, 4<sup>th</sup> block time period. It will run concurrently with the annual Missouri Legislative Session. NCAA approved course.

#### **GEOGRAPHY OF ASIA, AFRICA & AUSTRALIA (2410)**

Grades 9-12

Credit 0.5

Geography of Asia, Africa & Australia focuses students' attention on the cultures of the eastern hemisphere outside the European continent. Students will learn about the physical, political, cultural and historical developments of countries within each region studied. **NCAA approved course.** 

#### **GEOGRAPHY OF NORTH & SOUTH AMERICA (2411)**

Grades 9-12

Credit 0.5

Geography of North & South America is a study of the cultural regions of North and South America. In each region, special attention is given to historical background, climate, topography, natural resources, economic development, cultural influences, and standards of living. **NCAA approved course.** 

#### **AP HUMAN GEOGRAPHY (2502)**

Grades 9-12

Credit 1.0

AP Human Geography introduces the tools of geography and then applies them to topics such as the political organization of space, agricultural and rural land use, the spatial character of industrial and economic development, and the origin, evolution, and functional character of cities as a way to understand the built environment. Student will read and write extensively on the course topics. This course prepares the student to take the AP Human Geography exam. **NCAA approved course.** 

PSYCHOLOGY (2412) GRADES 11-12 CREDIT 0.5

Psychology stresses the various schools of thought including behavioral, psychoanalytical, biological, and cognitive. Units focus on learning, intelligence, the brain, human development, memory, and the sleep cycle. **NCAA approved course.** 

SOCIOLOGY (2413) Grades 10-12 Credit 0.5

Sociology is the study of human society and social behavior. It involves looking at human behavior, which is largely shaped by the groups to which people belong and by the social interaction that will take place within those groups. The course involves studying culture, society, socialization (family, school, peer groups, etc.), social groups, recognizing the inequalities that exist among entire categories of people (social stratification), social institutions and social change. **NCAA approved course.** 

AP PSYCHOLOGY (2503) Grades 11- 12 Credit 1.0

AP Psychology looks at current and historical issues in psychology. This emphasizes reading and writing skills. This course prepares the student to take the AP Psychology Exam in May for which they may earn college credit. Qualified students may also enroll for dual enrollment college credit through Lincoln University. Dual enrollment offerings will be determined by staff certifications. **NCAA** approved course.

#### **MILITARY LEADERSHIP (2416) JCHS Only**

**Grades 11-12** 

Credit 0.5

Military Leadership is an optional elective class established between Lincoln University and Jefferson City School District and allows students to gain one free college credit hour from Lincoln University. Military Leadership allows students to understand more about the challenges of leadership, the US military, and the overall college experience. Reserve Officer Training Corps (ROTC), time & stress management, setting goals, military drill and ceremony, a day in the life of a college student, military customs/courtesies, and health/fitness. Students will also have the option to participate in Lincoln University ROTC's physical training program as well as join Lincoln University Cadets in a variety of other ROTC functions. This class is designed to help students better understand leadership, the military, ROTC, and college life so they can make informed decisions about their future, as well as become better leaders within their community. Classes will be held two days a week at Soldier's Hall on the campus of Lincoln University, while the remaining three days a week will be held at the high school. This class is not a part of the recruiting efforts of the US military and requires an application to be accepted.

### WORLD LANGUAGES

FRENCH I (5112) Grades 9-12 Credit 1.0

French I introduces students to the French language and the cultures of the people who speak it. The primary focus of this class is acquiring the tools for total communication - listening, speaking, reading, and writing. Correct pronunciation is stressed with a study of the spelling patterns governing this. Students are encouraged to use the skills learned through classroom and individual activities. **NCAA approved course.** 

FRENCH II (5113) Grades 10-12 Credit 1.0

#### Prerequisite: French I

French II is a continuation of the beginning course with more emphasis on the reading and writing skills. Oral activities give the student opportunities to express their increased knowledge of vocabulary and grammatical structures to better communicate in French. The reading of a French play during the second term gives the students not only more confidence in French language abilities, but also more current vocabulary and awareness of cultural similarities or differences. **NCAA approved course.** 

FRENCH III (5114) Grades 10-12 Credit 1.0

#### Prerequisite: French II

French III emphasizes the four skills of listening, speaking, reading, and writing on an advanced level. A further introduction to French culture and thought will be achieved through a survey of original literature. **NCAA approved course.** 

FRENCH IV (5115) Grades 10-12 Credit 1.0

#### ◆Prerequisite: French III

French IV contains a review of all previously learned grammar, with new grammar being introduced. The philosophy of teaching used in the first three years is continued with more reading and comprehension through the use of French literature and cinema. **NCAA approved course.** 

SPANISH I (5410) Grades 9-12 Credit 1.0

Spanish I exposes students to Spanish from the first day they enter the class. The skills of listening, speaking, reading, and writing Spanish are emphasized along with correct, precise pronunciation on the basic level. Cultural items related to literature, history, and art of the Spanish-speaking world form a part of the course to reinforce communicative tasks and to promote cultural awareness.

Native speakers can advance without mandatory prerequisite with department approval. NCAA approved course.

SPANISH II (5422) Grades 10-12 Credit 1.0

#### Prerequisite: Spanish I

Spanish II reinforces and expands of the Spanish I experience. Students' knowledge of basic vocabulary and grammatical structures are broadened to empower students to communicate at the basic level. Cultural items will be explored to enhance their understanding of the Spanish-speaking world and their own culture. **Native speakers can advance without mandatory prerequisite with department approval. NCAA approved course.** 

SPANISH III (5423) Grades 10-12 Credit 1.0

#### Prerequisite: Spanish II

Spanish III expands vocabulary and grammatical structures on a more sophisticated level so that students can become proficient at the beginning-intermediate level. Students approximate native-like pronunciation. Through comparisons of English and Spanish, students develop an appreciation for the nature of language. Broad cultural perspectives are analyzed. After this level, students are prepared for the full-immersion experience of Spanish IV. **Native speakers can advance without mandatory prerequisite with department approval. NCAA approved course.** 

SPANISH IV (5424) Grades 10-12 Credit 1.0

#### ◆Prerequisite: Spanish III

Spanish IV is the last formative course in the Spanish program. All major grammatical concepts from levels I through III are reviewed. Students acquire a comprehensive perspective of the Spanish language through exposure to critical, upper-level grammatical concepts. Students utilize authentic sources to expose students to the language and the culture. Spanish is the primary language spoken in the class. Native speakers can advance without mandatory prerequisite III and/or department approval. NCAA approved course.

SPANISH V (5426) Grades 11-12 Credit 1.0

Prerequisite: Spanish IV and/or recommendation from Spanish III or IV teacher

Spanish V focus will be on continued proficiency in the language. Simplistic grammatical structures will be reviewed, followed by the study of more advanced/complete structures. Native speakers can advance without mandatory prerequisite IV and/or department approval. NCAA approved course.

### PHYSICAL EDUCATION

#### **GIRLS PHYSICAL EDUCATION (8120)**

Grades 9-12

Credit 0.5

Girls Physical Education is a combination of individual and team activities with emphasis on fundamentals, sportsmanship, and active participation. Activities will include but not be limited to basketball, soccer, volleyball, ultimate football, ultimate frisbee, speedball, archery, table tennis, badminton, golf, and pickleball.

#### **BOYS PHYSICAL EDUCATION (8110)**

Grades 9-12

Credit 0.5

Boys Physical Education is a combination of individual and team activities with emphasis on fundamentals, sportsmanship, and active participation. Activities will include but not be limited to basketball, soccer, volleyball, ultimate football, ultimate frisbee, speedball, archery, table tennis, badminton, golf, and pickleball.

#### Unified Physical Education (8118)

Grades 9-12

Credit 0.5

Unified Physical Education is a combination of individual and team activities with emphasis on fundamentals, sportsmanship, and active participation. Unified Physical Education is a concept for bringing students with and without disabilities together, as equals, in a physical education setting where all students earn physical education credit, thus putting all students on equal footing. Activities include but are not limited to basketball, bocce, softball, improving flexibility, performing agility exercises and aerobic conditioning.

P.E. Wellness (8190) Grades 10-12 Credit 0.5

PE Wellness is a community-based course that features hands-on activities for health education and physical wellness. Counselor recommendation is required.

#### **ATHLETIC ADVANCED STRENGTH TRAINING (8181)**

Grades 9-12

Credit 1.0

Students must be a school athlete or have the prerequisites of Body Conditioning I and Body Conditioning II to enroll

Advanced Strength Training is designed for the athlete who wishes to improve their performance through the use of strength training and agilities. Students should expect a demanding routine of daily lifting, flexibility, and conditioning.

#### **BODY CONDITIONING I (Co-ed) (8130)**

Grades 9-12

Credit 0.5

Body Conditioning I consists of using weight lifting equipment, improving flexibility, performing agility exercises and aerobic conditioning. Students will learn the fundamentals of weight lifting, flexibility, and improving body strength. Students will be taught and practice safe lifting techniques. Each student will develop fitness goals and individual workouts. They will learn about safety in spotting and breathing mechanics.

#### **BODY CONDITIONING II (Co-ed) (8131)**

Grades 9-12

Credit 0.5

◆Prerequisite: Body Conditioning I unless you are a school athlete

Body conditioning II is intended as a follow-up course to Body Conditioning I. In this course, the students will gain increased knowledge and experience in body conditioning. The students will train using plyometrics, advanced cardiovascular conditioning, and flexibility. They will also learn how to create their own workout.

### **HEALTH**

HEALTH (8210)

Grades 9-12

Credit 0.5

Health students will gain knowledge to make healthy decisions regarding their personal health and wellness that confronts society today. Instruction includes life management skills, disease prevention and control, mental health, sex education, Tobacco, Alcohol and Other Drugs (TAOD), nutrition, physical fitness, and health related careers. This would fulfill the 0.5 credit of health required to graduate.

#### **ATHLETIC TRAINING & NUTRITION (8211)**

Grades 9-12

Credit 0.5

◆Prerequisites: Successful completion of health, current involvement in the school athletic program, or be physically involved in an activity outside of school

Athletic Training and Nutrition helps physically active students gain the awareness and knowledge of how nutrition, biomechanics, and psychology impact their performance. This will help them to make decisions that will enhance their performance and health. Instruction includes sports nutrition, sports medicine, sports psychology, biomechanics, and its effect on performance, and the prevention of injury and unhealthy habits that might occur during the training process.

### DRIVERS EDUCATION

#### **DRIVERS EDUCATION (7401 & 7403)**

Grades 9-12

Credit 0.5

◆Prerequisite: State law requires that the student have reached the age of 15 (or older) at the time, class begins

Driver's Education is designed to give the student experience and instruction in the classroom, on the closed course driving range, and on the streets in and around Jefferson City.

### **BUSINESS & MARKETING**

**ACCOUNTING I (7210)** 

Grades 10-12

Credit 1.0

Accounting I will provide a basic understanding of accounting principles as well as help students develop a business vocabulary. Students will learn how to analyze business transactions; record those transactions in journals, transfer information to various ledgers, and prepare financial statements for both a proprietorship and a corporation using both manual and automated systems.

#### **ACCOUNTING II (7211)**

**Grades 11-12** 

Credit 1.0

Prerequisite: Accounting I

Accounting II is an advanced course designed for any student who is planning a career in accounting or planning on enrolling in business courses at the post-secondary level. Journalizing, posting, and preparation of financial statements will be covered for a departmentalized business. Emphasis is also placed with a mixture of cost accounting and managerial accounting, including determining inventory cost and turnover ratios. Students will complete accounting simulations and be introduced to an automated accounting system.

BUSINESS LAW I (7241) Grades 9-12 Credit 0.5

Business Law I helps develop an understanding of how law affects you in everyday living and to gain knowledge of legal terms and forms. Several phases of law covered are as follows: ethics and sources of laws, the dual court system, trials, criminal law, and tort law. From a study of Business Law I, students should gain a genuine respect and an intelligent appreciation for the law that affects them both at home and at work.

## **BUSINESS LAW II (7242)**

**Grades 10-12** 

Credit 0.5

## Prerequisite: Business Law I

Business Law II helps develop an understanding of how law affects you in everyday living and to gain knowledge of legal terms and forms. Several phases of law covered are as follows: contracts, real estate law, personal property law, and probate law. From a study of Business Law II, students should gain a genuine respect and an intelligent appreciation for the law that affects them both at home and at work.

## **CAREER CONNECTIONS (7250)**

Grades 9-12

Credit 0.5

Career Connections students will create an individual career profile through the scoring of various inventories. Topics covered include self-esteem, goal setting, conflict resolution, sexual harassment, substance abuse, ethics, diversity, and the job search process. Various textbooks, current articles, career videos, guest presenters, online career information, and other creative means will be used to help students search for the most satisfying career for their basic personality type.

## **CAREER CONNECTION/WORK (7252)**

**Grades 10-12** 

Credit 0.5

## Prerequisite: Career Connections

Career Connections Work students who have successfully completed Career Connections are eligible to go to work for school credit. Students will turn in a weekly time sheet to their school supervisor. The employer will evaluate and submit grade sheets to the school supervisor.

## CYBERSECURITY (7268S1/S2)

**Grades 10-12** 

Credit 1.0

Cybersecurity lays a foundation for understanding cyber law and policy, Linux, networking technology basics, risk assessment, cryptography, and a variety of cybersecurity tools-all the essential knowledge and skills needed to begin a future in the cybersecurity workforce. Not only does Cybersecurity introduce the breadth of cybersecurity concepts and skills to students, but it also prepares them to verify their technical know-how through the CompTIASecurity+ certification.

WEB DESIGN I (7225) Grades 9-12 Credit 0.5

Web Design I is a project-based course designed to teach skills and concepts needed to create and edit web pages. Adobe Photoshop and Dreamweaver software is utilized to integrate text and graphic images into an independent cumulative website project. Students will learn HTML code, and are expected to independently utilize problem-solving skills to troubleshoot during the web design process. It is recommended that a student have a C or higher in the following prerequisite classes.

## WEB DESIGN II (7227) Grades 10-12 Credit 0.5

## Prerequisite: Web Design I

Web Design II is a course that will allow students the opportunity to increase multimedia skills developed in the Web Design I class. Students will learn advanced web design concepts to create Web-based movies, animation, and websites using Adobe Animate and ActionScript. Adobe Photoshop will be used to edit digital images and photos.

## **COMPUTER APPLICATIONS (7221)**

Grades 9-12

Credit 0.5

Computer Applications students will utilize word processing and spreadsheet programs to demonstrate content knowledge and depth of understanding. This course is designed to provide students learning opportunities to explore and discover the features in both programs. Utilizing features of word processing, students will demonstrate the ability to insert and format text, create tables and develop documents through mail merge. Students will use spreadsheet programs to incorporate basic formulas and advanced functions as well as creating multiple chart types. Images will be inserted and formatted on a variety of work ranging from company logos to clip art graphics.

## **DESKTOP PUBLISHING (7224)**

Grades 9-12

Credit 0.5

Desktop Publishing utilizes Adobe InDesign, one of the most widely applied desktop publishing software applications in business today. The class will concentrate on writing, editing, and designing professional quality publications. Students will create a portfolio that will integrate text, photos and graphics to create business cards, letterheads, flyers, advertisements, brochures, newsletters, and other personal and business documents. The Windows operating system is utilized, along with Adobe Photoshop for photo and graphics editing, and Microsoft Word for word processing. Digital cameras and a flatbed scanner are available for use for image and photo integration with projects.

## **DIGITAL PHOTOGRAPHY (7230)**

**Grades 10-12** 

Credit 0.5

## ◆Prerequisites: Desktop Publishing OR Web Design I

Digital Photography focuses on teaching skills in photography techniques including composition, lighting, editing, special effects, and the use of photographs in various media (i.e., print, web, and video). Curriculum activities will focus on a project or theme, active and experiential learning, and students working collaboratively. Students will develop a portfolio that allows them to explore their personal interests, employment opportunities and educational options.

#### **ENTREPRENEURSHIP A (7253)**

**Grades 10-12** 

Credit 0.5

Entrepreneurship A begins with an examination of the characteristics and skills possessed by successful entrepreneurs in history. Students will understand the importance of business in our economic system, its contributions to and its functions in marketing activities, such as determining product, setting price, selecting distribution channels, and determining appropriate methods of promotion.

## **ENTREPRENEURSHIP B (7254)**

**Grades 11-12** 

Credit 0.5

## Prerequisite: Entrepreneurship A

Entrepreneurship B students will apply principles learned in Entrepreneurship A by starting their own corporation through the Business Education Department. Local business consultants will conduct interviews to appoint department heads and the company president. Each student will be a member of the production, marketing, finance, public relations, or human resources departments. Departments will issue stock, open a bank account, conduct market research, maintain all financial records, and liquidate the corporation. Throughout this process the business consultants visit the class once per week to guide the students through the operation of the business, offering advice and assistance. Along with running the corporation, each student will create a business plan for a service business of his/her choice.

## **INTRODUCTION TO BUSINESS (7249)**

Grades 9-12

Credit 0.5

Introduction to Business is a course designed to introduce students to the concepts of business and leadership to help prepare them for their roles as employees, employers, citizens and leaders within their community while thinking like an entrepreneur. Students will look into business structures and how business impacts the economy in both profit and non-profit organizations. Students will also be given the opportunity to unlock their leadership potential through the development of essential skills necessary for effective leadership.

## **LEGAL TOPICS (7265)**

**Grades 10-12** 

Credit 0.5

## Prerequisite: Business Law I

Legal Topics concepts help students develop an understanding of how the law affects people in everyday living and to gain knowledge of legal terms and forms. Several phases of law covered are as follows: Juvenile Law, Legal Business Ownership, Consumer Law, Employment Law, and Immigration Law. From a study of Legal Topics, students should gain a genuine respect and an intelligent appreciation for the law that affects them both at home and at work.

## PERSONAL FINANCE (7280)

**Grades 11-12** 

Credit 0.5

Personal Finance introduces the foundational skills necessary to manage money today and in the future. This course teaches students essential skills in such areas as decision-making, career-building, income sources, budgeting, banking services, credit, insurance, and investing. This course is a high school graduation requirement.

## INDUSTRIAL TECHNOLOGY

ELECTRICITY (7140) Grades 9-12 Credit 0.5

Electricity provides the student with the opportunity to study the fundamentals of electricity and electronics. Areas covered include: basic electrical circuits, basic electrical/electronic theory, symbols, basic programming and terminology. Residential house wiring is also studied. Students will develop fundamental electrical skills after completing classroom instruction, which may lead to future careers in this field.

## **METALS TECHNOLOGY I (7150)**

Grades 9-12

Credit 0.5

Metals Technology I is designed to introduce students to the fundamentals of working safely and efficiently with both hand and power metal working tools. These topics and additional topics to include problem solving, project design and planning, general hand tool and machine safety, welding, and finishing. Students will construct core projects designed to develop fundamental metalworking skills after completing classroom instruction. ALL students will be expected to reimburse the school for expendable materials used. Each student will be required to furnish and wear safety glasses during laboratory work.

## **METALS TECHNOLOGY II (7151)**

Grades 9-12

Credit 0.5

Prerequisite: Metals Technology I

Metals Technology II builds upon the foundation of Metalworking I with an expansion of theories and principles of problem solving, project design, hand tool/machine use/safety, welding, and finish techniques. Students will construct projects designed to further their metalworking techniques. ALL students will be expected to reimburse the school for expendable materials used. Each student will be required to furnish and wear safety glasses during lab work.

WOODWORKING I (7160) Grades 9-12 Credit 0.5

Woodworking 1 is designed to introduce students to the fundamentals of working safely and efficiently with both hand and power woodworking tools. These topics and additional topics to include problem solving, project design and planning, general hand tool and machine safety, and sanding/finishing techniques. Students will construct core projects designed to develop fundamental woodworking skills after completing classroom instruction. All students will be expected to reimburse the school for expendable materials used. Each student will be required to furnish and wear safety glasses during laboratory work.

## **WOODWORKING II (7161)**

Grades 10-12

Credit 0.5

Prerequisite: Woodworking I

Woodworking II builds upon the foundation of Woodworking I with an expansion of theories and principles of problem solving, project design, hand tool/machine use/safety, and sanding/finishing techniques. Students will construct projects designed to further their woodworking techniques. ALL students will be expected to reimburse the school for expendable materials used. Each student will be required to furnish and wear safety glasses during laboratory work.

## PROJECT LEAD THE WAY: ENGINEERING

## **INTRODUCTION TO ENGINEERING DESIGN (7240)**

Grades 9-12

Credit 1.0

This PLTW introductory course to engineering is designed for 9th or 10th grade students; the major focus of IED is the design process and its application. Through hands-on projects, students apply engineering standards and document their work. Students use industry standard 3D modeling software to help them design solutions to solve proposed problems, document their work using an engineer's notebook, and communicate solutions to peers and members of the professional community.

## **PRINCIPLES OF ENGINEERING (7246)**

**Grades 10-12** 

Credit 1.0

The second of the rigorous and relevant four-course PLTW Engineering sequence exposes students to major concepts they will encounter in a post-secondary engineering course of study. Topics include mechanisms, energy, statics, materials, and kinematics. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, document their work and communicate solutions.

## **CIVIL ENGINEERING & ARCHITECTURE (7244)**

**Grades 10-12** 

Credit 1.0

Civil Engineering and Architecture is the third of the rigorous and relevant four-year PLTW sequence. It is the study of the design and construction of residential and commercial building projects. The course includes an introduction to many of the varied factors involved in building design and construction including building components and systems, structural design, storm water management, site design, utilities and services, cost estimation, energy efficiency, and careers in the design and construction industry. Civil Engineering and Architecture is a high school level course that is appropriate for 10th - 12th grade students interested in careers related to civil engineering and architecture. Other than concurrent enrollment in college preparatory mathematics and science courses, this course assumes no previous knowledge: However, students are encouraged to take the first two engineering courses in the PLTW sequence.

## **ENGINEERING DESIGN & DEVELOPMENT (7295)**

**Grades 11-12** 

Credit 1.0

## ◆Prerequisite: Two of the three previous engineering PLTW courses

The knowledge and skills students acquire throughout PLTW Engineering come together in EDD as students identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing EDD ready to take on any post-secondary program or career.

## **FAMILY & CONSUMER SCIENCE**

## **FOODS & NUTRITION I (7320)**

Grades 9-12

Credit 0.5

Foods and Nutrition I is an introductory course in foods that includes the study of nutrition, basic terminology and equipment, the principles of cookery, and the skills involved in cooking through laboratory experience. Emphasis is given to the study of fruits, vegetables, grains, quick breads, protein foods and meal planning for a healthy diet.

## **FOODS & NUTRITION II (7321)**

Grades 9-12

Credit 0.5

## Prerequisite: Foods and Nutrition I

Foods and Nutrition II is a culinary course that provides students with the opportunity to analyze good nutrition and wellness, investigate different eating patterns, develop culinary skills, in egg, dairy, sandwich preparation, protein, and desserts as well as meal planning for a healthy diet.

## WORLD FOODS (7322)

Grades 9-12

Credit 0.5

## Prerequisite: Foods and Nutrition I

World Foods is a culinary arts course that will give students the opportunity to investigate cultures, customs, and lifestyles throughout the world as well as aid in developing culinary skills in creating global cuisine.

## **TEXTILES FOR LIVING I (7350)**

Grades 9-12

Credit 0.5

Textiles for Living I encompass the basic skills needed in sewing and clothing care. Attention will be given to working with fabrics, the use of equipment, patterns, sewing machines, and basic hand sewing. At least four projects will be completed and students will learn the elements of design, fibers, and basic clothing functions. This course is recommended for all students considering a career in Fashion Merchandising, Fashion Design, retail clothing sales or any other clothing- related field. There is a cost to the student for taking this course - this cost includes sewing supplies, patterns, fabric, and notions.

## **TEXTILES FOR LIVING II (7351)**

**Grades 10-12** 

Credit 0.5

## Prerequisite: Textiles for Living I

Textiles for Living II gives the student an opportunity to develop advanced skills in sewing construction. The student will construct projects with a higher degree of difficulty than in Textiles I. There is a cost to the student for taking this course - this cost includes sewing supplies, patterns, fabric, and notions.

## **CHILD DEVELOPMENT (7331)**

## Grades 9-12

Credit 0.5

Child Development is the study of the development of children. Areas of study will include prenatal care and nutrition, birth, birth defects, developmental stages and care of the young child. Infant simulators will be utilized.

## THE SCHOOL AGE CHILD (7332)

**Grades 12** 

Credit 0.5

The School Age Child is designed for students interested in becoming a teacher or childcare professional. The students will study the development of the school age child. They will interpret reasons for individual differences in children and understand their impact on learning. Students will have an opportunity to design and implement an age and developmentally appropriate learning activity.

## **INTERIOR DESIGN & DECORATING (7370)**

Grades 9-12

Credit 0.5

Interior Design and Decorating teaches the relationship of art principles to the design of the home and its furnishings. Attention will be given to architectural styles and furniture styles as well as physical, psychological and social influences on housing needs and choices. The study will be reinforced by practical projects and learning activities. This course is recommended for all students who will someday own, rent, or be responsible for a house or apartment. It is especially recommended for the student considering a career in housing, architecture, real estate or interior design.

# FINE ARTS / VISUAL ARTS

## **INTRODUCTION TO ART (6109)**

Grades 9-12

Credit 0.5

Introduction to Art is a course that introduces the basic fundamentals of art. Emphasis is on the basics necessary for success with two-dimensional and three-dimensional art skills. Units will be based on the elements of art. Independent problem-solving skills, and basic reading and writing skills are necessary for success in this course.

## **INTRODUCTION TO PHOTOGRAPHY (7229)**

Grades 9-12

Credit 0.5

Introduction to Photography students will study the creative art processes of photography with information about the history, aesthetics, and criticism of the photographic media. Students will explore photographic approaches, photographers, and techniques of digital photography including creative experimentation with photo editing and digital enhancement of photographs. Students will also develop an appreciation of contemporary uses of photography. Students will produce a portfolio of their work to include daily assignments, formal reports, special projects, and their top photos taken during the course based on the composition principles learned.

## **THREE-DIMENSIONAL ART (6118)**

Grades 9-12

Credit 0.5

Three-Dimensional Art is a course to introduce the methods and materials used to create sculptures and three-dimensional art pieces. Projects/units may include the following materials and the methods needed to successfully complete those projects: paper building, basket weaving, wood assemblage, mobiles, paper mache, and other non- conventional objects used to create sculptures. This class will introduce well-known sculpture artists and explore their techniques as well as cover a brief history of sculpture.

DRAWING I (6128) Grades 9-12 Credit 0.5

## ◆Prerequisite: Intro to Art

Drawing I is a semester course designed for the further development of art skills related to two-dimensional artwork. Students will develop intermediate drawing skills using a variety of media, such as graphite, charcoal, oil pastels, colored pencils, etc. Units will be based on the elements and principles of art and design. Independent problem-solving skills, creative and critical thinking skills, and basic reading and writing skills are necessary for success in this course.

DRAWING II (6129) Grades 10-12 Credit 0.5

## Prerequisite: Drawing I

Drawing II is an advanced visual art course designed to enhance the knowledge and skill of the art student through increased exposure to the elements of art, principles of art, practice/use of drawing skills, art history, and personal expression. Emphasis will be on exploring conceptual subject matter using a variety of advanced drawing techniques and media.

PAINTING I (6130) Grades 9-12 Credit 0.5

## Prerequisite: Intro to Art

Painting I is a semester course designed for the further development of art skills related to two-dimensional artwork. Students will develop intermediate painting skills using acrylic paint. Units will be based on the elements and principles of art and design. Independent problem-solving skills, creative and critical thinking skills, and basic reading and writing skills are necessary for success in this course.

PAINTING II (6131) Grades 10-12 Credit 0.5

## Prerequisite: Painting I

Painting II is an advanced visual art course designed to enhance the knowledge and skill of the art student through increased exposure to the elements of art, principles of art, practice/use of drawing and painting skills, art history, and personal expression. Emphasis will be on exploring conceptual subject matter using a variety of advanced painting techniques.

CERAMICS I (6115) Grades 10-12 Credit 0.5

Ceramics I include hand building and wheel throwing, glazing and firing of clay products. The historical background of ceramics and sculpture will be studied as it applies to the students work.

CERAMICS II (6116) Grades 10-12 Credit 0.5

## ◆Prerequisite: Ceramics I

Ceramics II is an in-depth study of the techniques taught in Ceramics I. The course includes hand building and wheel throwing, with an emphasis on the wheel. Students will understand the loading of the kiln for bisque and glaze firing.

CERAMICS III (6123) Grades 10-12 Credit 0.5

## Prerequisite: Ceramics I & II

Ceramics III is a more independent study of the techniques learned in Ceramics I and II. This course used a more conceptual approach, which allows for critical thinking, exploratory methods (including hand-building and wheel throwing), and creative independence. Different types of clay will be explored as well as an introduction to proper firing and glazing.

## AP SENIOR STUDIO (6218S1/S2 )

◆Prerequisite: Introduction to Art, Drawing I & II, and Painting I & II

Grade 11-12 Credit 1.0

AP (Advanced Placement) Drawing is a program administered by the College Board to provide highly motivated high school students with an opportunity to earn college credit in art with a drawing focus. Students will submit a drawing portfolio to the College Board with work that focuses on the use of mark-making, line, surface, space, light and shade, and composition. AP Drawing is not based on a written exam; instead, students submit a portfolio in May to include five selected works (demonstrating drawing skills and synthesis of materials, processes, and ideas) and 15 sustained investigation images (demonstrating drawing skills, practice, experimentation, and revision, as well as synthesis of materials, processes, and ideas) based on an investigation of the student's choosing

# FINE ARTS / MUSIC

#### **HISTORY OF JAZZ, POP & ROCK (6211)**

Grades 9-12

Credit 0.5

This course introduces students to the history, theory, and genres of music. The course explores the history of music, from the surviving examples of musical forms through to contemporary pieces from around the early 1920 to current music. We will visit a variety of genres including: jazz, blues, gospel, soul, Motown, folk, bluegrass, country, the evolution of rock and roll and many more.

## **INTRODUCTION TO MUSIC THEORY (6210)**

**Grades 10-12** 

Credit 0.5

Introduction to Music Theory is designed to give musically interested students basic technical knowledge of reading music and the basic construction of "Western Art Music." Emphasis is placed on the development of skills necessary to recognize, understand, and describe the basic material and Processes of music that are heard or presented in a score. Fundamental aural, analytical and compositional skills are used with both listening and written exercises. This course provides a secure basis for Advanced Music Theory.

## **MUSIC APPRECIATION (6410)**

Grades 9-12

Credit 0.5

Music Appreciation is a non-auditioned and non-performance class for students. The purpose of the class is to provide an overview of music without the responsibility of singing/performing. Music Appreciation allows students to explore cultural and historical elements of music. Students will be introduced to a variety of musical skills for performance and critical listening. This course gives non-performance oriented students the opportunity to receive a fine arts credit through the Vocal Music program.

## **AP MUSIC THEORY (6219S1/S2)**

**Grades 11-12** 

Credit 1.0

## Prerequisite: Introduction to Music Theory or teacher approval

AP Music Theory is an introductory college music theory course that covers topics such as musicianship theory, musical materials, and procedures. Musicianship skills including dictation and listening skills, sight and singing, and harmony are an important part of this course. Students develop the ability to recognize, understand, and describe basic materials and processes of tonal music that are heard or presented in a score. Development of aural (listening) skills is a primary objective. Performance is also part of the curriculum through the practice of sight-singing. Students learn basic concepts and terminology by listening to and performing a wide variety of music. Notational skills, speed, and fluency with basic materials emphasized.

# FINE ARTS / PERFORMING ARTS

DRAMA I (6310) Grades 9-12 Credit 0.5

Drama I is an introductory performance course. Students will develop basic theatrical skills and will study the historical background of theater. Performances will include: pantomime, improvisation, monologues, and duet/triple/quad acting scenes. Since memorization is the foundation of drama; all performances will be memorized.

DRAMA II (6320) Grades 9-12 Credit 0.5

## Prerequisite: Drama I

Drama II, a fast-paced performance course, relies upon mastery of vocal, analytical, and movement techniques. Focus is on the student's area of interest whether it is acting, directing, or designing. A variety of performances are included: monologues, duets, musical pantomimes and classical script analysis. Students will write and perform original scripts and will perform published selections. Course work involves self-awareness, character alignment, and text analysis, as well as in-depth characterization activities. Performance is the focus with an emphasis on analysis.

## Technical Theatre (6325) Grade 9-12 Credit 0.5

Technical Theatre would be a class in which interested students would learn the technical elements needed in order for a theatre production to become a reality. We would analyze design choices and how directors and designers make them, and then would learn to implement designs in the following areas: lights, sound, costuming, props and set. We would also learn how to build some rudimentary things for a set (flats, platforms etc.), and learn the basic tools used backstage. We would also learn the basics of stage management and what a stage manager's role would be. Would you get hands- on experience by working on backstage elements for mainstage shows currently in production for the schools' theatre programs, which would support our growing theatre program by giving us more time during rehearsal periods.

## **COMPETITIVE INTERPRETATION (6330)**

Grades 9-12

Credit 1.0

Competitive Interpretation is a general study of the techniques of interscholastic forensics and individual events. Students explore a variety of performance styles such as humorous and dramatic interpretation, duo interpretation, poetry, prose, storytelling, original oratory, informative, and extemporaneous speaking. Participation in the interscholastic Debate/Forensics program is a requirement and serves as the only prerequisite to taking this course. The course may be replaced for additional credit. Students in their first two years are required to take this course, but may take it beyond the two years for specialized training if their schedule permits. SPECIAL NOTE: This requirement may be waived by the instructor under special circumstances.

As part of this class, students will participate in Missouri State High School Activities competitions. Students that participate in MSHSAA Activities are subject to drug testing per our JC Schools Drug Testing Policy. The policy can be viewed at your schools website: <a href="https://jeffersoncity.rschoolteams.com">https://jeffersoncity.rschoolteams.com</a>.

## **COMPETITIVE SPEECH AND DEBATE (6331)**

Grades 9-12

Credit 1.0

Competitive Speech and Debate is designed to provide students with a unique and enriching educational experience that fosters critical thinking, effective communication, research skills, and a deep understanding of important social and global issues. Competitive Speech and Debate has long been recognized as a valuable educational activity, and this course aims to introduce high school students to the world of debate while nurturing their intellectual growth and preparing them for success in various aspects of their academic and personal lives.

CONCERT CHOIR (6440) Grades 9-12 Credit 1.0

Concert Choir is a performance-based choral ensemble for 9th-12th grade students. Concert Choir explores choral music from a wide variety of cultures and time periods through study and performance. The core curriculum emphasizes the basics of vocal technique, sight-reading, music theory, and music history. This ensemble performs numerous times throughout the school year for both school and community. Certain performances are required, and grades are directly affected by participation in these required performances.

As part of this class, students will participate in Missouri State High School Activities (MSHSAA) competitions. Students that participate in MSHSAA Activities are subject to drug testing per our JCSD Drug Testing Policy. The policy can be viewed at your schools website: <a href="https://capitalcity.rschoolteams.com">https://capitalcity.rschoolteams.com</a>.or, <a href="https://ieffersoncity.rschoolteams.com">https://ieffersoncity.rschoolteams.com</a>.

## BELLA VOCE (64421S1/S2)

Grades 9-12

Credit 1.0

Bella Voce is a performance based choral ensemble composed of 9-12 grade treble voices. Entrance to the group is with choral directors' approval and consent. The choir performs numerous times throughout the school year for both school and community, with the majority of performances required as part of the grading components. In performance classes, grades will be directly and significantly affected by participation in required concerts and other activities. Whether a course audition is required is based upon the director's discretion. Mid-year changes are possible, subject to schedule limitations.

As part of this class, students will participate in Missouri State High School Activities (MSHSAA) competitions. Students that participate in MSHSAA Activities are subject to drug testing per our JCSD Drug Testing Policy. The policy can be viewed at your schools website: <a href="https://capitalcity.rschoolteams.com">https://capitalcity.rschoolteams.com</a> or <a href="https://jeffersoncity.rschoolteams.com">https://jeffersoncity.rschoolteams.com</a> or <a href="https://jeffersoncity.rschoolteams.com">https://jeffersoncity.rschoolteams.com</a>

CHORALE (6450) Grades 10-12 Credit 1.0

## ◆Prerequisite: Audition in the spring of the previous school year

Chorale is an upper-level performance opportunity offered to experienced 10th-12th grade students who are accomplished in vocal performance. This class is designed to be the advanced placement class for the Vocal Music Program. Chorale explores choral music from a wide variety of cultures and time periods through study and performance. The core curriculum emphasizes the basics of vocal technique, sight-reading, music theory, and music history. This ensemble performs numerous times throughout the school year for both school and community. Certain performances are required, and grades are directly affected by participation in these required performances.

As part of this class, students will participate in Missouri State High School Activities (MSHSAA) competitions. Students that participate in MSHSAA Activities are subject to drug testing per our JCSD Drug Testing Policy. The policy can be viewed at your schools website: <a href="https://capitalcity.rschoolteams.com">https://jeffersoncity.rschoolteams.com</a>. or <a href="https://jeffersoncity.rschoolteams.com">https://jeffersoncity.rschoolteams.com</a>.

CONCERT BAND (6511) Grades 9-12 Credit varies: 0.5 or 1.0

Concert Band is a performance based instrumental class for students, 9-12. All members of the Concert Band are not required, but are highly encouraged to begin or continue private study outside of the school setting. Students from this ensemble will have the opportunity to audition for the Symphonic Band upon completion of this class. All members of Symphonic and Concert Bands are required to march unless they are a fall athlete or have a medical excuse. It is also possible to do both Marching Band and Athletics at the same time.

As part of this class, students will participate in Missouri State High School Activities competitions. Students that participate in MSHSAA Activities are subject to drug testing per our JCSD Drug Testing Policy. The policy can be viewed at your schools website: <a href="https://capitalcity.rschoolteams.com">https://capitalcity.rschoolteams.com</a> or <a href="https://ieffersoncity.rschoolteams.com">https://ieffersoncity.rschoolteams.com</a>.

SYMPHONIC BAND (6512) Grades 9-12 Credit 0.5

Symphonic Band is a performance based instrumental ensemble designed for advanced placement. Admission into the class is by blind audition in the spring and will utilize the MMEA/MBA All-State Audition cycle for the upcoming school year. A balanced instrumentation is necessary for the group; therefore, selection is based off of a blind audition, dependability, desire to perform at a high level and academic standing. All members of the Symphonic Band are not required, but are highly encouraged to begin or continue private study on the outside. All members of the Symphonic and Concert Bands are required to march unless they are a fall athlete or have a medical excuse. **NOTE:** It is possible to do both marching band and athletics at the same time.

As part of this class, students will participate in Missouri State High School Activities competitions. Students that participate in MSHSAA Activities are subject to drug testing per our JCSD Drug Testing Policy. The policy can be viewed at your schools website: <a href="https://capitalcity.rschoolteams.com">https://capitalcity.rschoolteams.com</a> or <a href="https://jeffersoncity.rschoolteams.com">https://jeffersoncity.rschoolteams.com</a>.

MARCHING BAND (6531) Grades 9-12 Credit 0.5

Marching Jay Band is a competitive group. All band students are expected to participate in the class, beginning their freshmen year, unless they are a fall athlete or have a physical disability which would prohibit their participation. June music camp and July/August marching camp, as well as school rehearsals and performances, are required. It is possible to do both marching band and athletics at the same time.

As part of this class, students will participate in Missouri State High School Activities competitions. Students that participate in MSHSAA Activities are subject to drug testing per our JCSD Drug Testing Policy. The policy can be viewed at your schools website: <a href="https://capitalcity.rschoolteams.com">https://capitalcity.rschoolteams.com</a> or <a href="https://jeffersoncity.rschoolteams.com">https://jeffersoncity.rschoolteams.com</a>.

#### **CONCERT ORCHESTRA (6521)**

Grades 9-12

Credit 1.0

## Prerequisite: Students must have earned a passing grade in orchestra the previous year

Concert Orchestra will continue to develop and enhance the student's technical skills and musical concepts through intermediate to advanced music literature selected from a variety of periods. Certain performances are required. In performance classes, grades will be directly affected by participation in required concerts and other activities.

As part of this class, students will participate in Missouri State High School Activities competitions. Students that participate in MSHSAA Activities are subject to drug testing per our JCSD Drug Testing Policy. The policy can be viewed at your schools website: <a href="https://capitalcity.rschoolteams.com">https://capitalcity.rschoolteams.com</a> or <a href="https://jeffersoncity.rschoolteams.com">https://jeffersoncity.rschoolteams.com</a>.

## **SYMPHONIC ORCHESTRA (6523)**

Grades 9-12

Credit 1.0

## Prerequisite: Auditions in the spring of the previous year

Symphonic Orchestra will develop advanced technical and interpretive skills, playing music with a variety of key signature, unusual meters, complex rhythms and subtle dynamics through advanced music literature selected from a variety of musical periods. Entrance to the class is by audition only as well as the requirement for a balanced ensemble. Certain performances are required. In performance classes, grades will be directly affected by participation in required concerts and other activities.

As part of this class, students will participate in Missouri State High School Activities competitions. Students that participate in MSHSAA Activities are subject to drug testing per our JCSD Drug Testing Policy. The policy can be viewed at your schools website: <a href="https://capitalcity.rschoolteams.com">https://capitalcity.rschoolteams.com</a> or <a href="https://jeffersoncity.rschoolteams.com">https://jeffersoncity.rschoolteams.com</a>.

## SPECIAL SERVICES

## **FUNCTIONAL BASIC DESIGN (62)**

Grades 9-12

Credit 1.0

Basic Design introduces students to the basics of fine art. Students will develop skills necessary to produce visual art by following verbal, pictorial and written directions, and incorporating technology. IEP team recommendation is required.

FUNCTIONAL COMMUNITY EXPERIENCE I (57ISI/S2)	Grades 9-12	Credit 1.0
FUNCTIONAL COMMUNITY EXPERIENCE II (57IISI/S2)	Grades 9-12	Credit 1.0
FUNCTIONAL COMMUNITY EXPERIENCE III (57IIISI/S2)	Grades 9-12	Credit 1.0
FUNCTIONAL COMMUNITY EXPERIENCE IV (57IVSI/S2)	Grades 9-12	Credit 1.0

Community Experience will provide students with the ability to generalize what is learned in the classroom into the community. Students will have the opportunity to participate in weekly trips into the community to practice independent living skills (i.e. shopping, recreational leisure, social skills). IEP team recommendation is required.

## **FUNCTIONAL GOVERNMENT (52)**

Grades 9-12

Credit 1.0

Functional Government fulfills two state requirements: each student will satisfactorily complete a course in the institutions, functions, and the electoral process of federal and state governments while learning how to vote, get a birth certificate and a state ID or license. IEP team recommendation is required.

FUNCTIONAL HISTORY I (65IS1/S2)	Grades 9-10	Credit 1.0
FUNCTIONAL HISTORY II (65IIS1/S2	Grades 10-12	Credit 1.0
FUNCTIONAL HISTORY III (65IIIS1/S2)	Grades 10-12	Credit 1.0

Functional History is designed for students who need a basic understanding of geography, key events, individuals, economics, cultures and civilizations of the United States. IEP team recommendation is required.

FUNCTIONAL INDEPENDENT LIVING I (60IS1/S2)	Grade 9	Credit 1.0
FUNCTIONAL INDEPENDENT LIVING II (60IS1I/S2)	Grade 10	Credit 1.0
FUNCTIONAL INDEPENDENT LIVING III (60IIIS1/S2)	Grade 11	Credit 1.0
FUNCTIONAL INDEPENDENT LIVING IV (60IVS1/S2)	Grade 12	Credit 1.0

Independent Living assists students with disabilities to acquire basic living skills including self-care, safety, household tasks, and simple meal preparation to help them live as independently as possible. IEP team recommendation is required.

## **FUNCTIONAL JOB READINESS (90)**

Grades 9-12

Credit 1.0

Job Readiness is a course designed to develop the pre-vocational and academic skills necessary for entry-level jobs. Work skills focus on practical life skills and functional tasks. Appropriate work behaviors are emphasized. Basic instructional skills in the areas of reading, mathematics, writing, and language are aligned with the students Individual Educational Plan. In the course, students may have an opportunity to job sample work at different locations in the community. When job sampling, students ride a bus to job sites and work under direct supervision of teachers or facilitators in the Job Readiness program. This program is designed for students with disabilities that prohibit them from learning basic skills without concrete experiences and opportunities or extended practice. IEP team recommendation is required.

## **FUNCTIONAL LIFETIME HEALTH (59)**

Grades 9-12

Credit 1.0

Lifetime Health helps develop the student's knowledge of how to obtain, interpret, and understand basic health information and services as it relates to individuals and families. Areas of focus include: how the body works, first aid, prevention of diseases, drug awareness, and fitness. IEP team recommendation is required.

FUNCTIONAL MATH I (51IS1/S2)	Grades 9-12	Credit 1.0
FUNCTIONAL MATH II (51IIS1/S2)	Grades 9-12	Credit 1.0
FUNCTIONAL MATH III (51IIIS1/S2)	Grades 9-12	Credit 1.0
FUNCTIONAL MATH IV (51IVS1/S2)	Grades 9-12	Credit 1.0

Functional Math is designed for students who need a basic understanding of mathematical concepts and operations. Instruction is carefully sequenced allowing for understanding before proceeding into more complex skills. Instruction focuses on how math relates to the areas of daily living, personal/social/occupational skills. The goal is to teach students daily living along with consumer and vocational skills at their individual level. IEP team recommendation is required.

## **FUNCTIONAL PERSONAL FINANCE (54)**

**Grades 11-12** 

Credit 1.0

Functional Personal Finance will provide students with the skills that they will need to be able to handle personal and financial affairs. Students will learn the basics of budgeting, banking services, insurance, identity theft, and exploring career opportunities. IEP team recommendation is required.

FUNCTIONAL READING & WRITING I (50IS1/S2)	Grades 9-12	Credit 1.0
FUNCTIONAL READING & WRITING II (50IIS1/S2)	Grades 9-12	Credit 1.0
FUNCTIONAL READING & WRITING III (50IIIS1/S2)	Grades 9-12	Credit 1.0
FUNCTIONAL READING & WRITING IV (50IVS1/S2)	Grades 9-12	Credit 1.0

Functional Reading focuses on reading and writing activities to develop independent skills in the areas of daily living, vocational skills, and social skills while utilizing consumer materials. IEP team recommendation is required.

FUNCTIONAL SCIENCE I (66IS1/S2)	Grades 9-12	Credit 1.0
FUNCTIONAL SCIENCE II (66IIS1/S2)	Grades 9-12	Credit 1.0
FUNCTIONAL SCIENCE III (66IIIS1/S2)	Grades 9-12	Credit 1.0

Functional Science is designed for students who need a basic understanding of Earth & Space Science, Life Science, and Scientific Inquiry. IEP team recommendation is required.

## SC CAREER EXPLORATION (64)

**Grades 10-12** 

Credit 1.0

Vocational Career Connections is designed to assist students in exploring a variety of career options and identifying careers appropriate for their interests, skills, and abilities. Students learn to research career information including career outlooks and the effects of the economy on career choices and availability. Students are taught goal setting and planning for goal achievement and the skills to create various business communications. Overall, this course prepares students to transition from school into post-secondary life by imparting the required tools for career selection and life planning. IEP team recommendation is required.

SC COMMUNICATIONS I (53IS1/S2)	Grades 9-12	Credit 1.0
SC COMMUNICATIONS II (53IIS1/S2)	Grades 9-12	Credit 1.0
SC COMMUNICATIONS III (53IIIS1/S2)	Grades 9-12	Credit 1.0
SC COMMUNICATIONS IV (53IVS1/S2)	Grades 9-12	Credit 1.0

Communications is intended to enhance the student's ability to effectively communicate in a variety of environments, situations and relationships. Emphasis is placed on understanding behavior, practicing effective verbal and nonverbal communication, teaching self-regulation and interpersonal skills, coping strategies, and role-playing. IEP team recommendation is required.

SC ENGLISH I (11)	Grades 9-12	Credit 1.0
SC ENGLISH II (12)	Grades 9-12	Credit 1.0

SC English I and II is designed for students with reading and/or written expression disability and requires the recommendation of the IEP Team. Students will read literature and nonfiction texts throughout the course and their instruction levels. In addition, students will have opportunities to practice expository, narrative, and argumentative writing. IEP team recommendation is required.

## SC TECHNICAL MATH I (34) Grades 9-12 Credit 1.0

Students in this class will gain a deeper understanding of numbers, how numbers are expressed, and basic operations. This course will emphasize building number sense, as students will work with the number line, multiplication/division, place value, and the order of operations. Also included is a measurement unit with students working with time and fractions, as well as an algebraic unit including writing and simplifying expressions. IEP team recommendation is required.

## SC TECHNICAL MATH II (35) Grades 9-12 Credit 1.0

Students in this class will prepare for future coursework in mathematics, particularly Algebra IA/IB. This course will include a unit focusing on number sense, including multiplication/division, integers, and fractions. Algebraic thinking is emphasized, as students work with expressions, solving/writing equations, and graphing. Students also work with data in reading and building scatter plots. IEP team recommendation is required.

## SC PERSONAL FINANCE (71) Grades 11-12 Credit 1.0

Personal Finance deals with skills that are needed to survive in today's complex business world. Students will become more efficient in managing personal and financial affairs. The course teaches soon-to-be independent students how to make it on their own in such areas as economic decision-making, budgeting, banking services, insurance and credit. This course will also include the exploration of career opportunities. IEP team recommendation is required.

SC TECHNICAL READING I (15)	Grades 9-12	Credit 1.0
SC TECHNICAL READING II (22)	Grades 9-12	Credit 1.0

Students in this subject-contained class will prepare for future coursework in English. This course will focus on developing literacy skills in the areas of monitoring, decoding, comprehension, vocabulary, and fluency. Students will engage in reading a variety of texts at their instructional reading level, discussing the texts, writing about the texts, and word study activities to support decoding and spelling. IEP team recommendation is required.

VOCATIONAL INTERNSHIP I (55I)	Grades 10-12	Credit 3.0
VOCATIONAL INTERNSHIP II (55II)	Grades 10-12	Credit 3.0

Vocational Internship offers students an opportunity to develop and expand vocational competencies and work-related skills before leaving high school. It provides a community-based instruction while earning credit towards graduation. Participating students must be 16 years of age, be recommended by their case manager, and approved by the transition team. IEP team recommendation is required.

## VOCATIONAL WORK STUDY (91) Grades 10-12 Credit 1.0

Vocational Work Study offers students the opportunity to work part or full time in a community setting while earning high school credit. Any student wishing to participate in the program must be at least 16 years of age, be referred by their case manager, approved by the transition team, have a case open with the Missouri Department of Vocational Rehabilitation, and whose IEP reflects a need for work experience in a community setting. Students should be employed before enrolling in the program. IEP team recommendation is required.

# NICHOLS CAREER CENTER

Information



## **Overview**

The career and technical education (CTE) programs at Nichols Career Center provide students with the opportunity to gain skills necessary for gainful employment. Graduates of these programs are able utilize this education to directly enter the workforce, pursue advanced technical or military training, or continue their training at the post-secondary level.

CTE programs are only available to juniors or seniors who have been selected through a competitive application process coordinated by the NCC Student Services Coordinator. This process requires a program tour and submitting an application. Because most CTE programs are two-year programs, the application process generally favors incoming juniors, although incoming seniors are welcome to apply (the exception is the Health Sciences program, which is exclusive to seniors). A review of the applicant's academic/attendance/discipline records, sending counselor evaluation, and career pathway serve as the basis for selection.

## **Dual Credit & Articulated Credit**

There are several opportunities for students to earn dual or articulated credit while enrolled in one of the CTE programs. Current offerings include, but are not limited to: State Technical College of Missouri, State Fair Community College, Ozark Technical Community College, Missouri State, and East Central Community College. A comprehensive list is posted on the NCC website. Enrollment for this credit is coordinated by the NCC Student Services Coordinator.

## **Industry Recognized Credential (IRC)**

Most CTE programs provide students with the opportunity to earn an IRC. This credential generally serves as evidence that the student has demonstrated competency in specific skills required by various businesses and industry. Students who earn an IRC generally command better employment opportunities or wages when entering the workforce. The assessments for IRC's are provided to students when they have completed the required curriculum, which is typically during the second year of study.

## <u>Internships</u>

Several CTE programs offer internships for second year students in their final semester of study. Students are required to maintain the following: attendance of 95% or better, minimum 2.5 GPA, an excellent behavior record, be in good standing with your high school, and be recommended by their program instructor. Students who are approved transport themselves to their internship site and attend internship in lieu of class time.

## AGRICULTURAL SCIENCE

## **ADVANCED ANIMAL SCIENCE (9925)**

Grades 10-12

Credit 1.0

## ◆ Prerequisite: Introduction to Agriculture (WILL NOT be offered in 24-25)

Advanced Animal Science is an agricultural education course that is an advanced study in large domestic animal production, management, marketing, nutrition, breeding, production records, selection, animal health, waste management, and biotechnology. Students will be encouraged to continue participation in the FFA chapter as well as expand their current SAE program and maintain a student record book.

## **AGRICULTURE LEADERSHIP (9943)**

Grades 10-12

Credit 0.5

## ◆Prerequisite: Introduction to Agriculture (WILL NOT be offered in 24-25)

The Agriculture Leadership course will provide to students a deeper understanding into the skills necessary to be a leader in an agriculture career setting. Throughout the course students will evaluate ethics used to send agriculture messages, conduct research, analyze current issues facing the agriculture industry and will develop leadership skills relating to verbal/non-verbal communication, proper functions of debate, public speaking, and job interview. Other topics in this course will include: team building exercises, personality profiles, career interest profiling, parliamentary procedure and effective leadership habits. Students will identify community needs, agriculture issues and develop ways to help overcome those. By the end of the course students will have learned how to work as team, manage people, and build a career portfolio related to agriculture. With this course students will be encouraged to continue participation in the FFA chapter as well as expand their current SAE program and maintain a student record book.

## Agricultural Mechanics and Technology Systems (9948)

**Grades 10-12** 

Credit 0.5

## **Prerequisite: Introduction to Agriculture**

The focus of Agricultural Mechanics and Technology is to expose students to mechanics, power, technology, and career options in the world of agriculture. Students participating in this course will have experiences in various mechanical and engineering concepts with exciting hand-on activities, projects, and problems. Student's experiences will involve the study of energy, tool operation and safety, material properties, machine operation, and structural components. Students will acquire the basic skills to operate, repair, engineer, and design agricultural tools and equipment. Throughout the course, students apply technical skills while becoming competent in the process used to operate, repair, engineer, and design agricultural tools and equipment. ALL students will be expected to reimburse the school for expendable materials used. With this course students will be encouraged to continue to participate in the FFA chapter as well as expand their current SAE program and maintain a student record book.

## Supervised Agriculture Cooperative Experience (SAE) ( 9947S1, 9947S2) Grade 12 Credit 0.5-2 for each 10 hrs of employment

## Prerequisite: Introduction to Agriculture & One Additional Agricultural Course

Students who have completed two years of agricultural courses are eligible for a SAE internship (supervised agricultural experiences) for one to two hours per day. For every ten hours of work averaged per week, a student can earn 1/2 credit per semester. For every twenty hours of work averaged per week, a student can earn 1 credit per semester. This internship can be substituted for no more than two hours of their scheduled school day. Some internships may receive pay from an employer where others do not depending on the type of business or industry. Students must have reliable transportation and signed parent permission in order to participate, along with instructor and NCC director approval. Students will also be required to be subject to onsite evaluations and maintain a financial record book documenting their work.

## **AGRICULTURAL BUSINESS, SALES & MARKETING (7267)**

**Grades 11-12** 

Credit 1.0

## ◆Prerequisite: Introduction to Agriculture (WILL NOT be offered in 24-25)

Agricultural Business, Sales and Marketing combines farm management, agribusiness management, and content based on agricultural economic principles. This course includes human relations, personal inventory, careers in selling, and other experiences necessary for employment in agribusiness engaged in marketing, purchasing, storing, grading, and transporting supplies and products. Computer applications are included to enhance student understanding and utilization of current technology. Students will be encouraged to continue participation in the FFA chapter as well as expand their SAE program and maintain a student record book. Students will be encouraged to continue participation in the National FFA Organization and the Supervised Agricultural Experience Program.

## ◆Prerequisite: Introduction to Agriculture (Offered ONLY at CCHS)

Conservation of Natural Resources prepares students for activities in the conservation and/or improvement of natural resources such as oil, water, air, forests, fish, forestry, and wildlife for recreational and economic purposed. Students will be encouraged to continue participation in the FFA chapter as well as expand their current SAE program and maintain a student record book.

## FLORAL DESIGN (9945) Grades 10-12 Credit 0.5

This Floral Design course will teach creative skills related to the horticulture/floriculture business sector of the agriculture industry. This will include using fresh, silk, or dried flowers and design a new product called an arrangement/decoration. Other topics included in this course include the production, arrangement and retailing of flowers; plant and tool Identification specific to the industry; the process and design of corsages, bouquets, arrangements, and seasonal decorations. With this course students will be encouraged to continue participation in the FFA chapter as well as expand their current SAE program and maintain a student record book.

FOOD SCIENCE (9922) Grades 10-12 Credit 0.5

## ◆Prerequisite: Introduction to Agriculture (WILL NOT be offered in 24-25)

Food Science is a course where students will complete hands-on activities, projects, and problems that simulate actual concepts and situations found in the food science and safety industry, allowing students to build content knowledge and technical skills. You will investigate areas of food science including food safety, food chemistry, food processing, food product development, and marketing. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating solutions to their peers and members of the professional community. Students will be encouraged to continue participation in the FFA chapter as well as expand their current SAE program and maintain a student record book.

## **GREENHOUSE OPERATIONS and MANAGEMENT (9949S1, 9949S2)**

**Grades 10-12** 

Credit 1.0

## Prerequisite: Introduction to Agriculture (Offered ONLY at JCHS)

This year-long course is designed to give students a technical understanding and working knowledge of the greenhouse industry. Emphasis is given to job opportunities, as well as the development of technical skills and procedures used by professionals in the greenhouse management industry. Approximately seven weeks will be spent in classroom instruction and the remainder will be on practical lab experience in greenhouse management. Actual crops will be propagated by the students and the greenhouse will be operated as an actual business, utilizing a School to Work format with partnerships formed with private businesses. Upon completion of this course, the students will have the necessary skills to enter the fields of greenhouse management as an entry worker.

HORTICULTURE (9923) Grades 10-12 Credit 1.0

## ◆Prerequisite: Introduction to Agriculture (WILL NOT be offered in 24-25)

Horticulture will introduce students to careers in horticulture and landscaping. It includes the study of plants, soils, floristry, irrigation practices, pest control and harvesting of crops. Students will also learn the basic techniques of landscape design, landscape construction, installation, and maintenance. Students will be encouraged to continue participation in the National FFA Organization and the Supervised Agricultural Experience Program.

## **INTRODUCTION TO AGRICULTURE (9932)**

Grades 9-11

Credit 1.0

This class serves to introduce students to the agriculture industry. It includes units related to: animal science, agricultural system management, industrial technology, food science, and conservation and natural resources. It will also include leadership, science applications and career exploration. Students' participation in this course will experience exciting "hands-on" activities, projects and problems. Students experiences will involve the study of communication, the science of agriculture, animals, natural resources, food science, and agricultural mechanics. While surveying the opportunities available in Ag and natural resources, students will learn to solve problems, conduct research, analyze data, work in teams and take responsibility for their work, actions and learning.

## LANDSCAPING/TURF MAINTENANCE & MANAGEMENT (9942)

**Grades 10-12** 

Credit 0.5

## ◆Prerequisites: Introduction to Agriculture (WILL NOT be offered in 24-25)

The Landscape Design and Turf Management course includes instruction in the areas of: basic techniques of landscaping design; landscape construction, installation, and maintenance; establishment of turf management practices and procedures; careers in Turf Management and Landscape Design. With this course students will be encouraged to continue participation in the FFA chapter as well as expand their current SAE program and maintain a student record book.

## **SMALL & SPECIALTY ANIMALS (9926)**

**Grades 10-12** 

Credit 0.5

## ◆Prerequisite: Introduction to Agriculture

Small and Specialty Animals examines the agricultural enterprises of producing bees, laboratory animals, fur animals, fish, companion animals and rabbits. This course will also explore career opportunities in small animal care and management. Students will be encouraged to continue participation in the FFA chapter as well as expand their current SAE program and maintain a student record book.

VET SCIENCE (9944) Grades 10-12 Credit 0.5

## Prerequisites: Introduction to Agriculture

Vet Science will focus on the study of caring and handling for both farm and companion animals, as well as, the day to day structure of how things operate in a veterinary clinic. This includes exploring the areas/careers related to, but are not limited to: caring and breeding of domesticated animals; veterinarian and vet technician responsibilities; farm management/manager Career; animal trainer/handler career. With this course students will be encouraged to continue participation in the FFA chapter as well as expand their current SAE program and maintain a student record book.

## NICHOLS CAREER COURSES

## TECHNICAL MATH-EMBEDDED MATH (1/2 credit per course)

## **◆**Corequisite: All CTE students are enrolled in this course

This course presents informational methods of contextual mathematical instruction directly related to the corresponding 3-block CTE program. Students will review pre-existing concepts and learn new concepts that are specific to their chosen trade. Relevant mathematics will prepare students for higher education or provide them with the knowledge necessary to enter directly into a trade. Students will complete various assignments including but not limited to projects and problem-solving activities. Additionally, students will practice standardized assessment questions relating to the ACT or other post-secondary entrance exams.

## TECHNICAL ENGLISH-EMBEDDED ENGLISH (1/2 credit per course)

## **◆**Corequisite: All CTE students are enrolled in this course

This course strives to improve and expand students' reading, writing, speaking, and listening skills through practice relevant to their CTE programs. Students will be encouraged to choose topics related to their specific programs when conducting research and presenting information. Special emphasis will be placed on speaking and presentation skills, especially the job interview experience. Students will complete a minimum of one research and presentation project per term with additional work assigned at the program instructor's discretion.

## Collision Repair Technology I/II (9010/9011) \*

**Grades 11-12** 

Credit 3.0/2 Years

Auto Collision Technology is a two-year course of study that focuses on the fundamentals of collision repair including safety, auto glass, part replacement, cutting metal, plastic repair, welding, straightening body panels, masking, refinishing, and detailing. The industry-developed curriculum (I-CAR) alternates annually with one year focusing on non-structural repair work while the subsequent year introduces refinishing concepts.

IRC: I-CAR Non-Structural/Refinishing

**Internship Available** 

## AUTOMOTIVE TECHNOLOGY I/II (9012/9013) \*

**Grades 11-12** 

Credit 3.0/2 Years

Automotive Technology is an ASE (Automotive Service Excellence) certified two-year course of study that focuses on automotive repair and diagnosis. The curriculum is delivered through a combination of computer-based modules and shop work. The course of study alternates annually with one year focusing on engine performance and braking systems while the subsequent year introduces steering/suspension and electrical/electronic systems.

IRC: ASE Student Level Certification Internship Available

## Social Media and Content Development I (7282)

**Grades 11-12** 

Credit 3.0/ 2 Years

# ◆ Prerequisite: Journalistic Writing OR strong communication skills (verbal, written) as evidenced by proficient writing skills in all high school English classes.

This program of study will focus on occupations related to social media management, social media technology, analytics and creating digital media in the form of social media posts, stories, podcasts, livestreams and maintaining a simulated social media presence. Participants in this course should have a strong interest in journalistic writing or becoming a Social Media Manager, Specialist, or Content Developer utilizing a variety of social media platforms to promote businesses, sports teams, and entertainment industries. In the second year of this program students will have the opportunity to participate in an internship managing content for actual clients in their communities.

**Internship Available** 

## **BUILDING TRADES I/II (9110/9111) \***

**Grades 11-12** 

Credit 3.0/2 Years

Building Trades is a two-year course of study that prepares students for various occupations within the construction industry. This program partners annually with the River City Chapter of Habitat for Humanity to construct a home in the Jefferson City area. Students travel off-campus for this project. The first year introduces safety, hand and power tools, plans, specification and codes, footing and foundations, concrete placing and finishing, floor/wall/ceiling/roof framing, roofing, windows and exterior doors, exterior wall finishing, interior doors and trim, painting, staining, and finishing. Second year students advance those skills through higher level tasks on the jobsite.

**Internship Available** 

**IRC: Career Connections** 

**Additional Certification: OSHA 10** 

#### COSMETOLOGY I (9919)

Grades 11-12

Credits: 3.0/2 Years

This course is for students who wish to pursue a career in the field of Cosmetology. Cosmetology consists of haircutting, hair coloring, shampooing, styling, arranging hair, manicures, pedicures, hair removal, scalp treatments, chemical texture services (perms and relaxers), disinfection procedures and many other services. Students are required to have a specific amount of hours in each of the subjects required by the MO State Board of Cosmetology and Barber Examiners. Once a student has acquired 160 hours they will be allowed to work on actual clients in the salon. The Cosmetology school is open to the public, therefore clients will come to the school to have students perform service.

IRC: Licensure through the Missouri Board of Cosmetology and Barbering

**Clinical Experience Available** 

## **COMPUTER TECHNOLOGY I/II (9310/9311)**

**Grades 11-12** 

Credits: 3.0/2 Years

## ◆Prerequisite: Show proficiency in Algebra I or higher-level math

Computer Technology is a two-year course of study that prepares students for a variety of occupations within the computer science/information technology field. The program of study alternates annually with one year specializing in coding websites and computer programs using Java programming language and markup languages (HTML, DHTML, and JavaScript). The subsequent year focuses on the design, construction, maintenance, repair, networking, and administration of computers/computer systems.

Dual Credit Available IRC: Test Out (Pro PC)

## **CULINARY ARTS I/II (7323/7324)**

**Grades 11-12** 

Credits: 3.0/2 Years

## ◆Prerequisite: Show proficiency in Foods I

Culinary Arts is a two-year American Culinary Federation accredited program that prepares students for a variety of occupations in the hospitality and food service industries. First year students learn food preparation, sanitation and safety, nutrition, basic baking, dining room service, menu planning, purchasing, receiving, inventory, storage, human relations, garde manger, sustainability, and nutrition in an industry standard kitchen. Students have the opportunity to showcase these skills though several catering events within the school and community. Second year students continue to advance their competencies in food preparation, sanitation and safety, nutrition, basic baking.

**Dual Credit Available** 

**IRC: ACF Certified Fundamentals Cook** 

**Additional Certification: ServSafe Food Protection Manager** 

## Early Childhood Professions I (9960)

**Grades 11-12** 

Credits: 3.0/1 Year

This course provides students with the primary knowledge and skills needed for a future career in childcare or early childhood education. Students have the opportunity to complete their practicum hours, child development associate training, and course work in an early childhood setting under the guidance and supervision of a certified CTE instructor and early childhood educators. Early Childhood Professions instructional time encompasses three high school class periods per day, five days a week. Students will use reflective writing and discussion to process and learn from experiences in the field. Students will be required to spend at least 120 hours of child development/early childhood education in class training + 480 hours of experience working directly with children over two years.

**Dual Credit Available** 

IRC: Child Development Associate (CDA)Certification

**Clinical Experience Available** 

## ◆Prerequisite: Early Childhood Professions I

This course will provide a more in depth look into the knowledge and skills needed for a future career in childcare or early childhood education. The course will expand upon the standards and learning objectives outlined in Early Childhood Professions I while also helping students prepare for their experience working directly with children in a clinical setting. Students will be required to develop and deliver curriculum, create a daily schedule with routines and transitions, identify children with special needs, and complete the CDA child development portfolio requirements under the guidance and supervision of a certified CTE instructor and early childhood educators. Early Childhood Professions instructional time encompasses three high school class periods per day, five days a week. Students will use reflective writing and discussion to process and learn from experiences in the field. Students will be required to spend at least 120 hours of child development/early childhood education in class training + 480 hours of experience working directly with children over two years.

**Dual Credit Available** 

IRC: Child Development Associate (CDA)Certification

**Clinical Experience Available** 

GRAPHIC DESIGN I/II (9210/9211) (with AP 2-D Design and Portfolio Option Grades 11-12 Credits: 3.0/2 Years

Prerequisite: Show proficiency in Introduction to Art, <u>OR</u> Desktop Publishing, <u>OR</u> Digital Photography.

Recommended: Strong communication skills (verbal, written) as evidenced by proficient writing skills in all high school English

classes. Any experience creating two-dimensional art and design work, in or out of the classroom, will be helpful.

This is a two-year program that introduces students to the graphic design and advertising industry. Students study industry-leading Adobe Creative Cloud software through a series of in-class modules and design activities. They learn about design thinking, typography, page layout, composition, color theory, branding, digital illustration, digital workflow, professional workplace skills, and printing methods. Second-year students strengthen their skills through more in-depth problem solving and real-world, client-based design projects. In the final semester of the program, second-year students participate in an industry internship and/or the AP 2-D Design Portfolio/Senior Capstone Portfolio. The AP (Advanced Placement) 2-D Design Portfolio is a program administered by the College Board to provide highly motivated students an opportunity to earn college credit with a 2-D art and design focus.

IRC: Adobe Certified Professional in Visual Design

AP Portfolio Available (Graphic Design II students only)

**Dual Credit Available** 

**Internship Available** 

\*Sending schools determine if there is weighted credit for AP and how that credit will be weighted. See your school counselor for more information.

HEALTH SCIENCES (9800) Grade 12 Credits: 3.0/ 2 Years

Health Sciences is a one-year course of study that introduces students to a variety of career opportunities within the healthcare field while focusing on required skills to become a Certified Patient Care Technician (PCT). The fall semester introduces medical terminology, anatomy and physiology, patient care skills, regulatory compliance and safety, critical thinking, and infection control. In order to advance these skills, students who meet the clinical requirements for the program are required to transport themselves daily to clinical settings at various medical facilities during the spring semester

**Dual and Articulated Credit Available** 

IRC: Patient Care Technician (PCT)

## HEATING, AIR CONDITIONING & REFRIGERATION I/II (9900/9901) \* Grades 11-12

This two-year course of study introduces students to the fundamentals of the heating and cooling industry. The first year includes instruction of the basics of refrigeration, installation and service, troubleshooting of residential air conditioners and furnaces, sheet metal fabrication, and wiring of house and control circuits. The second year provides students with advanced troubleshooting and problem-solving skills for all types of furnaces and air conditioners, in addition to fundamentals of commercial refrigeration/air conditioners/furnaces, and advanced sheet metal fabrication.

Stackable Credentials: EPA 608 Universal Certification and OSHA 10

**Internship Available** 

Credits: 3.0/2 Years

Credits: 3.0/2 Years

## ◆Prerequisite: Show proficiency in Algebra I or higher-level math

This two-year course of study prepares students for several occupations within the engineering field such as systems, mechanical, electrical, telecommunications, control, and computer engineering. First year students use knowledge of electronic components, soldering, and microchip design to construct, troubleshoot, and repair integrated circuits, robots, computers, car audio equipment, and telecommunications devices. Students also utilize AutoCAD design software to create various 3D printer projects and industrial programmable logic controllers to manipulate pneumatic powered equipment/control circuits. Second year students continue various projects within these topics while advancing their design, troubleshooting, and maintenance skills.

**Articulated Credit Available** 

**Additional Certifications Available: OSHA 10** 

**IRC: ETA EM-1** 

WELDING I/II (9910/9911) \*

**Grades 11-12** 

Credits: 3.0/2 Years

Welding is a two-year AWS (American Welding Society) approved course of study that includes instruction in gas, stick, MIG, oxyacetylene and plasma cutting processes using mild steel, stainless steel, and aluminum metals. The first year of study focuses on the preparation of metal for welding and correct application of welding rods, welding techniques, safety requirements, layout/cutting techniques, and welding terminology. The second year emphasizes advanced project-based learning, and additional skill development of arc/MIG/TIG welding, and weld testing.

**IRC: AWS SENSE Certification** 

**Additional Certification Available: OSHA 10**