

FORT ZUMWALT SCHOOL DISTRICT HIGH SCHOOL

Career and Educational Planning Guide

2026-2027

East High School

**600 First Executive Drive
St. Peters, MO 63376**

North High School

**1230 Tom Ginnever Ave.
O'Fallon, MO 63366**

South High School

**8050 Mexico Road
St. Peters, MO 63376**

West High School

**1251 Turtle Creek Drive
O'Fallon, MO 63366**

Hope High School

**307 W. Pitman St.
O'Fallon, MO 63366**

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Notice of Nondiscrimination

Applicants for admission or employment, students, parents of elementary and secondary school students, employees, sources of referral and applicants for employment, and all professional organizations that have entered into agreements with the Fort Zumwalt School District are hereby notified that the School District does not discriminate on the basis of race, color, ethnicity, religion, national origin, sex, age, sexual orientation or perceived sexual orientation, disability, or any other characteristic protected by law in admission or access to, or treatment or employment in its programs and activities. In addition, the School District provides equal access to the Boy Scouts of America and other designated youth groups. Information on additional prohibited behavior is outlined in Board of Education Policy AC. Any person having inquiries concerning the Fort Zumwalt School District's compliance with the laws and regulations implementing Title VI of the Civil Rights Act of 1964 (Title VI), the Age Discrimination Act, Section 504 of the Rehabilitation Act of 1973 (Section 504), Title II of the Americans with Disabilities Act of 1990 (ADA) or the Boy Scouts of America Equal Access Act, is directed to the respective Compliance Coordinator listed below, who oversees the School District's efforts to comply with the laws and regulations implementing the laws and regulations cited above.

The Fort Zumwalt School District has established grievance procedures for persons unable to resolve problems arising under the statutes above. The School District's Compliance Coordinator will provide information regarding those procedures upon request.

Any person who is unable to resolve a problem or grievance arising under any of the laws and regulations cited above may also contact the Office for Civil Rights:

One Petticoat Lane 1010 Walnut Street, 3rd floor, Suite 320 Kansas City, MO 64106
Telephone: (816) 268-0550 Facsimile: (816) 268-0559 Email: OCR.KansasCity@ed.gov

COMPLIANCE COORDINATORS:

Mr. John Schulte, Assistant Superintendent for Student Services Compliance Coordinator for Student Complaints 555 E. Terra Lane, O'Fallon, Missouri 63366 636-272-6620

Mrs. Erin Williams, Chief Human Resources Officer Compliance Coordinator for Staff Complaints 555 E. Terra Lane, O'Fallon, Missouri 63366 636-272-6620

Dr. Laura Smith, Assistant Superintendent for Special Services Compliance Coordinator for 504 Complaints 555 E. Terra Lane, O'Fallon, Missouri 63366 636-272-6620

Public Notice: Sexual Harassment Under Title IX

The Fort Zumwalt School District does not discriminate on the basis of sex in its education programs and activities, including employment and admissions, as required by Title IX of the Education Amendments of 1972 (Title IX). All forms of sex-based discrimination are prohibited in the district, but this policy focuses exclusively on sexual harassment as defined in Title IX that occurs within the education programs and activities of the district. However, the district will respond promptly to investigate and address any report or complaint of sexual harassment.

“Sexual Harassment under Title IX” is conduct on the basis of sex within the scope of the

district’s education programs or activities (as defined in this policy) that satisfies one or more of the following:

1. An employee of the district conditioning the provision of an aid, benefit or service of the district on an individual’s participation in unwelcome sexual conduct.
2. Unwelcome conduct determined by a reasonable person to be so severe, pervasive and objectively offensive that it effectively denies a person equal access to the district’s education program or activity; or
3. “Sexual Assault” as defined in 20 U.S.C. 1092(f)(6)(A), “dating violence” as defined in 34 U.S.C. 12291 (a)(10), “domestic violence” as defined in 34 U.S.C. 12291(a)(8) or “stalking” as defined in 34 U.S.C. 12291(a)(30).

See the “Definitions Applicable to this Policy” section at the end of this document for definitions of other terms applicable to this policy.

In creating this policy, the district does not relieve any person under the district’s jurisdiction from the consequences for violations of other policies and rules of the district meant to establish an environment conducive to teaching, learning, support services, work and the social and emotional well-being and development of the students entrusted to the district.

If a student alleges sexual misconduct on the part of any district employee to any person employed by the district, that person will immediately report the allegation to the Children’s Division (CD) of the Department of Social Services in accordance with state law and district policy. Moreover, nothing in the policy precludes the mandatory or voluntary reporting of any suspected criminal activity to the appropriate law enforcement agency at any time.

Reporting Sexual Harassment or Title IX Retaliation

Any person may report sexual harassment regardless of whether the person is the alleged victim (complainant). However, Board members and employees must immediately report to the Title IX coordinator any incident or behavior that could constitute sexual harassment or retaliation in accordance with this policy. Reports may be made at any time, including during non business hours, by using the telephone number, email address or office address listed below.

The Board authorizes the following individual(s) to serve as the Title IX coordinator(s) for the Fort Zumwalt School District and coordinate and implement the district’s efforts to comply with the requirements of Title IX:

Mrs. Erin Williams, Chief Human Resources Officer Compliance Coordinator for Staff Complaints 555 E. Terra Lane, O’Fallon, Missouri 63366 636-272-6620

Mr. John Schulte, Assistant Superintendent for Student Services Compliance Coordinator for Student Complaints 555 E. Terra Lane, O’Fallon, Missouri 63366 636-272-6620

In the event the Title IX coordinator is unavailable or is the respondent to the complaint, reports should instead be directed to the compliance officer or alternate compliance officer listed in policy AC

GRADUATION REQUIREMENTS

English/Communication Arts (English I, English II, American Literature, Senior Electives)	4 Credits
Mathematics	3 Credits
Science	3 Credits
Social Studies (United States History, World History, and Government)	3 Credits
Health	½ Credits
Personal Finance	½ Credits
Fine Arts	1 Credits
Practical Arts	½ Credits
Physical Education	1 Credits
Electives	7 ½ Credits
Pass the Missouri and U.S. Constitution Tests	
Missouri Civics Education Initiative Test	
Total Units Required 24 Credits	

COURSE SELECTION/SCHEDULE CHANGE GUIDELINES

The proper selection of courses is very important for all students and something that should be done with serious deliberation. Course description guides are available to each student and a copy of the guide is located on each high school's web site. It is strongly suggested that students confer with their parents, counselors, other staff, and consider college and/or career plans carefully before making course selections. Availability of course offerings is dependent on enrollment numbers.

Requesting a course change does not guarantee that a change will be made. Many factors must be considered, including class sizes and class size balances, before requests can be granted. Requests for schedule changes received after stated deadlines will not be permitted without administrative approval. This approval will only be considered when significant extenuating circumstances exist.

Course Change Deadline Guide:

- First (10) days of semester – Try to find another class for the student or study hall will be assigned
- Ten (10) days to 5 weeks into the semester, student must be assigned to a study hall (student receives “WD” withdrawn from class)
- After 5 weeks – Under extenuating circumstances a student can be assigned to a study hall (student receives an “F” for withdrawn class)

GRADUATE GUARANTEE

The Fort Zumwalt School District offers to the employer of the bearer of the Fort Zumwalt School diploma the guarantee that the individual possesses the appropriate math, reading, and communication skills to perform the job for which they have been employed. If the employer finds the employee does not have these skills, the Fort Zumwalt School District will refer the employee to the St. Charles Community College Academic & Career Enhancement Center for instruction and remediation in the deficit areas. Any cost incurred will be borne by the Fort Zumwalt School District, as the St. Charles Community College is a partner with the public school in this effort. This guarantee is effective for three years from the date on the high school diploma.

Students must attend at least one semester and earn a minimum of three (3) credits in a Fort Zumwalt High School to qualify for graduation. The following number of credits by grade level is recommended to maintain an appropriate progression toward graduation.

- 7 units of credit starting sophomore year
- 13 units of credit starting junior year
- 18 units of credit starting senior year

EARLY GRADUATION

A student wishing to graduate from high school in less time than the ordinary eight (8) semesters, grade 9-12 sequence, may request permission to complete graduation requirements on an alternate schedule. The student and parents/guardians will consult with high school counseling personnel to develop a graduation plan. The student's intention to accomplish this shall be stated in writing to the principal.

The Missouri Department of Elementary and Secondary Education and the Fort Zumwalt Board of Education recommend eight (8) semesters of high school attendance prior to graduation. However, if a student wishes for an early graduation after six (6) or seven (7) semesters, the option is available. The following requirements and procedures shall serve as guidelines for the early graduation program.

Requirements

1. Student must complete at least one semester of academic enrollment and earn a minimum of three (3) credits in the Fort Zumwalt School District.
2. Student must have earned the prescribed number of credits and meet all requirements necessary for graduation as prescribed by the Fort Zumwalt School Board of Education and the Missouri Department of Elementary and Secondary Education.
3. Early graduates may participate in commencement activities and students may participate in other school activities (including Prom) with the building principal's approval. Students who participate in extracurricular activities such as athletics, band, choir, or speech would be ineligible following early graduation per MSHSAA academic eligibility requirements.

Procedures – Early Graduation (after 6 or 7 semesters) The following procedures will apply to those students who wish to be considered for early graduation. ***The following letters must be attached to the application.***

1. A letter of intent from the student. This letter should indicate the reason or need for early graduation.
2. A letter of approval from the parents/guardians recommending the early graduation. This letter is not necessary for emancipated students.
3. All applications for early graduation must be submitted to the high school principal or counselor no later than January 1st in the year preceding intended early graduation. Applications received after January 1st will be reviewed for approval on a case-by-case basis.
4. Notice of approval of applications will be made after March 1st.

Note to students who wish to graduate after six(6)semesters: *While you might be included in senior activities, officially you are a junior and must complete all junior level activities (ie. EOC testing).*

COLLEGE ADMISSIONS REQUIREMENTS

In general, students are encouraged to take as much college related coursework as possible during high school to maximize their academic potential, enhance their admission opportunities for college and improve their scores on college entrance tests. These courses include Math, Science, Communication Arts, Social Studies, and Foreign Language. Four-year colleges and universities have specific requirements in certain subject areas in addition to GPA performance and college admission test scores. Listed below are the **course** requirements for admission to several state universities.

Missouri State Colleges

English	4 units
Math (Algebra I or higher*)	3 units
Social Studies	3 units
Science	3 units
Fine Arts	1 unit
Electives	3 units
(Electives from Foreign Language and/or combinations of the core courses)	

* Students who complete Algebra I prior to their freshman year may need to complete at least three additional units in grades 9-12.

** Truman State University requires 2 Foreign Language credits.

Missouri State Colleges/Universities

University of Central Missouri
Missouri Southern
Missouri State University
Missouri Western
Northwest Missouri State
Southeast Missouri State
Truman State University**

University of Missouri System

English	4 units
Math (Algebra I or higher)	4 units
Social Studies	3 units
Science	3 units
Fine Arts	1 unit
Foreign Language	2 units

University of Missouri System

University of Missouri - Columbia
University of Missouri – Kansas City
University of Missouri – St. Louis
Missouri University of Science & Technology

SEAL OF BILITERACY

By meeting the requirements listed below, students can earn a Seal of Biliteracy on their transcript and potentially earn 12 college credits through some universities. This Seal represents that the student is biliterate in both English and another language (can be a language that they have learned in high school or it may be a language they have learned at home).

Requirements for earning the Seal of Biliteracy

Senior standing
3.0 GPA in English Classes
Proficiency on standardized test
18 or higher on the reading portion of the ACT OR Proficient score on English II EOC OR 4.0 or higher on the ACCESS test (for ESOL students only)
Intermediate-Mid Score on Stamp4S Test (Administered in April)

If students want to earn the Seal, they can apply for it by requesting an application from their counselor in February.

Cluster Groupings
Large purpose-driven mega-sectors that help guide young people toward Clusters that are aligned with their interests, their sense of purpose, and the impact they want to make on their communities.

Career Clusters
Industry sectors as defined by groupings from Standard Occupational Classification and North American Industry Classification System codes.

Sub-Clusters
Major groupings of career areas within a given field that have similar skills as defined by industry areas.

Cross-Cutting Clusters
Clusters that are based on both sector-specific and crosscutting functions instead of purely discrete industry sectors. These Clusters have both Sub-Clusters and implications for courses taken in all other Career Clusters.

Career-Ready Practices
Developed by industry & educational institutions, these practices represent the skills needed to succeed in the modern workplace.

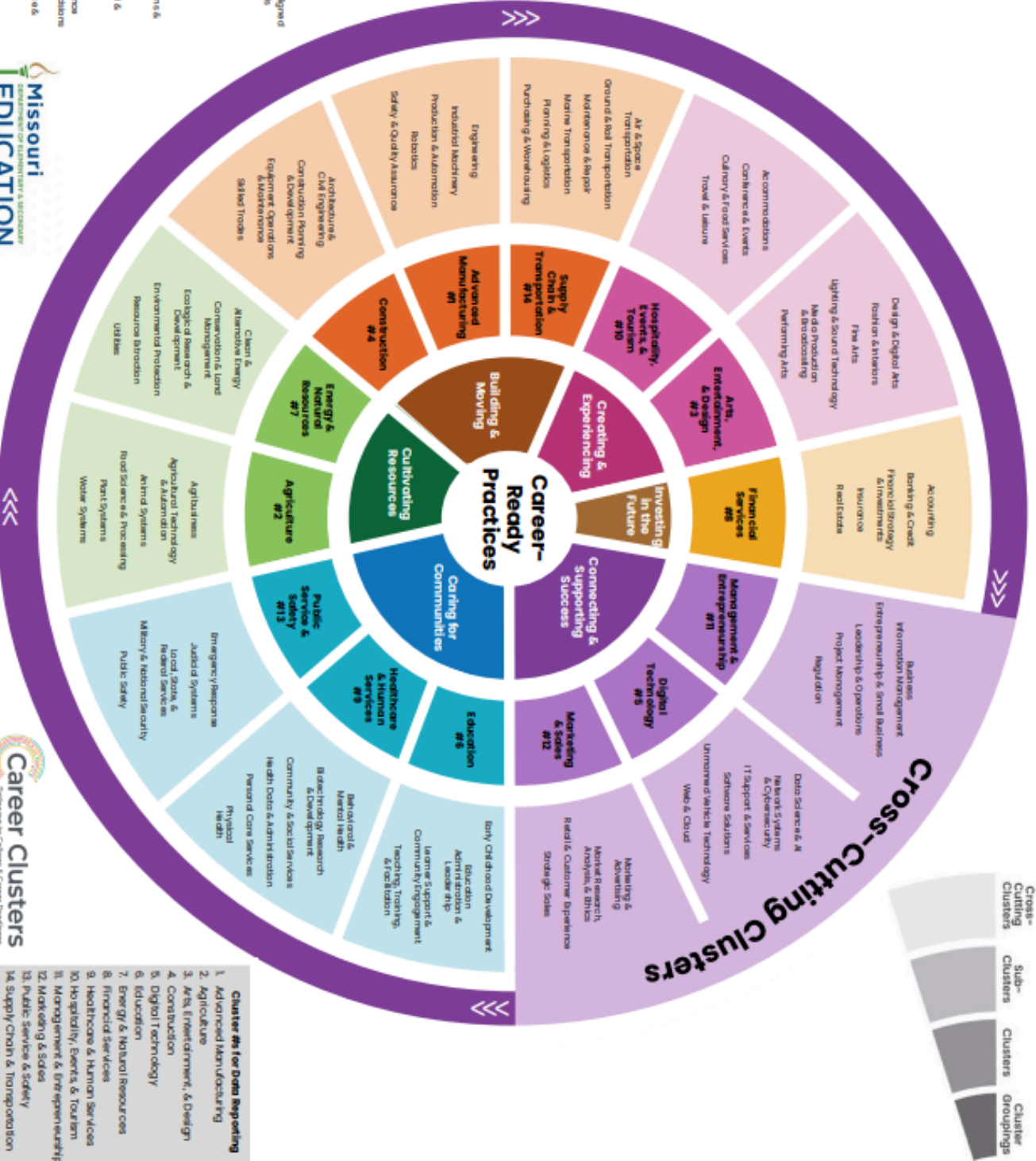
- Lead one or contributing employee
- Manage time & space effectively
- Demonstrate a creative & innovative mindset
- Collaborate productively with using cultural & global competencies
- Investigate an education & career path aligned to strengths, work style, interests, & goals
- Consider the environmental & social impacts of decisions
- Communicate clearly & effectively with reason
- Think critically to make sense of problems & persevere in solving them
- Act as a good steward of right natural & personal resources & resources
- Use digital skills & technologies to enhance productivity & make data-informed decisions
- Remain resilient in a changing workplace & world of work
- Apply appropriate economic & mathematical skills



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- Cluster #1: Advanced Manufacturing**
1. Advanced Manufacturing
 2. Agriculture
 3. Arts, Entertainment, & Design
 4. Construction
 5. Digital Technology
 6. Education
 7. Energy & Natural Resources
 8. Financial Services
 9. Healthcare & Human Services
 10. Hospitality, Events, & Tourism
 11. Management & Entrepreneurship
 12. Marketing & Sales
 13. Public Service & Safety
 14. Supply Chain & Transportation
 15. Other



STUDENT ELIGIBILITY REQUIREMENTS FOR ALL INTERSCHOLASTIC ACTIVITIES

In order for a student to participate in activities, he/she must fulfill completely all the regulations, and requirements set forth by the M.S.H.S.A.A. and the Fort Zumwalt School District.

M.S.H.S.A.A ELIGIBILITY STANDARDS

1. Students must be enrolled in courses offering 3.0 units and must earn 3.0 units the preceding semester within the regular school day. Summer school credits may apply to state eligibility standards provided the course is necessary for graduation or promotion and is placed on the school transcript. No more than one credit in summer school shall be counted towards eligibility.
2. Students enrolled in Missouri Virtual Schools Program must attend the district high school for courses offering not less than one unit of credit and be enrolled in a minimum of one and one half units of virtual school credit for the current semester.
3. Students must not have reached their 19th birthday prior to July 1st preceding the opening of the school year. A student is ineligible after the class in which they entered 9th grade has graduated.
4. Students are ineligible for varsity competition for one calendar year if they transfer to Fort Zumwalt from either a public or parochial high school without a corresponding change of residence of parent or guardian. (There is a possibility of a waiver when transferring from private to public.)
5. Students must be good school citizens. Behavior unbecoming a participant could result in the principal revoking the privilege of a student to participate in an activity temporarily or permanently. A student cannot commit an unsportsmanlike act while attending or participating in a high school activity.
6. Students must have satisfactorily passed the physical examination. Exams can be taken after February 1st of the preceding year and before school.
7. Students must have a signed parent permission form to participate in interscholastic activities.
8. All 9th grade students who have been promoted from the 8th grade are automatically eligible during their first semester of high school, but must meet district/state requirements their second semester.
9. Students cannot have previously graduated from a four year high school.
10. Students cannot have played sports under a false name.
11. Students must have entered school within the first 11 days of the semester.

COLLEGE ATHLETICS

College athletics are governed by one of three organizations:

- National Collegiate Athletic Association (NCAA)
- National Association for Intercollegiate Athletics (NAIA)
- National Junior College Athletic Association (NJCAA)

These governing bodies decide the rules and regulations that keep the various college sports and teams in line with what the organizations and their members determine are appropriate standards.

The NCAA is the largest and best known of the three organizations. Regardless of which of the three organizations governs the school you decide to attend and play a sport at, it is critical that you understand and abide by the eligibility requirements for that organization. In general, if you meet the eligibility requirements to be a NCAA Division I athlete, you will be eligible for the other organizations as well. However, you should check with each organization to be certain.

Websites:

- NCAA: <http://eligibilitycenter.org>
- NAIA: www.playnaia.org
- NJCAA: www.njcaa.org

Initial-Eligibility Standards

If you want to compete in NCAA sports, you need to register with the NCAA Eligibility Center at eligibilitycenter.org. Plan to register before your freshman year of high school. For more information on registration, visit on.ncaa.com/RegChecklist.

Academic Requirements

Division I and II schools require you to meet academic standards. To be eligible to practice, compete and receive an athletics scholarship in your first year of full-time enrollment, you must meet the following requirements:

Division I

1. Earn 16 NCAA-approved core-course credits in the following areas:

ENGLISH	MATH (Algebra I or higher)	SCIENCE (Including one year of lab, if offered)	EXTRA (English, math or science)	SOCIAL SCIENCE	OTHER Any area listed to the left or courses listed in additional discipline (world language, comparative religion or philosophy)
4 years	3 years	2 years	1 year	2 years	4 years

2. Complete your 16 NCAA-approved core-course credits in eight academic semesters or four consecutive academic years from the start of ninth grade. If you graduate from high school early, you still must meet core-course requirements.
3. Complete 10 of your 16 NCAA-approved core-course credits, including seven in English, math or science, before the start of your seventh semester. Once you begin your seventh semester, any course needed to meet the 10/7 requirement cannot be replaced or repeated.
4. Earn a minimum 2.3 [core-course GPA](#).
5. Ask your high school counselor to upload your [final official transcript](#) with proof of graduation to your Eligibility Center account.

Division II

1. Earn 16 NCAA-approved core-course credits in the following areas:

ENGLISH	MATH (Algebra I or higher)	SCIENCE (Including one year of lab, if offered)	EXTRA (English, math or science)	SOCIAL SCIENCE	OTHER Any area listed to the left or courses listed in additional discipline (world language, comparative religion or philosophy)
3 years	2 years	2 years	3 years	2 years	4 years

2. Earn a minimum 2.2 [core-course GPA](#).
3. Ask your high school counselor to upload your [final official transcript](#) with proof of graduation to your Eligibility Center account.

Division III

While [Division III schools](#) set their own admissions and academic requirements, [international student-athletes](#) (first-year enrollees and transfers) who are enrolling at a Division III school after Aug. 1, 2023, must be certified as an amateur by the Eligibility Center. Contact the Division III school you plan to attend for more information about its academic requirements.

GRADE
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REGISTER

- » If you haven't yet, **register** for a free Profile Page account at eligibilitycenter.org for information on NCAA initial-eligibility requirements.
- » Use NCAA Research's **interactive map** to help locate NCAA schools you're interested in attending.
- » Find your high school's list of NCAA-approved core courses at eligibilitycenter.org/counselist to ensure you're taking the right courses, and earn the best grades possible!

GRADE
10
PLAN

- » If you're being actively recruited by an NCAA school and have a Profile Page account, **transition** it to the required **certification account**.
- » Monitor the **task list** in your NCAA Eligibility Center account for next steps.
- » At the end of the school year, ask your high school counselor from each school you attend to upload an official transcript to your Eligibility Center account.
- » If you fall behind academically, ask your high school counselor for help finding **approved courses** you can take.

GRADE
11
STUDY

- » Ensure your **sports participation** information is correct in your Eligibility Center account.
- » Check with your high school counselor to make sure you're on track to complete the required number of NCAA-approved **core courses** and graduate on time with your class.
- » Share your **NCAA ID** with NCAA schools recruiting you so each school can place you on its **institutional request list**.
- » At the end of the school year, ask your high school counselor from each school you attend to upload an official transcript to your Eligibility Center account.

GRADE
12
GRADUATE

- » **Request your final amateurism certification** beginning April 1 (fall enrollees) or Oct. 1 (winter/spring enrollees) in your Eligibility Center account at eligibilitycenter.org.
- » Apply and be accepted to the NCAA school you plan to attend.
- » Complete your final NCAA-approved **core courses** as you prepare for graduation.
- » After you graduate, ask your high school counselor to upload your final **official transcript** with proof of graduation to your Eligibility Center account.

How to plan your high school courses to meet the 16 core-course requirement:

$$4 \times 4 = 16$$

9th GRADE

(1) English
(1) Math
(1) Science
(1) Social Science and/or other

4 CORE COURSES

10th GRADE

(1) English
(1) Math
(1) Science
(1) Social Science and/or other

4 CORE COURSES

11th GRADE

(1) English
(1) Math
(1) Science
(1) Social Science and/or other

4 CORE COURSES

12th GRADE

(1) English
(1) Math
(1) Science
(1) Social Science and/or other

4 CORE COURSES



CONTACT THE NCAA ELIGIBILITY CENTER

U.S. and Canada (except Quebec):
877-262-1492 (toll free), Monday-Friday
9 a.m. to 5 p.m. Eastern time



[@ncaaec](https://twitter.com/ncaaec) [@ncaaec](https://www.youtube.com/channel/UCncaaec) [@ncaaec](https://www.facebook.com/ncaaec) [@playcollegesports](https://www.instagram.com/playcollegesports)

COLLEGE CREDIT PROGRAMS

There are currently different types of dual enrollment/articulation programs whereby high school students can earn college credit by taking advanced high school courses and dually enrolling in the college's reciprocal course. Under the guidelines from the Coordinating Board for Higher Education (CBHE), **the following requirements must be met:**

Juniors and Seniors

- Juniors and seniors with an overall minimum grade point average of 3.0 (on a 4.0 scale) are automatically eligible for dual credit classes.
- Juniors and seniors with an overall grade point average between 2.5-2.99 (on a 4.0 scale) must provide a signed letter of recommendation from their principal or school counselor and provide written permission from a parent or legal guardian.

Sophomores

- Sophomores must have an overall minimum grade point average of 3.0 (on a 4.0 scale).
- Sophomores must provide a signed letter of recommendation from their principal and school counselor.
- Sophomores must provide written permission from a parent or legal guardian.

Freshmen

- Freshmen must have an overall minimum grade point average of 3.0 (on a 4.0 scale).
- Freshmen must score at the 90th percentile or above on the ACT or SAT.
- Freshmen must provide a signed letter of recommendation from their principal and school counselor.
- Freshmen must provide written permission from a parent or legal guardian.

Actual courses available for college credit change annually based upon approval of courses by the college, student enrollment and teacher certification requirements as set forth by the Missouri Department of Higher Education. Parents and students should contact their school's Counseling Department to determine if a course will be eligible for college credit at a particular high school. Please consult your high school's Counseling Department for current dual enrollment/articulation information.

Parents and students are advised that a college may not accept college credit earned through any of these programs. It is the student's/parents' responsibility to check with the college that they are planning on attending to see if the college will accept college credit obtained through these advanced credit programs. Additionally, many universities will not accept high school credit earned in middle school. Students are advised to take at least a minimum of three credits each of math and science in high school.

EARLY COLLEGE WITH SCCC

There are currently Early College opportunities for students with St. Charles Community College (SCCC) where students can simultaneously earn high school and college credit. The full program description is available [HERE](#). Interested students must complete an Early College Application and submit it to their school's counseling office. Students must also complete an online Application for Admission for SCCC. All students will need to apply to SCCC and take their entrance assessment. All enrollees will complete a signed agreement to abide by the expectations and responsibilities of the FZSD/SCCC Early College Program. Prospective enrollees should have a strong academic record with documented success in rigorous courses.

WEIGHTED GRADES

The impact of weighted grades for advanced course offerings should serve to offer additional scholastic rewards to those students taking these classes. The use of weighted grades could help raise the grade point average and the class ranks of college-bound students and help those students in qualifying for scholarships and financial awards.

For all high school honors courses and advanced courses that are available for college credit, additional points on the grade point average scale can be earned for the grades of A, B, and C. The weight, per grade, is 1 additional point.

The grades of A, B, and C receive full weight equivalent to the next highest grade. The weighted grades are as follows:

A	5 points
B	4 points
C	3 points
D	1 point
F	0 points

ACADEMIC EXCELLENCE

In the interest of encouraging and recognizing outstanding academic achievement, students will be recognized for their accomplishments. These academic honor students will be selected according to the following procedure:

Cum Laude Honors System

1. A student must have attended Fort Zumwalt School District for a minimum of one calendar year.
2. A student must have taken a minimum of a full seven hour day for four years. During the senior year, students may petition the principal for part-time attendance status as outlined in IKFA-E-2 and will be eligible for Honors if they meet all remaining criteria.
3. Students requesting early graduation (after 6 or 7 semesters) will be eligible for Honors if they meet all remaining criteria.
4. Grade point average will include all courses taken in high school, except correspondence.
5. A student must take a minimum of 12 semester courses (6 credits) of advanced coursework. Advanced coursework is defined as weighted classes as identified in the *Career & Educational Planning Guide*.
6. Grade Point Average needed for recognition:
 - a. 4.2 and above = Summa Cum Laude
 - b. 4.0 – 4.19 = Magna Cum Laude
 - c. 3.80 – 3.99 = Cum Laude
7. Recognition will be received as follows:
 - a. As student's names are read at commencement, the Cum Laude Honors will be announced.
 - b. Students will wear a colored medallion to signify their level of honor.
 - i. Summa Cum Laude – Gold
 - ii. Magna Cum Laude – Silver
 - iii. Cum Laude – Bronze
 - c. A sticker will be placed on the student's diploma indicating the honor.
8. Class rank will only be reported on final transcripts.

SPECIAL EDUCATION

When a general education course is modified and delivered in the special education setting, the course title on the schedule and transcript will include a ().

When the IEP team determines significant modifications are needed to general education course expectations and curriculum delivered in the general education setting, modified grades will be assigned. The modified grade will be determined based on the extent to which the modified requirements, expectations, and skills are met, as well as other factors (class participation, homework completion, etc.) used by teachers to determine grades. The modified grade will be indicated by an (@) after the letter grade on the report card and transcript.

Modified courses and grades are averaged in the same manner as regular course grades to compute grade point averages. The amount of credit earned will be the same as for non-modified coursework.

Students are eligible for honor roll and graduation with honors per applicable board of education policy.

All decisions regarding a student's Individualized Program (IEP) are to be determined by the student's IEP team. Such decisions include the types and amounts of special education and related services, service delivery models, settings in which the services are delivered, curriculum modifications, and accommodations.

THE A+ PROGRAM

Graduates of Ft. Zumwalt who completes the A+ program may be eligible for funds to pay for tuition, and some common fees at any Missouri community college or trade-school. Additionally, many private schools, or 4-year Missouri schools may offer their own version of an A+ scholarship. See the A+ office for a complete list of schools that offer benefits.

REQUIREMENTS:

- * Sign an A+ agreement form
- * Attend an A+ high school for two (2) consecutive years prior to graduation
- * Graduate from high school with a grade point average of 2.5 or higher on a 4.0 scale
- * Maintain a four-year attendance record of 95% or higher
- * Graduate with fifty (50) documented hours of unpaid tutoring of students in an approved and supervised Ft. Zumwalt setting (5th grade camp, STEM camp, and other summer opportunities available)
- * Maintain a record of good citizenship and avoid the unlawful use of drugs and alcohol
- * Students must score Proficient or higher on the Algebra I End of Course (EOC) Test, or score a 17 or higher on the math portion of the ACT

BENEFITS:

- * Two-years of tuition and some fees for Missouri community colleges, trade or vocational schools (valid for up to 4-years after graduation)
- * Some Missouri post secondary institutions offer their own version of A+ scholarship (For example, Truman and Missouri State Universities both offer \$500 per year (\$2,000 over 4 years)).
- * Tutoring/service hours provide talking points for college and scholarship applications.
- * Job Shadowing opportunities available as early as Freshman year of high school.

PEER MENTORING

Peer Mentors are students who volunteer to be natural supports to students with disabilities in select courses and Community-Based instruction to increase socialization and independence. Peer mentors must be responsible, positive role models who show initiative and self-direction.

Peer Mentors must:

- Complete application and have approval from their assistant principal.
- Have acceptable attendance and citizenship. Previous school discipline issues and/or legal matters outside of school may exclude students from being a Peer Mentor.
- Participate in training at the beginning of each semester.

Peer Mentor opportunities are available in select elective courses, availability varies by school. Please discuss course options, prerequisites, and credit options with your counselor and parent(s). Peer Mentors have the opportunity to earn general elective credit or A+ hours.

VIRTUAL COURSEWORK

Eligible students may apply to enroll in virtual courses offered through the school district's adopted platform or the Missouri Course Access Program (MOCAP). Online coursework will follow the same process as traditional course enrollment with similar academic calendar dates for enrollment, withdrawal and course completion. Students participating in online courses may not exceed a seven period course load unless the additional coursework is approved by the building principal and is at the expense of the student and/or parent.

Any student interested in online coursework should start by completing the enrollment process and choosing seven traditional courses.

Why consider a virtual course?

- Schedule conflicts
- Course offerings for homebound or at-risk students
- Credit recovery

Selection of virtual coursework should be carefully made and students should expect to spend considerable amounts of time to complete virtual courses successfully. Students must confer with their counselors and parents prior to applying to take any virtual coursework.

Students and parents/guardians interested in pursuing enrollment in virtual courses **should contact their school counselor for more information**. More detailed information about the policy and procedures governing this process can be found on the Fort Zumwalt School District website, Board Policy IGCD or by visiting the Missouri Course Access Program at <https://mocap.mo.gov>.

COURSES OPEN TO FRESHMEN

Students must meet the required prerequisites for some courses as specified in the course descriptions.

<u>ENGLISH LANGUAGE ARTS</u>	<u>PHYSICAL EDUCATION, cont.</u>	<u>STUDENT PUBLICATION</u>
Literacy Skills (Teacher Recommended Only)	Lifetime and Individual Activities *	Intro to Newspaper Production
English I	Body Sculpting *	Intro to Yearbook Production
Accelerated English I (w)	Weight Training & Fitness *	<u>FINE ARTS</u>
English for Speakers of Other Languages (ESOL)	Cardio Fitness for Life *	Introduction to Art
<u>SOCIAL STUDIES</u>	<u>PRACTICAL ARTS</u>	Intro to Theatre *
United States History	Introduction to Foods *	Theatre I: Performance *
Accelerated US History (w)	Culinary 1 *	Technical Theatre 1 *
<u>SCIENCE</u>	Apparel, Textiles & Construction 1 *	Treble Choir
Physical Science	Apparel, Textiles & Construction 2 *	Baritone Choir
Biology	Desktop Publishing *	Concert Choir (with approval)
Accelerated Biology (w)	Intro to Business *	Concert Orchestra
<u>MATH</u>	Web Design *	Beginning Band *
Math 9 (teacher recommended)	Computer Applications *	Symphonic Band
Algebra I	Metals I *	Wind Ensemble
Geometry	Metals 2 *	Guitar I *
Accelerated Geometry (w)	Woods 1 *	Guitar 2 *
<u>WORLD LANGUAGES</u>	Woods 2 *	Jazz Band
French I	Carpentry *	Jazz Lab *
German I	Introduction to Drafting *	<u>PROJECT LEAD THE WAY</u>
Spanish I	Architectural Drafting *	Intro to Engineering (w)
<u>PHYSICAL EDUCATION</u>	Engineering Drafting *	Principles of Biomedical Science (w)
General Physical Education *	Video Production 1 *	Computer Science Essentials (w)
Health and Family Education *	Video Production 2 *	

w = weighted grade * = semester course cc = college credit

All course offerings are dependent on enrollment

COURSES OPEN TO SOPHOMORES

Sophomores may select from any courses listed from freshmen plus take any additional courses listed below as long as prerequisites have been met.

<u>ENGLISH LANGUAGE ARTS</u>	<u>WORLD LANGUAGES</u>	3-D Solid Modeling & Design *
English II	French II	Drafting Capstone *
Accelerated English II (w)	German II	<u>FINE ARTS</u>
Speech * (in addition to English II)	Spanish II	Drawing 1 *
<u>SOCIAL STUDIES</u>	<u>PHYSICAL EDUCATION</u>	Drawing 2 *
World History	Team Sports *	Painting 1 *
AP World History (w)	Outdoor Education & Hunter Safety *	Photography 1 *
Sociology *	Positive Leadership in Sports *	Photography 2 *
General Psychology *	<u>PRACTICAL ARTS</u>	Graphic Design 1 *
Leadership *	Housing and Interior Design *	Graphic Design 2 *
<u>SCIENCE</u>	Culinary 2 *	Ceramics 1 *
General Physics	International Foods/Culinary 3 *	Ceramics 2 *
General Chemistry	Child Development 1 *	Mixed Media *
Accelerated Chemistry (w)	Accounting	Theatre II: Performance
Environmental Science *	IT Essentials (w)/cc	Technical Theatre II
Earth Science - Astronomy & Meteorology *	Introductions to Networks (w)/cc	Chamber Choir
Earth Science - Geology *	Entrepreneurship *	Symphonic Orchestra
Zoology *	Personal Finance *	<u>PROJECT LEAD THE WAY</u>
<u>MATH</u>	Marketing Foundations	Principles of Engineering (w)
Algebra II	Business Production *	Civil Engineering & Architecture (w)
Accelerated Algebra II (w)	Woods 3 *	Human Body Systems (w)
Introduction to Statistics * (if enrolled in Algebra II)	Metals 3 - Precision Machining *	Cybersecurity (w)
(If student completed Algebra II during freshman year, please see school counselor for options)	Metals 3 - Welding & Fabrication *	Computer Science Principals (w)
	Metals 4 * Engineering Metal Tech	<u>ELECTIVE</u>
	Video Production Capstone *	ACT Prep Course

w = weighted grade * = semester course cc = college credit

All course offerings are dependent on enrollment

COURSES OPEN TO JUNIORS

Juniors may select from any courses listed for sophomores and freshmen plus take any additional courses listed below as long as prerequisites have been met.

<u>ENGLISH LANGUAGE ARTS</u>	<u>MATH</u>	<u>PRACTICAL ARTS, cont.</u>
American Literature	Introduction to Statistics *	AP Economics (w)
AP Language & Composition (w)/cc	Algebra III *	Advanced Marketing
Mythology*	Math Analysis *	Supervised Apprenticeship *
Advanced Speech * (w)/cc	College Algebra (w)/cc	<u>FINE ARTS</u>
Science Fiction & Fantasy *	AP Pre-calculus (w)/cc	Painting 2 *
Sports Media and Literature*	AP Statistics (w)/cc	AP Art History (w)
Creative Writing *	Mathematics Independent Study *	AP Art & Design/AP Drawing (w)
<u>SOCIAL STUDIES</u>	<u>ELECTIVES</u>	Film Studies I *
Government	Peer Mentor *	Film Studies II *
AP US Gov & Politics (w)	Peer Mentor A+ credit only *	Advanced Theatre Studies: Performing (w) *
Contemporary Issues *	<u>WORLD LANGUAGES</u>	Advanced Theatre Studies: Technical (w)*
Criminal Justice *	French III (w)/cc	Advanced Music Ensemble (w)/cc
American Pop Culture *	German III (w)/cc	AP Music Theory (w)
AP Psychology (w)/cc	Spanish III (w)/cc	Philharmonic Orchestra
AP US History (w)/cc	<u>PRACTICAL ARTS</u>	<u>PROJECT LEAD THE WAY</u>
<u>SCIENCE</u>	Family Relationships *	Engineering Design & Dev. (w)
Human Anatomy & Physiology (w)/cc	Child Development II *	Medical Interventions (w)
AP Biology (w)/cc	Child Development Practicum *	AP Computer Science A (w)
AP Chemistry (w)/cc	Apparel, Textiles & Interior Design Practicum *	
AP Environment (w)/cc	Pathways to Teaching (w)/cc	
AP Physics 1: Algebra Based (w)/cc	Culinary Practicum *	
AP Environmental Science (w)/cc	Advanced Accounting (w)	
Science Research (w)/cc	Microsoft Office Skills (w)	

w = weighted grade * = semester course cc = college credit All course offerings are dependent on enrollment

COURSES OPEN TO SENIORS

Seniors may select from any courses listed for juniors, sophomores and freshmen plus take any additional courses listed below as long as prerequisites have been met.

<u>ENGLISH LANGUAGE ARTS</u>	<u>SCIENCE</u>	<u>PRACTICAL ARTS</u>
AP Literature & Composition (w)/cc	Science Research year 2 (w)/cc	Supervised Work Program - Business
Senior Literature & Composition	AP Physics C: Mechanics (w)/cc	Supervised Work Program - Marketing
<u>SOCIAL STUDIES</u>	<u>WORLD LANGUAGES</u>	Business Independent Study
Foreign Policy * (w)/cc	French IV (w)/cc	<u>PROJECT LEAD THE WAY</u>
Western Civilization (w)/cc	French V (w)/cc	Biomedical Innovations (w)
AP Comparative Government & Politics * (w)/cc	German IV (w)/cc	<u>CENTER FOR ADVANCED PROFESSIONAL STUDIES (CAPS)</u>
<u>MATH</u>	German V (w)/cc	Healthcare & Medical Professions
AP Calculus AB (w)/cc	Spanish IV (w)/cc	Entrepreneurship & Business Management
AP Calculus BC (w)/cc	Spanish V (w)/cc	Creative Media. Engineering. Applied Technology

w = weighted grade * = semester course cc = college credit

All course offerings are dependent on enrollment

ENGLISH LANGUAGE ARTS

Four ELA credits are required for graduation.

When developing an Individual Career & Academic Plan, there are two pathways to choose from when deciding which ELA courses to take. When a student chooses one of the options, he or she is not obligated to stay on that path. The student may switch to a different pathway if academic results indicate a change will be beneficial to the student, provided that the deadlines and prerequisites are met. Students should work with their parents, teachers and school counselors to develop the best course sequence for their post-secondary goals.

*** Course is weighted ** Course is weighted and available for college credit and/or AP credit**

ENGLISH LANGUAGE ARTS	FRESHMAN YEAR	SOPHOMORE YEAR	JUNIOR YEAR	SENIOR YEAR
REQUIRED PATHWAY	English I	English II	American Literature	Senior Literature & Composition OR various ELA Elective courses
ADVANCED PATHWAY	Accelerated English I *	Accelerated English II *	AP English Language & Composition **	AP English Literature & Composition **

ELA Courses that count for Elective ELA (.5) Credit: (These courses may be taken junior or senior years, but they do not replace the Required or Advanced Pathway courses for junior year.)	Creative Writing Science Fiction and Fantasy Mythology Sports Media & Literature Advanced Speech**
Courses that count for Practical Arts Credit: (These courses may be taken sophomore, junior, or senior year.)	Introduction to Newspaper Production Newspaper Production Introduction to Yearbook Production Yearbook Production
Students planning to apply to selective colleges should take the Advanced Pathway and any Advanced Placement (AP) English courses.	
Accelerated Courses are available to all students and should be viewed as a pathway to an Advanced Placement course. These courses are more rigorous.	
Advanced Placement (AP) ELA courses are encouraged for all students. AP ELA courses help develop key skills needed to succeed in college by improving academic writing skills for all majors, sharpening problem-solving abilities, and developing better study habits.	
<i>*See the Fort Zumwalt Career & Educational Planning Guide for all Prerequisites.</i>	

ENGLISH LANGUAGE ARTS

010055 Literacy Skills (1 Elective Credit)

The focus of this course is to provide students with explicit, direct instruction in vocabulary development, comprehension strategies, and fluency (if needed). Students take part in pre and post assessment of their reading level as a part of this course. Instruction in the course is individualized and differentiated according to the needs of the student. Teacher recommendation and Administrator approval required. **DESE 054840**

01015 English I (1 Credit)

English I is a year-long course in reading, writing, and speaking and listening. Coursework and instruction meet the Missouri Learning Standards and prepare students for success in future high school English Language Arts courses and in real-world applications. Students will develop critical thinking skills through close readings of complex literature, including fiction, informational texts, poetry, and drama. Students will evaluate and analyze authors' purposes, styles, organization, central ideas, and themes and respond thoughtfully to diverse perspectives. In addition, students will cultivate writing skills by composing well-developed argumentative, narrative, expository, and research-based essays that demonstrate a mastery of vocabulary, grammar, rhetoric, and sentence fluency. Using digital media, students will produce and publish clear and coherent pieces that encourage dialogue and promote understanding. **DESE 054800-1**

01025 Accelerated English I (1 Credit)/w

Accelerated English I is an intensive year-long reading and writing course that will introduce literacy, argument, and analysis skills that students will need to be successful in high school and in future AP classes. In addition to meeting the Missouri Learning Standards, this course will focus on reading a variety of genres, with an emphasis on informational texts, literature, and poetry, as well as introducing and applying rhetorical strategies to encourage critical thinking and analysis of authors' tones, purposes, syntax, central ideas, and themes. Students will develop their writing skills through the synthesis of a variety of modes, including argumentative, narrative, and informative, and utilize digital mediums to produce and publish clear and coherent pieces. Research is integrated throughout the course. Students' speaking and listening skills will develop through the presentation of ideas, Socratic seminars, and literature discussions geared towards a variety of audiences and purposes. **DESE 045861-1**

01035 English II (1 Credit)

English II is a year-long course in reading, writing, and speaking and listening that meets the Missouri Grade Level Expectations. Coursework and instruction prepare students for success in future high school English Language Arts courses and in real world applications. Students will develop and apply critical-thinking and analysis skills to complex literature – including fiction, informational texts, poetry, and drama – through close readings and the identification and analysis of the author's craft. Students will also evaluate and analyze an author's tone, purposes, syntax, style, central ideas and themes and respond thoughtfully to diverse and cultural perspectives. In addition, students will continue to develop writing skills through a variety of modes by composing blended genre writing incorporating argumentative, narrative, informative, and research-based elements that are integrated throughout the course, demonstrating a mastery of language, rhetoric, and sentence fluency. Using digital media, students will produce and publish clear and coherent pieces that encourage dialogue and promote understanding of ideas. **(Prerequisite: Successful completion of English I) DESE 054800-2**

01045 Accelerated English II (1 Credit)/w

Accelerated English II is an intensive year-long reading and writing course that will build upon the literacy, argument, and analysis skills that students will need to be successful in high school and in future AP classes. Students will read, analyze, and critique a variety of complex fiction and nonfiction, applying rhetorical strategies that will continue to encourage critical thinking and analysis of author's purpose, tone, syntax, style, central ideas and themes. The class will continue to develop students' writing, specifically focusing on sophisticated blended genre (narration, argumentative, and expository) compositions. Using various forms of media/research, students will synthesize information to create a variety of presentations and projects. Students' speaking and listening skills will develop through the presentation of ideas, Socratic Seminars, and literary discussions geared towards a variety of audiences and purposes. This course is vertically aligned to the AP standards and is designed to help students achieve success in future AP classes. **(Prerequisite: Successful completion of English I) DESE 054861-2**

01055 American Literature (1 Credit)

American Literature is a year-long reading, writing, and speaking and listening course. Coursework and instruction introduce students to American writers of nonfiction, fiction, poetry, and drama. Students continue developing their analytical and critical thinking skills as they read, evaluate, compare, and contrast primary source documents, various media sources, and foundational works of American literature through historical, political, and social perspectives. In addition, students will write several compositions that demonstrate their analytical and critical-thinking skills. Students will also refine their research skills while evaluating arguments according to audience, subject, and purpose. Working toward career-ready digital literacy, students will use digital tools to compose and produce pieces demonstrating mastery of vocabulary, grammar, and sentence fluency. Students will engage in speaking and listening skills in which they will work collaboratively to promote civil, democratic discussions and respond thoughtfully to diverse perspectives.

(Prerequisite: Successful completion of English II) DESE 054821-3

01425 Senior Literature and Composition (1 Credit)

Senior Literature and Composition is a year-long course that prepares students for post-secondary life, whether it be college, trade school, military, or the workforce. Students will strengthen their critical thinking skills through analyzing and synthesizing various readings across genres while participating in collegiate-level discussions. Focusing on digital literacy, students will thoughtfully respond, qualify, and justify diverse perspectives while analyzing and evaluating their own views about the presented information. Students will also have opportunities to work collaboratively, utilize digital resources, synthesize research, and complete projects and assignments in order to expand their perspectives and reasoning skills. In addition, students will compose formal and informal writing pieces, including essays, journal entries, reflections, etc. that demonstrate a mastery of vocabulary, grammar, rhetoric, and sentence fluency. Emphasis will be placed on improving effective communication. **(Prerequisite: Senior standing) DESE 054800-3**

01145 Advanced Placement (AP) Language and Composition (1 Credit) cc/w

AP English Language and Composition is a rigorous, writing-intensive course designed for the serious student of communication arts. Students will craft original pieces acceptable in academic and professional environments. Through close reading and frequent collegiate-level writing, students will develop the skills necessary to analyze sophisticated texts that use intentional rhetorical strategies, devices, and choices. The course primarily places emphasis on works of nonfiction, and writing will include both formal and informal pieces of rhetorical analysis, argument, and synthesis (research-based pieces). Students focus on analyzing the speaker, audience, and purpose from the perspective of being the writer and as a critical thinker. Overall, the course helps students develop an awareness of the way language contributes to effectiveness in writing. **(Prerequisite: Junior/Senior standing) DESE 054804**

0107 Speech (0.5 Credit)

Speech is a semester-long course that develops verbal and nonverbal skills in a variety of communication contexts. Students will write, develop, and perform a variety of public speaking events. The course develops skills in research, writing, listening, speaking, and professionalism. Areas of study include interpersonal, narrative, informative, persuasive and impromptu speaking. **(Prerequisite: (Sophomores concurrent with English II, Junior or Senior standing) DESE 056500-1**

01085 Advanced Speech (0.5 Credit)/cc/w

Advanced Speech is a semester-long performance course that builds upon the written and oral communication skills taught in Speech. Students will research and write manuscripts, outlines and debates for performance. The major units of study include impromptu speaking, extemporaneous speaking, original oratory, mass communication, the art of rhetoric, debate, and real-world communication skills. *This course may be available for college credit. **(Prerequisite: Junior or Senior standing and successful completion of English II and Speech) DESE 056500-2**

0109 Creative Writing (0.5 Credit)

Creative Writing is a semester-long intensive writing course where students develop their talents further in the areas of creative nonfiction, fiction, poetry, etc. Students will analyze texts of published authors and use their speaking and listening skills to share and evaluate their writing. The class focuses on the study of style and structure; emphasis outside of class is on the students' opportunity, ability, and responsibility to create, polish, and revise their own individual works on a regular basis. Because the writing assignments can average more than one a week, the course is not recommended for any student who does not actively enjoy writing or who does not have at least average proficiency as a writer. **(Prerequisite: Junior or Senior standing and successful completion of English I and English II) DESE 054805**

0111 Mythology (0.5 Credit)

Mythology is a semester-long course that allows students to explore and analyze a variety of myths and folklore from cultures around the world including but not limited to Greek, Roman, Egyptian, Norse, African, Japanese, Indigenous Peoples, etc. Students will gain an understanding and appreciation of how myths have marked human history and how they continue to influence culture today. Students will also build upon prior reading, writing, speaking, and listening skills from previous language arts courses. While the course will pay special attention to archetypes often shared by myths across the globe (the hero, the underworld, the trickster, etc.), it also will explore what myths can tell us about the unique cultures, histories, and political contexts of the people who produce them.

(Prerequisite: Junior or Senior standing and successful completion of English I and English II) DESE 054850

0112 Science Fiction and Fantasy (0.5 Credit)

Science Fiction and Fantasy is a semester-long, Language Arts class designed for students with a strong curiosity in the science fiction/fantasy genres. Readers will delve into worlds and works created by both classic science fiction/fantasy authors and contemporary writers. Writings will encourage students to think fantastically outside of their everyday lives. Students will consider each text in its historical context, examine issues and themes presented, and make connections to their own world and what it means for their future. **(Prerequisite: Junior or Senior standing and successful completion of English I and English II) DESE 054819**

0116 Sports Media and Literature (0.5 Credit)

Sports Media & Literature is a semester-long course that explores the impact of sports on society. Students will strengthen their reading comprehension skills through analyzing and synthesizing various texts across multimedia resources such as journalism, film, broadcasting, and print. The course will emphasize students gaining a newfound understanding of teamwork, leadership, and the psychology of sports. Students will also have opportunities to work collaboratively, enhance effective communication skills, utilize digital resources, research, and complete projects to improve evidence-based reasoning. Students will compose writing pieces that evaluate their own views on sports topics. **(Prerequisite: Junior or Senior in good standing) DESE 054800-4**

01155 Advanced Placement (AP) Literature and Composition (1 Credit) cc/w

AP Literature and Composition is a year-long, college-level reading and writing course concentrating on mature literature from American, British, and world writers from the sixteenth century to contemporary times. Applying critical theory while close reading these texts, students will deepen their understanding of the ways writers use language to provide both philosophical meaning and pleasure for their readers. As they read, students consider a work's structure, style, universal themes, complexity, and smaller-scale elements, including figurative language, imagery, symbolism, and tone. Although critical analysis comprises the bulk of student writing for the course, well-constructed creative writing assignments may help students see how literature is written from the inside. **(Prerequisite: Senior standing) DESE 054995**

2505-2508 English for Speakers of Other languages (ESOL)

English for Speakers of Other Languages (ESOL) is a course designed for secondary students in grades 9-12. The course is designed to improve English Language Learners (ELLs) proficiency level in English in the areas of speaking, listening, reading and writing. The course also provides academic support, including modifications and accommodations, for core courses and assessments by providing an ELL Academic Plan detailing the specific needs of each ELL student. **(Prerequisite: Completing a home language survey form and scoring as Limited English Proficient (LEP) on the language assessment) DESE 0548**

STUDENT PUBLICATION

01205 Introduction to Newspaper Production (1 Credit)

Introduction to Newspaper Production (*An elective for Practical Arts or elective English Language Arts*) is a year-long, practical lab class, where students produce the school newspaper. Students will learn all the skills necessary to recreate a computer-generated newspaper, including newsworthiness of stories, identifying reliable sources, journalistic writing and editing, and working within a budget supported through ad sales and fundraising. Students need to be aware that this is a co-curricular class that will require after-school hours to complete deadlines satisfactorily. **(Prerequisite: Teacher recommendation and student application.) DESE 054830-1**

01215 Newspaper Production (1 Credit)

Newspaper Production (*An elective for Practical Arts or elective English Language Arts*) is a year-long, practical lab class where students will provide leadership to produce the school newspaper. Students will master all the skills necessary to create a computer-generated newspaper, including newsworthiness of stories, identifying reliable sources, journalistic writing and editing, and working within a budget supported through ad sales and fundraising. Students need to be aware that **this is a co-curricular class that will require after-school hours to complete deadlines satisfactorily. (Prerequisite: Successful completion of Introduction to Newspaper Production and/or Instructor Approval. Repeatable) DESE 054830-2**

01221 Introduction to Yearbook Production (1 Credit)

Yearbook Production I (*An elective for Practical Arts or elective English Language Arts*) is a year-long, practical lab class where students produce the school yearbook. Students will learn all the skills necessary to create a computer-generated yearbook, including theme development, journalistic writing, design, digital photography, and desktop publishing. Students need to be aware that **this is a co-curricular class that will require after-school hours to complete deadlines satisfactorily. (Prerequisite: Teacher recommendation and student application.) DESE 054830-1**

01235 Yearbook Production (1 Credit)

Yearbook Production II (*An elective for Practical Arts or elective English Language Arts*) is a year-long, practical lab class where students will provide the leadership to produce the school yearbook. Students will master all the skills necessary to create a computer-generated yearbook, including theme development, journalistic writing, design, digital photography, and desktop publishing. Students need to be aware that **this is a co-curricular class that will require after-school hours to complete deadlines satisfactorily. (Prerequisite: Successful completion of Introduction to Yearbook Production and/or Instructor Approval, Repeatable.) DESE 054830**

SOCIAL STUDIES

Three social studies credits are required for graduation.

When developing an Individual Career & Academic Plan, there are two pathways to choose from when deciding which social studies courses to take. When a student chooses one of the options, he or she is not obligated to stay on that path. The student may switch to a different pathway if academic results indicate a change will be beneficial to the student, provided that the deadlines and prerequisites are met. Students should work with their parents, teachers and school counselors to develop the best course sequence for their post-secondary goals.

***Course is weighted ** Course is weighted and available for college credit and/or AP credit**

SOCIAL STUDIES	FRESHMAN YEAR	SOPHOMORE YEAR	JUNIOR YEAR	SENIOR YEAR
REQUIRED PATHWAY	United States History	World History	Government	All social studies electives are available
ADVANCED PATHWAY	Accelerated United States History *	AP World History *	AP United States Government & Politics**	All social studies electives are available
ELECTIVE OPTIONS		Sociology General Psychology Leadership	Contemporary Issues Criminal Justice American Pop Culture AP Psychology** AP US History **	AP Comparative Government** Western Civilization** Foreign Policy**

- There are several social studies elective options for students to choose from beginning their sophomore year. If electives are taken during 10th or 11th grade, they do not replace the required Regular or Advanced Pathway courses for that particular year.

SOCIAL STUDIES

0205 United States History (1 Credit)

United States History is a required year-long survey course. This course emphasizes history, government, culture, diversity, economics, and geography of our nation. Students will explore a presentation of history from Industrialization through Modern America by interpreting historical evidence, identifying historical trends, and examining the major turning points that define America. During the course, students will have opportunities to pass the required Missouri Civics Education Initiative test to be eligible for graduation. **(Prerequisite: Freshman standing) DESE 156661**

02085 Accelerated United States History (1 Credit) /w

Accelerated United States History is an advanced year-long course that will introduce students to the history, government, culture, diversity, economics, and geography of our nation from industrialization to the present. In addition to fulfilling the United States history graduation requirement, this course will challenge students and prepare them for AP and dual credit social studies courses by analyzing primary source documents, conducting research, and applying critical thinking, reading, and writing skills. Students are required to pass the Missouri Civics Education Initiative test to be eligible for graduation.

(Recommendation: An “A” or “B” in 8th grade United States History) DESE 156661

02065 World History (1 Credit)

World History is a required year-long survey course that provides students with a comprehensive study of cultures, major events, and themes in world history beginning from the Renaissance. Throughout this course, students will develop historical thinking skills to become productive citizens. **(Prerequisite: Sophomore standing) DESE 156663**

02275 Advanced Placement (AP) World History (1 Credit) /w

This course is a year-long elective course offered to sophomores, juniors, and seniors. The course takes a chronological as well as a thematic approach to the study of world societies and contacts between peoples, 1200 to present. Students apply content knowledge to understand continuity and change among and between different parts of the world. This college level class is a weighted grade and will develop students’ reading, writing, and critical thinking skills through the use of historical documents and primary sources. Students are expected (although not required) to take the AP World History Exam. There is a charge for the exam. This course fulfills the World History graduation requirement. **(Recommendations: sophomore standing and parent permission) DESE 156663**

02075 Government (1 Credit)

American Government is a year-long required course. The course will include the study of federal, state, and local government, as well as basic economic principles. Students are required to pass both a United States Constitution test and a Missouri Constitution test to be eligible for graduation. **(Prerequisite: Junior standing) DESE 156651**

02325 Advanced Placement (AP) United States Government and Politics (1 Credit) /w

The purpose of this year-long course is to prepare students to take the AP Exam for U.S. Government and Politics. This course is a college-level survey of American government and political thought. Topics will include, but are not limited to: the Constitution and foundations of American democracy, the American political culture and landscape, the structure and function of the federal government, the role of special interest groups and the media, the rights and responsibilities of citizenship, civil liberties and civil rights, landmark Supreme Court Cases, and public policy. This rigorous course is designed to give students an analytical perspective on government and politics in the United States. Students will be expected to interpret both primary and secondary documents, including readings, maps, charts, graphs and polls and then analyze data to formulate conclusions and predictions. There is a charge for the exam. **(Recommendations: Junior standing and parent permission) DESE 156595**

02220 Leadership (0.5 Credit)

Do you want to learn how to change the world for the better? What kind of leader do you want to be? This semester-long class is a chance to think about who you want to be and how to build skills that will get you there. Leadership class helps develop skills like effective communication, understanding cultural differences, people skills, organizational/social strategies, and self confidence. This hands-on curriculum focuses on authentic and community based activities. Experiences could include guest speakers, community and school service, field trips, simulations, and real world applications/connections. **(Prerequisite: Sophomore, Junior, or Senior standing, student application, supportive teacher recommendations, and parent approval.) DESE 156610**

0209 Sociology (0.5 Credit)

This intriguing, semester-long course will help you understand the relationship between you and society. Topics include culture, socialization, deviance, the class system, inequality, and family. The course will help you take a sociological perspective when you think about the world and your social position within it. The course is useful for future career paths, especially in healthcare and social work. **(Prerequisite: Junior or Senior standing or Sophomore standing with building approval.) DESE 156670-1**

0217 General Psychology (0.5 Credit)

Have you ever wondered why we think, feel, and behave the way we do? General Psychology, a semester-long course, is a thought-provoking course where you will get to explore such questions. This class dives into topics including cognition, consciousness, perception, and personality. General Psychology will challenge your preconceptions as you look into the minds of famous psychologists and discover their unique perspectives of human behavior. You will engage in group discussions and hands-on activities while gaining a new appreciation of the wonders of the mind that will help enrich your studies and relationships. **(Prerequisite: Junior or Senior standing or Sophomore standing with building approval) DESE 156100**

0224 Contemporary Issues (0.5 Credit)

Welcome to Contemporary Issues, a thought-provoking, semester-long high school course designed to empower students with the knowledge and critical thinking skills necessary to understand, analyze, and discuss the complex challenges facing our world today. This course will foster an appreciation for the interconnectedness of global events and encourage active participation in the global community. **(Prerequisite: Junior or Senior standing) DESE 156620**

02260 American Pop Culture (0.5 Credit)

This engaging, semester-long course explores the development of Modern American Pop Culture and its impact on society. Students will examine the evolution and impact of popular music, film, television, fashion, art, sports, and media. Students will critically analyze the intersection of popular culture with topics such as technology, consumerism, and globalization. Students will engage in hands-on projects, discussions, and interactive experiences to develop their creativity, media literacy, and critical thinking skills. Some units will require the use of multimedia resources such as clips from films and television shows relevant to pop culture; parent permission will be necessary for students to participate in these units of study. **(Prerequisite: Junior or Senior standing) DESE 156666**

02270 Criminal Justice (0.5 Credit)

This compelling, semester-long course is an introduction to the American Criminal Justice System. Using critical thinking and collaboration, students will develop a better understanding of the rights of the accused, policing, the court system, and the corrections system. This will include discussions, interactive activities, and simulations of landmark decisions, issues within the system, and potential reforms. Throughout the course, students will analyze real-world cases and problems and propose creative solutions to develop a deeper understanding of the criminal justice system's intricacies, its societal impact, and its role in maintaining law and order. **(Prerequisite: Junior or Senior standing) DESE 156675**

02205 Foreign Policy (0.5 Credit) cc /w

Are you looking for a place to learn more about what's going on in the world? Would you like to better understand current global events? Throughout this semester-long course, students will engage in critical analysis, debates, and group projects, while fostering the development of their research, presentation, and diplomatic skills. By the end of the course, students will have a comprehensive understanding of global diplomacy and foreign policy analysis, enabling them to interpret, assess, and contribute to the ever-changing world of international relations. **(Prerequisite: Senior standing, successful completion of Government, building recommendation.) DESE 156652**

02195 Western Civilization (1 Credit) cc/w

Have you ever wondered how civilizations develop? Why do some empires thrive and others fall? Military tech, literature and art, big personalities, human drama, and people trying to survive are all part of the story history tells. Western Civilization is a semester-long class that touches on the great moments and the devastating missteps that dominate our shared history. Specific topics covered include: Pre- Civilization, Mesopotamia, Egypt, Ancient Near East, the Ancient Greeks, the Roman Republic and Empire, European Middle Ages, and the Renaissance as experienced by all people, classes, and cultures. Western Civilization is a year-long college credit elective (6 hours possible). **(Prerequisite: Senior standing) DESE 156667**

02255 Advanced Placement (AP) Psychology (1 Credit) cc/w

AP Psychology is a year-long course that introduces students to the systematic and scientific study of human behavior and mental processes. Students explore and apply science practices, psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, cognition, development and learning, social psychology and personality, and mental and physical health. Students are expected (although not required) to take the AP Psychology Exam. There is a charge for the exam. **(Prerequisite: Junior or Senior standing, parent permission) DESE 156195**

02215 Advanced Placement (AP) United States History (1 Credit) cc /w

AP United States History is a year-long elective course offered to juniors and seniors. The course is designed to cover the history of the United States from pre-Columbus to the present. The course explores major themes, events, people, and their relationships as well as economic, political, and social issues. This college level class is a weighted grade and will develop students' reading, writing, and critical thinking skills through the use of historical documents and primary sources. This course will require extensive reading, writing, and research. Students are expected (although not required) to take the AP US History Exam. There is a charge for the exam. **(Recommendations: Junior or Senior standing and parent permission) DESE 115861**

02335 Advanced Placement (AP) Comparative Government and Politics (0.5 Credit) cc/w

The course uses a comparative approach to examine the political structures; policies; and political, economic, and social challenges of six selected countries: China, Iran, Mexico, Nigeria, Russia, and the United Kingdom. Students compare the effectiveness of approaches to many global issues by examining how different governments solve similar problems. They will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. There is a charge for the AP exam. **(Prerequisite: Senior standing, Government, Foreign Policy strongly recommended, and parent permission) DESE 156595**

MATHEMATICS

Three math credits are required for graduation.

When developing an Individual Career & Academic Plan, there are various pathways to choose from when deciding which math courses to take. When a student chooses one of the options, he or she is not obligated to stay on that path. The student may switch to a different pathway if academic results indicate a change will be beneficial to the student, provided that the deadlines and prerequisites are met. Students should work with their parents, teachers and school counselors to develop the best course sequence for their post-secondary goals.

High School Math Pathways								
	FRESHMAN	SOPHOMORE		JUNIOR		SENIOR		
CORE	Algebra 1	Geometry	Accelerated Geometry	Algebra 2	Accelerated Algebra 2	Math Elective		
COLLEGE READINESS	Algebra 1	Geometry	Accelerated Geometry	Algebra 2	Accelerated Algebra 2	College Algebra	AP Precalculus	AP Stats
STEAM	Accelerated Geometry	Accelerated Algebra 2		AP Precalculus		AP Stats	AP Calculus	
ALTERNATIVE CORE	Math 9	Algebra 1		Geometry	Accelerated Geometry	Algebra 2	Approved Math Elective	

03055 Math 9 (1 Credit)

This course, which requires recommendations by a teacher and/or building/district administrator, is designed to provide students with a strong foundation in the necessary skills in order to be Algebra-ready. Students will study proportional, algebraic, geometric and statistical relationships. Students will enroll in Algebra I the following year. **TEACHER RECOMMENDATION:** Recommendation based on 8th-grade Math performance, MAP scores, benchmark scores, other district data.

DESE 115815

03105 Algebra I (1 Credit)

Algebra I, a full-year course, provides a solid foundation of the algebraic skills necessary to progress to high-level math courses. Students will learn how to generalize mathematical concepts with a focus on graphing, analyzing, comparing, and contrasting linear, exponential and quadratic functions. An emphasis will be placed on problem-solving as well as demonstrating reasoning and justifying conclusions through both written and verbal explanations by the student. At times, calculators will be used as an instructional tool in this course, but students are also expected to complete calculations mentally and with pencil-and-paper.

DESE 115810

03155 Geometry (1 Credit)

Geometry, a full-year course, includes an in-depth analysis of planar, coordinate, and solid geometry as they relate to both abstract mathematical concepts, as well as real-world problem solving situations. Students will complete compass and straightedge constructions as a means of understanding foundational concepts and definitions. An extension of 8th grade study of transformations on the coordinate plane will be used to develop an understanding of similarity and congruence of triangles and other polygons. Students will also become familiar with inductive and deductive reasoning through the writing and analysis of several forms of proofs. At times, calculators will be used as an instructional tool in this course, but students are also expected to complete calculations mentally and with pencil-and-paper. **DESE 115830**

03355 Accelerated Geometry (1 Credit) /w

Accelerated Geometry is a year-long intensive math course designed to prepare students for the accelerated pace of our advanced coursework. Accelerated Geometry includes all of the content of our Geometry course with a greater emphasis on complex problem-solving and applications. In addition to these concepts students will also explore conic sections at a greater depth, connecting the algebraic definition of quadratics/parabolas with their geometric definition and extending these ideas to circles, ellipses, and hyperbolas. Students in Accelerated Geometry are continually expected to explain their thinking, analyze problems from multiple perspectives, and participate in classroom discussions. This course is vertically aligned to the AP standards and is designed to help students achieve success in future AP classes. **(Recommendation: teacher recommendation) DESE 115830**

03205 Algebra II (1 Credit)

Algebra II, a full-year course, is a rigorous treatment of algebraic concepts in preparation for College Algebra. Students will study a variety of algebraic theories/concepts with an emphasis on the real-world applications of mathematics. A number of algebraic functions will be graphed/analyzed with a focus on polynomial, rational, and exponential functions. Every student should have a scientific calculator, but students will also be expected to complete calculations mentally and with pencil-and paper. **(Prerequisite: Successful completion of Algebra I and Geometry) DESE 115861-1**

03365 Accelerated Algebra II (1 Credit) /w

Accelerated Algebra II is a year-long intensive math course designed to prepare students for the accelerated pace of our advanced coursework. Students will engage in a rigorous study of algebraic theory/concepts with an emphasis on the real-world applications of mathematics. A number of algebraic functions will be explored in depth with a focus on graphing and analysis of polynomial, rational, and exponential functions. The unit circle is explored in depth in preparation for Pre-Calculus and AP Calculus. Students will also explore the effect of randomness and design of experiments on the validity of conclusions from statistics. Students in Accelerated Algebra II are continually expected to explain their thinking, analyze problems from multiple perspectives, and participate in classroom discussions. This course is vertically aligned to the AP standards and is designed to help students achieve success in future AP classes. **(Recommendation: teacher recommendation) DESE 115861-1**

03280 Introduction to Statistics (0.5 Credit)

Introduction to Statistics, a semester course, is a survey level course designed to prepare students for the statistics they will encounter in post-secondary studies, or for students who enjoy working with data and using data to make decisions. Topics include the collection, synthesis, and analysis of various types of data, descriptive statistics, probability, and statistical inference with an emphasis on simulations and applications of the normal distribution. **(Prerequisite: Concurrent enrollment in or successful completion of Algebra II or building recommendation). DESE 115875**

03290 Algebra III (0.5 Credit)

Algebra III, a semester course, is designed for students on a career technical education pathway or college pathway to deepen understanding of algebra concepts previously learned in high school algebra courses. Topics of study include number theory, equations and inequalities, graphs and functions, systems of equations and programming. Optional topics that may be covered to encourage the modeling of real-world situations through finite methods. **(Prerequisite: Successful completion of Algebra II or building recommendation) DESE 115840-1**

03291 Math Analysis (0.5 Credit)

Math Analysis, a semester course, is designed for students on a career technical education pathway or college pathway who want to explore mathematical concepts and ideas not traditionally found in the high school math curriculum. This class provides an insight into what mathematics has to offer beyond algebra and geometry. Students will explore problem solving in the mathematics of finance, logic, geometry, and election theory. Optional topics that may be covered to encourage the modeling of real-world situations through finite methods. **(Prerequisite: Successful completion of Algebra II or building recommendation) DESE 115840-2**

03265 College Algebra (1 Credit) cc/w

College Algebra, a full year course, is a fundamental mathematics course designed to equip students with the necessary mathematical skills and concepts required for success in a wide range of academic disciplines and everyday life. This course

emphasizes algebraic reasoning, problem-solving techniques, and critical thinking skills. Topics covered include linear equations, quadratic equations, functions, polynomial equations, exponential and logarithmic functions, systems of equations, and more. The course is structured to promote a deep understanding of algebraic principles and their applications. **(Prerequisite: Successful completion of Algebra II and math department recommendation) DESE 115861-2**

03255 Advanced Placement (AP) Precalculus (1 Credit) cc/w

AP Precalculus, a full-year course, is a rigorous course designed to prepare students for calculus. The course is intended for students who plan on pursuing a college degree requiring advanced mathematics. Precalculus fully develops the use of trigonometric, exponential and algebraic functions, as well as graphing of both rectangular and polar coordinates. Since graphing calculators are used extensively in the development of these topics, access to a graphing calculator is highly recommended. Students will also be expected to complete calculations mentally and with paper-and-pencil. This course is designed to prepare students for the Advanced Placement Precalculus Exam, given near the end of the spring semester. Students are responsible for the cost of this optional exam. **(Prerequisite: math department recommendation) DESE 115870**

03285 Advanced Placement (AP) Statistics (1 Credit) cc/w

AP Statistics, is a rigorous full-year course recommended for all college-bound students. Students will examine statistics through data patterns and deviations from these patterns, sampling and experimentation, using probability and simulation to explore random phenomena, and statistical inference through estimating parameters and hypothesis testing. Every student should have a scientific calculator. This course is designed to prepare students for the Advanced Placement Statistics exam near the end of the spring semester. Students are responsible for the cost of this optional exam. **(Prerequisite: Successful completion of College Algebra or AP PreCalculus OR math department recommendation) DESE 115795**

03455 Advanced Placement (AP) Calculus AB (1 Credit) cc/w

AP Calculus is a highly rigorous, full-year course, and is recommended for students entering fields of study in mathematics, sciences, engineering and economics. The course includes techniques and applications of differentiation and integration of algebraic, trigonometric, exponential and logarithmic functions. Since graphing calculators are used extensively in the development of these topics, access to a graphing calculator is highly recommended. Students will also be expected to complete calculations mentally and with pencil-and-paper. This course is designed to prepare students for the Advanced Placement Calculus AB Exam, given near the end of the spring semester. Students are responsible for the cost of this optional exam. **(Prerequisite: Successful completion of AP PreCalculus and math department recommendation) DESE 115895**

03565 Advanced Placement (AP) Calculus BC (1 Credit) /w

AP Calculus is a highly rigorous, fast paced, full-year course, and is recommended for students entering fields of study in mathematics, sciences, engineering and economics. The course covers *all* AP Calculus AB topics as well as parametric, polar and vector functions with applications of differentiation and integration, polynomial approximation techniques, and convergence/divergence. Since graphing calculators are used extensively in the development of these topics, access to a graphing calculator is highly recommended. Students will also be expected to complete calculations mentally and with pencil-and-paper. This course is designed to prepare students for the Advanced Placement Calculus BC Exam, given near the end of the spring semester. Students are responsible for the cost of this optional exam. **(Prerequisite: Successful completion of AP PreCalculus and math department recommendation) DESE 115995**

03370 Mathematics Independent Study (0.5 Credit)

Mathematics Independent Study, a one-semester course will allow the student to explore topics in mathematics outside of the math curriculum. The student and his/her sponsoring teacher will develop a course of study, which will be approved by the chairperson of the mathematics department. The course of study should include topics to be covered, a timeline, and how the progress will be monitored. **(Prerequisite: Teacher Recommendation) DESE 115899**

03005/03015/03025 High School Math Intervention Course (0.5 Credit)

This intervention course is designed to provide targeted assistance and reinforcement in foundational mathematical concepts and skills. This course is in support of the students' learning in the regular grade level math course. The math intervention course will address prerequisite skills students need for success in their grade level math class, as well as build students' math fluency and confidence. Students will be recommended for the math intervention course by teachers, counselors, and/or building administrators based on data relevant to students' performance in previous math courses. Parents will approve students participation in this course as it will replace one of the student's elective courses. **(Prerequisite: Building Approval/Recommendation) DESE 115800**

SCIENCE

STUDENTS STARTING 9TH GRADE WITH PHYSICAL SCIENCE SHOULD FOLLOW THIS CHART

When developing a four-year plan, there are three pathways to choose from when deciding on which science courses to take. When a student chooses one of the options, he or she is not obligated to stay on that path. The student may switch to a different path of courses if academic results indicate a change will be beneficial to the student, provided that deadlines and prerequisites are met. There are two versions of the chart to follow based on whether the student will start 9th grade in Physical Science or in Biology (Biology Accelerated). The suggestions below do not represent the only sequence of courses that students can take for a particular pathway. Students should work with their teachers and counselors to develop the best course sequence for their post-secondary goals.

High School Graduation Requirement Pathway:
Students who take this pathway will meet the district and state high school minimum science requirements for graduation.

ACT/College Prep Pathway: Students who complete the courses in this pathway will more likely have a solid foundation for the science portion of the ACT as well as for collegiate course work in science.

Advanced Science Pathway: Students who complete courses in this pathway will experience Fort Zumwalt's most rigorous science offerings to best prepare them for collegiate coursework.

Grade	Course(s)	Grade	Course(s)	Grade	Course(s)
9	Physical Science	9	Physical Science	9	Physical Science
10	Biology	10	Biology OR AcceleratedBiology	10	AcceleratedBiology
11	Take one credit of the following: <ul style="list-style-type: none"> Chemistry or Physics 1 year of Electives 	11	Chemistry or Accelerated Chemistry OR Physics	11	Accelerated Chemistry or Physics
			Additional course(s) that may be taken concurrently: <ul style="list-style-type: none"> AP Environmental Human Anatomy and Physiology 1 Year of Electives 		Additional courses that may be taken concurrently: <ul style="list-style-type: none"> AP Environmental Human Anatomy and Physiology Physics Electives
12	Optional additional course(s): <ul style="list-style-type: none"> Physics or Chemistry 1 year of Electives 	12	Chemistry or Accelerated Chemistry OR Physics	12	Physics OR AP Physics if not previously taken OR AP Chemistry OR AP Biology
			Additional course(s) that may be taken concurrently: <ul style="list-style-type: none"> 1 AP Course** Human Anatomy and Physiology Electives 		Additional course(s) that may be taken concurrently: <ul style="list-style-type: none"> 1 AP Course** not previously taken Human Anatomy & Physiology Electives

Project Lead the Way Health Science Pathway: This pathway is for students interested in pursuing health science careers (e.g. nursing, occupational/physical therapy, etc.) Students who satisfactorily complete the following: one AP course, one PLTW course and a third course (either AP or PLTW) and earn a qualifying score of 3 or higher on the AP exam(s) and a score of Proficient or higher on the PLTW End of Course (EOC) assessment(s) will receive the **AP + PLTW student recognition**. This is a qualification that demonstrates to colleges and employers that the student is ready for advanced course work and interested in careers in this discipline.

Grade	Courses
9	Principles of Biomedical Science (PLTW) Physical Science
10	Human Body Systems (PLTW) Biology (or Accelerated Biology)
11	Medical Interventions (PLTW) Chemistry (or Accelerated Chemistry)
12	Biomedical Innovations (PLTW)

STUDENTS STARTING 9TH GRADE WITH BIOLOGY OR BIOLOGY ACCELERATED SHOULD FOLLOW THIS CHART

When developing a four-year plan, there are three pathways to choose from when deciding on which science courses to take. When a student chooses one of the options, he or she is not obligated to stay on that path. The student may switch to a different path of courses if academic results indicate a change will be beneficial to the student, provided that deadlines and prerequisites are met. There are two versions of the chart to follow based on whether the student will start 9th grade in Physical Science or in Biology (Accelerated Biology). The suggestions below do not represent the only sequence of courses that students can take for a particular pathway. Students should work with their teachers and counselors to develop the best course sequence for their post-secondary goals.

ACT/College Prep Pathway: <i>Students who complete the courses in this pathway will more likely have a solid foundation for the science portion of the ACT as well as for collegiate course work in science</i>		Advanced Science Pathway: <i>Students who complete courses in this pathway are preparing for post-secondary experiences in science.</i>	
Grade	Course(s)	Grade	Course(s)
9	Biology OR Accelerated Biology	9	Accelerated Biology
10	Chemistry or Accelerated Chemistry OR Physics	10	Accelerated Chemistry
	Additional course(s) that may be taken concurrently: <ul style="list-style-type: none"> AP Environmental 1 Year of Electives* <p>*If successful with Accelerated Biology and Accelerated Chemistry, move to the Advanced Science Pathway.</p>		Additional course(s) that may be taken concurrently: <ul style="list-style-type: none"> AP Environmental Human Anatomy and Physiology Electives*
11	Chemistry or Chemistry Accelerated OR Physics (take the course not previously taken)	11	AP Physics or AP Chemistry or AP Biology
	Additional course(s) that may be taken concurrently: <ul style="list-style-type: none"> AP Environmental Human Anatomy and Physiology Electives* 		Additional course(s) that may be taken concurrently: <ul style="list-style-type: none"> Science Research AP Environmental Human Anatomy and Physiology Electives*
12	1 or more AP course(s)**	12	Take one or more credit of the following: <ul style="list-style-type: none"> AP Environmental Science Research Human Anatomy and Physiology Electives*
	Additional course(s) that may be taken concurrently: <ul style="list-style-type: none"> Human Anatomy and Physiology Electives* 		

Project Lead the Way Health Science Pathway: This pathway is for students interested in pursuing health science careers (e.g. nursing, occupational/physical therapy, etc.) Students who satisfactorily complete the following: one AP course, one PLTW course and a third course (either AP or PLTW) and earn a qualifying score of 3 or higher on the AP exam(s) and a score of Proficient or higher on the PLTW End of Course (EOC) assessment(s) will receive the **AP + PLTW student recognition**. This is a qualification that demonstrates to colleges and employers that the student is ready for advanced course work and interested in careers in this discipline.

Grade	Courses
9	Principles of Biomedical Science (PLTW) Biology (or Accelerated Biology)
10	Human Body Systems (PLTW) Chemistry (or Accelerated Chemistry)
11	Medical Interventions (PLTW) Human Anatomy & Physiology OR AP Chemistry
12	Biomedical Innovations (PLTW)

SCIENCE

04015/Physical Science (1 Credit)

Physical Science is a year-long, student-centered laboratory course exploring fundamental principles in chemistry and physics. Topics include atomic structure, the periodic table, chemical bonding, reactions, Newton's laws of motion, various forms of energy, and waves. Using Earth and Life Science phenomena, students will investigate such things as the chemical reaction of photosynthesis, thermal energy's involvement in Earth's ever changing surface, and the chemistry of star formation. This will give students a more comprehensive scientific perspective across all disciplines of science, thus, preparing them for all future high school science courses. Completion of this course—either in 8th grade as Advanced Physical Science or as a freshman—is required for graduation. **DESE 135010**

04101 Biology (1 Credit)

Biology is a year-long laboratory course in which students will seek to understand the living world. The course will include molecular and cellular biology, genetics and heredity, diversity and unity among organisms, ecology, biological evolution, as well as the life processes common to all living things. Scientific problem solving, inquiry based investigations, technology integration, laboratory work, and performance assessments will be utilized. Earning a full year of Biology credit is a requirement for every high school student. **(Prerequisite: High School Physical Science Credit) DESE 134200-1**

04125 Accelerated Biology (1 Credit)/w

Accelerated Biology is a full year, intensive laboratory course designed to offer students the opportunity to explore fundamental principles of introductory Biology. The course will include molecular and cellular biology, genetics and heredity, diversity and unity among organisms, ecology, and biological evolution, as well as the life processes common to all living things. Students will also engage in scientific problem solving, inquiry-based investigations using appropriate techniques, technology and mathematical integration, laboratory work, and performance assessments. Biology Accelerated is intensive and requires an increased level of critical thinking and mathematical reasoning. This class is an advanced course designed to challenge students and prepare them for AP science courses and the ACT/College Prep or Advanced Science Pathways. Earning a full year of Biology credit is a requirement for every high school student. **(Prerequisite: High School Physical Science) DESE 134200-1**

04155 General Chemistry (1 Credit)

Chemistry, a year-long laboratory course, is designed to offer students the opportunity to master fundamental principles of chemical and physical properties of matter. Topics include an indepth look at the atom and the periodic table, chemical reactions, molecular bonding, thermochemistry, acids and bases, and solutions. Students will engage in scientific problem solving, inquiry-based investigations using appropriate techniques, technology and mathematical integration, laboratory work, and performance assessments. **(Prerequisite: 1 Biology credit and Algebra I) DESE 134600-1**

04135 Accelerated Chemistry (1 Credit)/w

Accelerated Chemistry is a full year intensive laboratory course designed to offer students the opportunity to explore fundamental principles of chemical and physical properties of matter. The course will include topics such as components of the atom and periodic table of elements, chemical reactions, molecular bonding, and solutions. Students will also engage in scientific problem solving, inquiry-based investigations using appropriate techniques, technology and mathematical integration, laboratory work, and performance assessments. Accelerated Chemistry is intensive and requires an increased level of critical thinking and mathematical reasoning. This class is an advanced course designed to challenge students and prepare them for AP science courses and the ACT/College Prep or Advanced Science Pathways. **(Prerequisite: 1 Biology credit & Algebra I) DESE 134600-1**

04195 General Physics (1 Credit)

Physics, a full year laboratory course, studies kinematics, dynamics, linear momentum, energy, electrostatics and currents, and wave properties. This course includes laboratory activities using computer data collection, computer analysis, computer problem solving and digital simulations. Students will leave this course with a foundational understanding of the physical world with better critical thinking and problem-solving skills that are applicable in numerous fields. It is recommended for all college bound students on the ACT/College Prep or Advanced Science Pathways. **(Prerequisite: 1 Biology credit & completion of Geometry or current enrollment) DESE 135900**

0423 Environmental Science (0.5 Credit)

Environmental Science, a semester course, is an inquiry-based approach to the study of ecology. The course will primarily consist of fieldwork and laboratory investigations. Basic ecological principles, current environmental issues, and human impact on the environment will also be an integral part of the course. **(Prerequisite: 1 Biology credit) DESE 134215-1**

0417 Earth Science/Astronomy and Meteorology (0.5 Credit)

Astronomy and Meteorology, a semester course, is intended for any student having an interest in learning about the structure of the universe and the Earth's dynamic weather systems. Topics include history of the universe, the solar system, galaxies, motion in the universe, and the study of stars. Meteorological topics include the Earth's atmosphere, weather mapping and forecasting, climate, and weather phenomena. **(Prerequisite: 1 Biology credit) DESE 33800**

0418 Earth Science/Geology (0.5 Credit)

Geology, a semester course, is intended for any student interested in studying the history and the dynamics of Earth. Topics include rock and mineral identification and formation, plate tectonics, and weathering and erosion. In addition, students will explore the social, economic, environmental costs and benefits of our natural resources, and how best to utilize them in today's world. **(Prerequisite: 1 Biology credit) DESE 133800**

0414 Zoology (0.5 Credit)

Zoology is a semester-long course that explores the diversity of the animal kingdom. Focusing on the major groups of vertebrates and invertebrates, students will study taxonomy, anatomy, and physiology of the various groups of the animal kingdom. The course will explore organisms in a context that emphasizes ecology, life history, and morphology. The laboratory component will include various dissections to analyze and compare the physical differences in the animal world. **(Prerequisite: 1 Biology credit) DESE 134220**

04265 Advanced Placement (AP) Biology (1 Credit) cc/w

AP Biology is a full year elective lab course designed to be the equivalent of an introductory college-level biology course. This is a rigorous course that requires critical thinking and advanced quantitative applications. This course is organized around overarching themes such as evolution, cellular processes, genetics, information transfer, ecology, and interactions among organisms and their environment. AP Biology is designed to prepare students for the AP Biology Exam and prepares students for the Advanced Science and ACT/College Placement Pathways. AP biology can be taken for college credit. Students are expected (although not required) to take the AP Biology test in May and are responsible for the cost of the exam. Students should expect significant work outside of the regular class and some preparatory work may be required at the discretion of the teacher. It is strongly recommended that Biology Accelerated and Chemistry Accelerated be taken prior to taking this course. **(Prerequisites: 1 Biology credit and 1 Chemistry credit) DESE 134200-2**

04285 Advanced Placement (AP) Chemistry (1 Credit)/cc/w

AP Chemistry is a full year intensive lab course designed to be the equivalent of a college introductory chemistry course. Major areas of study will include structure and states of matter, intermolecular forces and bonding, kinetics, thermodynamics, and equilibrium. AP Chemistry is designed to prepare students for the AP Chemistry Exam and prepares students for the Advanced Science and ACT/College Placement Pathways. AP Chemistry can be taken for college credit. Students are expected (although not required) to take the AP Chemistry test in May and are responsible for the cost of the exam. Students should expect significant work outside of the regular class and some preparatory work may be required at the discretion of the teacher. It is strongly recommended that Chemistry Accelerated be taken prior to taking this course. **(Prerequisites: 1 Biology credit and 1 Chemistry credit) DESE 134600-2**

04295 Human Anatomy and Physiology (1 Credit)/cc/w

Human Anatomy & Physiology is a highly rigorous, full year laboratory course, intended for advanced science students who wish to increase their knowledge of the human body's structure and function. The major emphasis of this course is the physical and chemical processes of the human body. Emphasis will be placed on presenting the human body as a living, functioning, homeostatic organism. Topics include body organization, cells, tissues, structure and function of the organ systems of the body, microscope use, and dissection techniques. Students can expect significant work outside of the regular class and some preparatory work may be required at the discretion of the teacher. **(Prerequisites: 1 Biology credit and current enrollment in Chemistry or Chemistry Accelerated, Junior/Senior standing) DESE 134221**

04535 Advanced Placement (AP) Physics 1: Algebra-Based (1 Credit)/cc/w

AP Physics 1 is a full year intensive lab course designed to be the equivalent of a college introductory algebra-based physics course. Topics include, kinematics, Newton's Laws of motion, work energy and power, systems of particles and linear momentum, rotation, oscillations, and electrostatics. Students are expected to apply a significantly higher level of mathematics to the concepts studied in this course. AP Physics 1 is designed to prepare students for the AP Physics 1 Exam and prepares students for the Advanced Science and ACT/College Placement Pathways. AP Physics 1 can be taken for college credit. Students are expected (although not required) to take the AP Physics 1 test in May and are responsible for the cost of the exam. Students should expect significant work outside of the regular class and some preparatory work may be required at the discretion of the teacher. **(Prerequisites: C or better in Algebra II) DESE 135395**

04545 Advanced Placement (AP) Physics C Mechanics (1 Credit)/cc/w

AP Physics C is a full year intensive lab course designed to be the equivalent of a one-semester, calculus-based, college-level physics course. The course explores topics such as kinematic equations, Newton's laws of motion, work, energy and power, systems of particles and linear momentum, circular motion and rotation, oscillations and gravitation. Introductory differential and integral calculus is used throughout the course. It is especially appropriate for students planning to specialize or major in physical science or engineering. AP Physics C is designed to prepare students for the AP Physics C Exam and prepares students for the Advanced Science and ACT/College Placement Pathways. AP Physics C can be taken for college credit. Students are expected (although not required) to take the AP Physics C test in May and are responsible for the cost of the exam. Students should expect significant work outside of the regular class and some preparatory work may be required at the discretion of the teacher. **(Prerequisites: concurrent Calculus enrollment) DESE 135295**

04555 Advanced Placement (AP) Environmental Science (1 Credit)/cc/w

AP Environmental Science is a full year course designed to be the equivalent of a college introductory environmental science course. This course focuses on natural and human-made challenges. The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. AP Environmental Science is designed to prepare students for the AP Environmental Science Exam and prepares students for the Advanced Science and ACT/College Placement Pathways. Students are expected (although not required) to take the AP Environmental Science test in May and are responsible for the cost of the exam. Students should expect significant work outside of the regular class and some preparatory work may be required at the discretion of the teacher. **(Prerequisites: 1 Biology credit and current enrollment in Chemistry or Chemistry Accelerated, and Junior standing) DESE 134195**

04325 Science Research—1 OR 2 years (Each Year 1 Credit) /cc/w

Year 1—In year one of the science research class the students will develop presentation skills, use computer search skills to locate and retrieve journal articles from databases in their field of study, develop the skills necessary to understand journal articles and develop a scientific vocabulary. The students will also develop a research proposal in conjunction with a mentor and begin conducting research. Limit to 15 students. **(Prerequisite: Junior standing, students must be concurrently enrolled in at least 1 of the following courses: AP Biology, AP Chemistry, AP Physics, AP Environmental Science and/or Human Anatomy & Physiology; and/or receive building recommendation) DESE 135099**

Year 2—Year two is a continuation of the student's research. In order to receive credit for year 2, students must complete all of the following: (1) develop a PowerPoint and poster presentation of their research, (2) make a presentation at a science symposium, (3) write a formal research paper, and (4) enter a science contests (such as Junior Science, Engineering, and Humanities Symposium and the Missouri Consortium of Science Research). The student may elect to receive college credit at the University of Missouri-St. Louis (fee based). Limit to 15 students. **(Prerequisite: Senior standing and completion of Science Research; students must have completed or be concurrently enrolled in any 2 of the following courses: AP Biology, AP Chemistry, AP Physics, AP Environmental Science and/or Human Anatomy & Physiology; and/or receive building recommendation) DESE 135099**

WORLD LANGUAGES

01615 French I (1 Credit)

French I is a year-long course in which students will begin the journey of becoming a global citizen. After successful completion of the course, students will be able to exchange information and ideas in the French language on a variety of topics including describing oneself, free time, school and home life. This course will help build students' communication skills by providing opportunities to communicate and interpret messages in speaking, reading, writing and listening. Cultural topics will be introduced through visual and multimedia materials in order to present an authentic view of the French language and culture. Following French I students are encouraged to take level II, III and IV for the opportunity to earn college credit and the Seal of Biliteracy. **DESE 064900-1**

01715 German I (1 Credit)

German I is a year-long course in which students will begin the journey of becoming a global citizen. After successful completion of the course, students will be able to exchange information and ideas in the German language on a variety of topics including describing oneself, free time, school and home life. This course will help build students' communication skills by providing opportunities to communicate and interpret messages in speaking, reading, writing and listening. Cultural topics will be introduced through visual and multimedia materials in order to present an authentic view of the German language and culture. Following German I students are encouraged to take level II, III and IV for the opportunity to earn college credit and the Seal of Biliteracy. **DESE 065100-1**

01515 Spanish I (1 Credit)

Spanish I is a year-long course in which students will begin the journey of becoming a global citizen. After successful completion of the course, students will be able to exchange information and ideas in the Spanish language on a variety of topics including describing oneself, free time, school and home life. This course will help build students' communication skills by providing opportunities to communicate and interpret messages in speaking, reading, writing and listening. Cultural topics will be introduced through visual and multimedia materials in order to present an authentic view of the Spanish language and culture. Following Spanish I students are encouraged to take level II, III and IV for the opportunity to earn college credit and the Seal of Biliteracy. **DESE 066300-1**

01625 French II (1 Credit)

French II is a year-long course which both reinforces and broadens students' skills in listening, reading, writing and speaking French. Emphasis will be on learning to communicate in French on topics of daily life through active participation. Students will increase their range of expression, learning to use language for many different purposes by exploring topics such as families and communities, travel, shopping, recreational activities, and health and fitness. Students will examine how culture and language affect our understanding of daily life in a way that invites curiosity and encourages global awareness. Following French II students are encouraged to take level III and IV for the opportunity to earn college credit and the Seal of Biliteracy. **(Prerequisite: Level I or Building Approval) DESE 064900-2**

01725 German II (1 Credit)

German II is a year-long course which both reinforces and broadens students' skills in listening, reading, writing and speaking German. Emphasis will be on learning to communicate in German on topics of daily life through active participation. Students will increase their range of expression, learning to use language for many different purposes by exploring topics such as families and communities, travel, shopping, recreational activities, and health and fitness. Students will examine how culture and language affect our understanding of daily life in a way that invites curiosity and encourages global awareness. Following German II students are encouraged to take level III and IV for the opportunity to earn college credit and the Seal of Biliteracy. **(Prerequisite: Level I or Building Approval) DESE 065100-2**

01525 Spanish II (1 Credit)

Spanish II is a year-long course which both reinforces and broadens students' skills in listening, reading, writing and speaking Spanish. Emphasis will be on learning to communicate in Spanish on topics of daily life through active participation. Students will increase their range of expression, learning to use language for many different purposes by exploring topics such as families and communities, travel, shopping, recreational activities, and health and fitness. Students will examine how culture and language affect our understanding of daily life in a way that invites curiosity and encourages global awareness. Following Spanish II students are encouraged to take level III and IV for the opportunity to earn college credit and the Seal of Biliteracy. **(Prerequisite: Level I or Building Approval) DESE 066300-2**

01635 French III (1 Credit) cc/w

French III is a year-long course which fosters active participation and strengthens students' communicative skills. In French III, students will converse more freely and creatively about their past, present and future selves. Students will explore topics such as vacationing, health, careers, entertainment and celebrated pieces of French media. By examining how culture influences our understanding of life, students will deepen their global awareness and their role as a world citizen. Upon successful completion of French III, students are encouraged to take level IV for the opportunity to earn additional college credit and the Seal of Biliteracy. **(Prerequisite: French III or Building Approval) DESE 0649003**

01735 German III (1 Credit) cc/w

German III is a year-long course which continues to reinforce and broaden students' skills in listening, reading, writing and speaking German. Emphasis will be on expanding skills to communicate in German on topics of culture and everyday life through active participation. Students will increase their range of expression, learning to use language for different purposes by exploring topics such as families and communities, art, history, music, literature, travel, geography, careers and health. Students will examine how culture and language affect their understanding of daily life in a way that invites curiosity and encourages global awareness. Upon successful completion of German III, students are encouraged to continue level IV for the opportunity to earn additional college credit and the Seal of Biliteracy. **(Prerequisite: German II or Building Approval) DESE 065100-3**

01535 Spanish III (1 Credit) cc/w

Spanish III is a year-long course which continues to further expand and improve students' skills in listening, reading, writing and speaking allowing students to understand and converse more freely and creatively. Students will increase their range of expression, and learn to use language for different purposes by exploring topics such as families and communities, storytelling, global issues, and contemporary living. By examining how culture influences our understanding of life, students will deepen their global awareness and their role as a world citizen. Following Spanish III students are encouraged to take level IV for the opportunity to earn additional college credit and the Seal of Biliteracy. **(Prerequisite: Spanish II or Building Approval)**

01645 French IV (1 Credit) cc/w

French IV is a year-long course which interactively strengthens students' abilities to communicate theoretically. In French IV, students will be able to converse more freely and creatively about historical and contemporary issues as the issues relate to them and the world in which they live. Students will explore topics such as social media and mental health, the environment, beauty, global challenges, and relationships. By examining how culture influences our understanding of life, students will deepen their global awareness and their role as a world citizen. French IV, students are encouraged to earn the Seal of Biliteracy by demonstrating an Intermediate-mid level of proficiency. **(Prerequisite: French III or Building Approval) DESE 064900-4**

01745 German IV (1 Credit) cc/w

German IV is a year-long course which continues to further expand students' skills in listening, reading, writing and speaking German. Emphasis will be on broadening skills to communicate in German on topics of culture and everyday life through active participation. Students will increase their range of expression, learning to use language for different purposes by exploring topics such as German literature, German cinematic history, science, technology and environment, World War I and II and present-day Germany. Students will examine how culture and language influence their understanding of daily life in a way that invites curiosity and encourages global awareness. During German IV, students are encouraged to take the Seal of Biliteracy demonstrating an Intermediate-mid level of proficiency. **(Prerequisite: German III or Building Approval) DESE 065100-4**

01545 Spanish IV (1 Credit) cc/w

Spanish IV is a year-long course which continues to further expand and improve students' skills in listening, reading, writing and speaking Spanish so that they can understand and converse more freely and creatively. Students will increase their range of expression, learning to use language for different purposes by exploring topics such as Contemporary Life, Communities in our World, Spanish-speaking Identities and Beauty and Aesthetics. By examining how culture influences our understanding of life, students will deepen their global awareness and their role as a world citizen. Students are encouraged to take the Seal of Biliteracy demonstrating an Intermediate-mid level of proficiency. **(Prerequisite: Spanish III or Building Approval) DESE 066300-4**

01655 French V (1 Credit) cc/w

French V is a year-long course of independent study which allows the students to deepen their appreciation of literary masterpieces, French culture, customs, history, traditions, and business. Emphasis will be placed on higher-level thinking skills and on expressing ideas in writing. Literary and non-literary selections will be read and analyzed. Native speakers, as well as a variety of other cultural resources, will be used to improve listening comprehension. Students will be encouraged to attend French plays, movies, and other cultural events outside of class time. The study of business will enable the student to participate more fully in the global community and marketplace. **(Prerequisite: French IV or Building Approval) DESE 064900-5**

01755 German V (1 Credit) cc/w

German V is a year-long course of independent study which allows the students to deepen their appreciation of literary masterpieces, German culture, customs, history, traditions and business. Emphasis will be placed on higher-level thinking skills and on expressing ideas in writing. Literary and non-literary selections will be read and analyzed. Native speakers, as well as a variety of other cultural resources, will be used to improve listening comprehension. Students will be encouraged to attend German plays, movies, and other cultural events outside of class time. The study of business will enable the students to participate more fully in the global community and marketplace. **(Prerequisite: German IV or Building Approval) DESE 065100-5**

01555 Spanish V (1 Credit) cc/w

Spanish V is a year-long course of independent study which allows the students to deepen their appreciation of literary masterpieces, Spanish culture, customs, history, traditions and business. Emphasis will be placed on high level thinking skills and on expressing ideas in writing. Literary and non-literary selections will be read and analyzed. Native speakers, as well as a variety of other cultural resources, will be used to improve listening comprehension. Students will be encouraged to attend Spanish plays, movies, and other cultural events outside of class time. The study of business will enable the student to participate more fully in the global community and marketplace. **(Prerequisite: Spanish IV or Building Approval) DESE 066300-5**

VISUAL ART-FINE ARTS

0500 Introduction to Art (1 Credit)

Introduction to Art, a yearlong course, provides students the opportunity to work through the creative process in order to create original works of art. Students will view, discuss, and reflect on art to gain an understanding of how art connects to the outside world. Through the exploration of the Elements and Principles of Art students will work to improve their visual communication skills. Students will gain exposure to a variety of traditional and contemporary art media. Introduction to Art is offered to grades 9-12. It is the prerequisite to all other studio art courses and satisfies the Fine Art requirement for graduation. **DESE 024100**

05050 Drawing 1 (0.5 Credit)

Drawing 1, a semester course, allows students to learn to create the illusion of three-dimensional form on a two-dimensional surface by using blending, stippling, hatching, and cross hatching techniques. Subject matter includes still life, human figure, portrait, landscape, and imaginative subject matter. Pencil, charcoal, pastel, and pen are the major media explored. Students are expected to express their knowledge of the elements and principles of design in their work and through oral and/or written analysis. Emphasis is on drawing from direct observation and on the creation of original images. Sketchbook assignments are required. **(Prerequisite: Introduction to Art) DESE 024150-1**

05160 Drawing 2 (0.5 Credit)

Drawing 2, a semester course, allows students to expand upon their ability to create the illusion of three-dimensional form on a two-dimensional surface. Subject matter includes still life, human figure, portrait, landscape, and imaginative subject matter. Traditional media usage is expanded upon while student exploration and risk-taking with contemporary and combined media is encouraged. Students are expected to express their knowledge of the elements and principles of design in their work and through oral and/or written analysis. Emphasis is placed on the creation of original artwork that challenges students' abilities and addresses content in their artwork. Sketchbook assignments are required. **A student may retake the course with building approval. (Prerequisite: Drawing 1 with a minimum grade of C or building approval) DESE 024150-2**

05070 Painting 1 (0.5 Credit)

Painting 1, a semester course, provides students with a variety of experiences to improve their knowledge and application of color theory through art production and analysis. Subject matter includes still life, portrait, landscape, and imaginative subject matter. A variety of media will be used to explore multiple techniques and color theory. Emphasis is placed on rendering from observation and the creation of original images. Students keep a portfolio of their work to show and reflect upon their growth. **(Prerequisite: Drawing 1 with a minimum grade of C or building approval) DESE 024160-1**

05130 Painting 2 (0.5 Credit)

Painting 2, a semester course, allows students to expand upon their knowledge and application of color theory through art production and analysis. Subject matter may include still life, portrait, landscape, and imaginative subject matter. Traditional media is used while students are encouraged to explore and take risks with contemporary mixed media. Students are expected to express their knowledge of the elements and principles of design in their work. Emphasis is placed on the creation of original artwork that challenges students' abilities, addresses content, and creates connections between their worlds - personally, culturally, socially, and historically. Sketchbook assignments are required. **A student may retake the course with building approval. (Prerequisite: Painting 1 with a minimum grade of C or building approval) DESE 024160-2**

0509 Photography 1 (0.5 Credit)

Photography 1, a semester course, explores the use of single lens reflex and mirrorless cameras to create fine art photography. The functions and uses of ISO settings, the focus ring, aperture settings, and shutter speed settings are taught. Skills taught include artistic composition, the process for taking an image from its original format and processing it into a finished print. Students will learn how to adjust settings on their camera to control the outcome or effect that they are trying to achieve (freeze motion, blur motion, depth of field, etc.) Assignments typically include creative use of camera controls, contrasting light situations, portraits and individual selection of subject matter. Critique and analysis of final work is incorporated throughout to improve photo quality, compositions, and editing. **(Prerequisite: Introduction to Art and formal building approval) DESE 024130-1**

0510 Photography 2 (0.5 Credit)

Photography 2, a semester course, is an advanced version of Photography 1. Students will learn about various photo manipulation techniques and how to incorporate photos they have taken into creative and unique art projects. This course covers advanced camera techniques and creative approaches to the medium. Students will explore ways to manipulate photographs and effectively use artificial light. Emphasis will be placed on integrating content and composition to create visually compelling images that communicate a specific concept or idea. Various subject matter options will expose students to different ways of using photography. Additionally, students will deepen their understanding through the critiquing process. **A student may retake the course with building approval. (Prerequisite: Photography 1 with a minimum grade of C or building approval) DESE 024130-2**

05110 Graphic Design 1 (0.5 Credit)

This introductory course provides students with a strong foundation in graphic design principles, tools, and techniques. Students will explore the elements of design, color theory, typography, and composition while learning to use industry-standard software such as Adobe Photoshop and Illustrator. Through hands-on projects, students will create digital artworks such as digital paintings, posters, logos, and advertisements, developing both their creative and technical skills. Emphasis is placed on problem-solving, visual communication, and the design process from concept to completion.

(Prerequisite: Introduction to Art) DESE 02417-1

05120 Graphic Design 2 (0.5 Credit)

Building on the fundamentals learned in Graphic Design 1, this course challenges students to refine their design skills and develop a personal style. It allows students to expand their skill set of using a computer to create digital art work through the lens of a graphic designer. Emphasis is placed on creative problem-solving and using the design process to effectively communicate in a visual way with a target audience in mind. Graphic Design projects may include the design and production of some of the following: digital illustrations, package design, digital paintings, advertising layouts, posters, books covers, billboards and corporate or personal logos.

A student may retake the course with building approval. (Prerequisite: Graphic Design 1 with a minimum grade of C or building approval) DESE 02417-2

05040 Ceramics 1 (0.5 Credit)

Ceramics 1 is a semester course designed to provide students with the opportunity to develop problem solving skills and explore their creativity as it relates to clay and its properties. Students will design and build ceramic pieces using traditional hand building methods such as slab, coil, pinching and modeling. They will also explore the potter's wheel to create functional pieces. Students will learn new concepts and terminology that will be applied throughout the course. Students will work independently and collaboratively to develop original ideas and improve their skills through the creative process. **(Prerequisite: Introduction to Art) DESE 024126-1**

05180 Ceramics 2 (0.5 Credit)

Ceramics 2 is a semester course designed to provide students with the opportunity to develop problem solving skills and explore their creativity as it relates to clay and its properties. Students will design and build ceramic pieces using traditional hand building methods such as slab, coil, pinching and modeling. They will also use, in more depth, the potter's wheel to create functional pieces. Students will also be using informed decision making to generate original ideas using themes. They will execute these ideas through further experimentation of previously learned techniques. Students will expand upon concepts and terminology that will be applied throughout the course. Students will work independently and collaboratively to develop original ideas and improve their skills through the creative process. **A student may retake the course with a minimum grade of B or above and building approval. (Prerequisite: Ceramics 1 with a minimum grade of C or building approval) DESE 024126-2**

05080 Mixed Media (0.5 Credit)

Mixed-Media is a semester course designed to provide students with the opportunity to develop problem solving skills and explore their creativity as it relates to a wide variety of art materials. Possible media includes, but is not limited to, printmaking, fabric dyeing, weaving, art journaling, sculpture, found-object art, collage, wood or plaster carving, encaustic, and pyrography. Students will learn new concepts and terminology that will be applied throughout the course. Students will gain exposure to a variety of traditional and contemporary art media. Students will work independently and collaboratively to develop original ideas and improve their skills through the creative process. **A student may retake the course with building approval. (Prerequisite: Introduction to Art) DESE**

05035 Advanced Placement (AP) Art History (1 Credit) /w

The AP Art History course explores such topics as the nature of art, its uses, its meanings, art making, and responses to art. Through investigation of diverse artistic traditions of cultures from prehistory to the present, the course fosters in-depth and holistic understanding of the history of art from a global perspective. Students learn and apply skills of visual, contextual, and comparative analysis to engage with a variety of art forms, constructing understanding of individual works and interconnections of art-making processes and products throughout history. AP Art History is designed to be the equivalent of a two-semester introductory college or university art history survey course. **(Prerequisite: Junior or Senior standing, or Sophomores with building approval) DESE**

05196 Advanced Placement (AP) 2D Art & Design (1 Credit)/w

05197 Advanced Placement (AP) 3D Art & Design (1 Credit) /w

05198 Advanced Placement (AP) Drawing (1 Credit) /w

AP Art and Design is a year-long course for students who are seriously interested in the practical experience of design and creating artwork at the highest level. This is a rigorous and fast paced course where students will be expected to use time in and out of class to hit the course deadlines. Students work to create a portfolio containing finished artworks along with the documentation of their artistic process that will be submitted for evaluation by the AP College Board at the end of the school year. Each student will develop their own line of artistic thought by sustaining an investigation of ideas and processes through practice, experimentation, and revision. While exploring this investigation the student will expand upon their understanding of artistic materials, processes, and ideas. Students are required to document their artistic ideas and practices to demonstrate conceptual and technical development over time. AP Art and Design students can select from three portfolio options in the early fall for submission: 2D-Design, 3D-Design, or Drawing - corresponding to the most common college foundations courses. Due to multiple portfolio options, AP Art and Design is a course that students can elect to repeat to submit an additional portfolio to the AP College Board. **(Prerequisite: At least four semesters of visual art with a minimum grade of C or building approval) DESE**

PERFORMING ARTS- THEATRE, FINE ARTS

0520 Introduction to Theatre (0.5 Credit)

Students will briefly explore different facets of the theatre arts from performance and general presentation skills, to historical influence, script exploration, and basic technical theatre. This is a project/performance based course requiring in-class participation and limited time investment outside the classroom. This active class allows students to express creativity in multiple artistic fashions. **(No prerequisite) DESE 056550**

0576 Theatre I : Performance (0.5 Credit)

Students will explore the creative process as it applies to performance in contemporary and historical scripts as well as musical theatre. This performance-based course requires daily individual and group participation, resulting in limited time investment outside the classroom. The goal of this course is to develop the role of a performer and his or her relationship to other professionals in the theatre arts. **(Prerequisite - Introduction to Theatre) DESE 056520-1**

05785 Theatre II: Performance (0.5 Credit)

In this year-long course, students will explore more advanced aspects of an actor's world, including characterization, auditioning, script analysis and building a portfolio of work. There will be several in-class readings, as well as viewing and analyzing dramatic pieces. Several acting projects will be performed throughout the year. **(Prerequisite - Theatre I: Performance or building approval) DESE 056520-2**

0577 Technical Theatre I (0.5 Credit)

In this semester course, we will explore the basic elements of technical theatre. Units of study will include theatrical safety, parts of the theatre, technical terminology, basic scene painting, elements of lighting, sound and set construction. Students will be expected to complete projects in the subject areas. The primary focus of this course is to get a "hands-on" experience and work on several facets of set construction and production work. This is a project-based course requiring in-class participation and limited time investment outside the classroom. **(Prerequisite - Introduction to Theatre or building approval) DESE 056550-1**

05795 Technical Theatre II (1 Credit)

This is for the student who has shown the skills and abilities necessary to succeed in this project-oriented class. Students will complete projects of the technical aspects of the theatre department's current production season. The class will explore elements of scenic design and various construction techniques, scenic painting, lighting design, audio and other areas of technical theatre as well as careers in the theatre. Students will also learn the usage of appropriate hardware and software for some aspects of theatrical design. The primary focus of this course is to get a "hands-on" experience and work on several facets of scenic construction and production work using the production season as a laboratory setting. **(Prerequisite - Technical Theatre I or building approval) DESE 056550-2**

Advanced Theatre Studies (0.5 Credit)/w

This semester-long, repeatable course is offered to students who are interested in seriously studying the theatre arts. Once enrolled, students will specialize in a specific area of theatre, including acting, directing, technical design. Students will build performance and technical portfolios, as well as participate in the process of a production. Students in this class may also act as mentors in other theatre courses. The course will be catered to the individual interests of the students involved each semester. *This course may be available for college credit if taken for a full year. **(Prerequisite - junior/senior standing and building approval) DESE 056599**

0596 Performance: Students enrolling in this class have shown advanced proficiency in performance. In addition to class performance projects, students will be expected to build a portfolio of appropriate performance pieces for use in an audition. Performance pieces will explore various acting styles and genres, and include in-depth character analysis.

0597 Technical: This advanced class for students who have demonstrated the experience and maturity of attitude necessary to succeed in this advanced course. The design challenges will differ depending on the theatre season. The student will be assigned a technical design or directing element for a production. From there he/she will complete the project starting the script, research, design and implement advanced usage of appropriate hardware and software are fundamental aspects of the course. At the end of the process, the student will have completed a technical portfolio.

0523 Film I (0.5 Credit)

Film Studies I is a semester course that explores the many styles, genres of American film as well as the steps to filmmaking. The class will explore film analysis, history, and industry while building practical storytelling skills to be expanded upon in Film II. Some of the films in this course do not carry a rating, and a parent signature and approval is necessary prior to viewing the selections in class. **(Prerequisite - junior/senior standing) DESE**

0524 Film II (0.5 Credit)

Film Studies II is a semester course in which students will develop and produce short movies. Students will learn basic cinematography, narrative, directing, and editing required to tell a successful story. This hands-on class gets students up and out creating stories that speak to a modern audience. Students and parents will have to sign an equipment contract before any film equipment will be checked out to the student. **(Prerequisite - Film Studies I - junior/senior standing) DESE**

PERFORMING ARTS-MUSIC, FINE ARTS

05425 Treble Choir (1 Credit)

High School Treble Choir is a yearlong course open to students interested in vocal and choral music. Students enrolling in this class must be able to sing within the alto, mezzo soprano, or soprano range. The study of terms, vocal techniques, music theory and history, sight singing and performance skills will be emphasized through a variety of choral literature. Required extra-curricular concert participation is a part of the student's grade. **DESE 126960-1**

05435 Baritone Choir (1 Credit)

High School Baritone Choir is a yearlong course open to students interested in vocal and choral music. Students enrolling in this class must be able to sing within the bass, baritone, or tenor range. The study of terms, vocal techniques, music theory and history, sight singing and performance skills will be emphasized through a variety of choral literature. Required extra-curricular concert participation is a part of the student's grade. **DESE 126960-1**

05445 Concert Choir (1 Credit)

High School Concert Choir is a yearlong course open to students interested in vocal and choral music who have shown the skills and abilities necessary to succeed in a moderately advanced performance group. Students will be accepted into the group through auditions based upon available openings per voice section to maintain proper balance. The study of terms, vocal techniques, music theory and history, sight singing and performance skills will be emphasized through a variety of choral literature. Required extra-curricular concert participation is a part of the student's grade. **(Prerequisite: Grades 10-12. Grade 9 with Building Approval) DESE 126960-2**

0546 Chamber Choir (1 Credit)

High School Chamber Choir is a yearlong course that will generally be considered an advanced performing group of students who show the vocal skills and maturity of attitude necessary to succeed in a demanding course. The advanced study of terms, vocal techniques, music theory and history, sight singing and performance skills will be emphasized through a variety of choral literature, with an emphasis on High School Chamber Choir literature, madrigals, and jazz/show choir music. Auditions will be held the previous spring based upon available openings per voice section to maintain proper balance. Required extra-curricular concert participation is a part of the student's grade. **(Prerequisite: Building Approval) DESE 126960-3**

0548 Beginning Band Grades 9-12 (0.5 Credit)

High School Beginning Band is a semester-long designed to meet the needs of those students that would like the opportunity to either participate in marching band activities or learn to play a musical instrument who did not start in Middle School. Members are chosen by audition and consent of the Band Director. Those students who would like to learn a secondary instrument for personal development should consider this class as well. Instrumentation is limited to wind and percussion instruments only. Upon completion of this course, students can either enroll in a Band class or re-enroll in this repeatable course. Students will need to supply their own instruments, except for large instruments provided by the school. **(Prerequisite: Building approval) DESE 125510-1**

05495 Symphonic Band (1 Credit)

Symphonic Band is a yearlong performance-based course, designed to further refine the skills that students learn in High School Beginning Band or Middle School Band. Members are chosen by audition and consent of the Band Director. When multiple sections are necessary, enrollment will be determined by the director. Membership in Marching Band is required of all Symphonic Band members, unless exempted by the director. A variety of literature will be studied and performed from different styles and periods of music history, including original band music, orchestral transcriptions and well known and varied standard works for the band. Members will be encouraged to participate in district and/or state Solo and Ensemble Festival. The band will also perform in an adjudicated Large Ensemble Festival. Extra-curricular rehearsals and performances will be required; some of which will begin prior to the school year. Attendance at these rehearsals and performances will be required as a part of the student's grade. **(Prerequisite: Building approval) DESE 125510-2**

05525 Wind Ensemble (1 Credit)

Wind Ensemble is an advanced yearlong performance-based course, designed to further refine the skills that students learn in High School Beginning Band, Symphonic Band or Middle School Band. This ensemble generally performs advanced band literature. Members are chosen by audition and consent of the Band Director. Membership in Marching Band is required of all Wind Ensemble members, unless exempted by the director. A variety of literature will be studied and performed from different styles and periods of music history, including original band music, orchestral transcriptions and well known and varied standard works for the band. Members will be encouraged to participate in district and/or state Solo and Ensemble Festival. The band will also perform in an adjudicated Large Ensemble Festival. Extra-curricular rehearsals and performances will be required; some of which will begin prior to the school year. Attendance at these rehearsals and performances will be required as a part of the student's grade. **(Prerequisite: Building Approval) DESE 125510-3**

05535 Jazz Band (1 Credit)

Jazz Band is a yearlong performance based course designed to be a highly selective performing group. Membership is by audition only. When multiple sections are necessary, enrollment will be determined by the director. Students must be co-enrolled in Symphonic Band or Wind Ensemble, or must have successfully completed two years of Symphonic Band or Wind Ensemble, unless exempted by the director. Traditional Jazz Band instrumentation will be used. A variety of jazz styles will be studied and performed. Emphasis will be on listening to the art of jazz improvisation. Extensive extra-curricular performances are required. Attendance at performances will be required as part of the student's grade. **(Prerequisite: Audition and Instructor Approval) DESE 125540-1**

05540 Jazz Lab (0.5 Credit)

Jazz Lab is a semester class. The class is open to students who are proficient on a traditional band instrument, orchestra instrument or voice (upon recommendation of the band director). Emphasis will be placed on the development of big band and small group jazz as well as improvisational techniques through the extensive study of chords, scales, theory, and literature. The performance practices of various jazz artists that have been influential in the development of jazz as an art form will be studied. Students must be co-enrolled in Symphonic Band or Wind Ensemble, unless exempted by the director. **(Prerequisite: Audition and Building Approval) DESE 125540-1**

05555 Concert Orchestra (1 Credit)

High School Concert Orchestra is a performing Orchestra with repertoire including many styles and time periods. Concert Orchestra is a non-auditioned class. Training is provided in the technical skills and music reading skills needed to perform standard developing string orchestra literature. Attendance at scheduled performances and after school rehearsals is mandatory and is a part of the student's grade. Students will provide their own instruments as possible, and as needed, the larger instruments will be provided by the school. Students who play cello and bass do not need to transport their instruments to school, as home practice instruments and school instruments will be provided. **DESE 125520-1**

05565 Symphonic Orchestra (1 Credit)

The Symphonic Orchestra is a performing orchestra. Admittance to this class is by audition or by the director's approval. Advanced training is provided in technique and music reading skills in order to perform standard string orchestra literature in a broad range of styles, genres, and time periods. Symphonic Orchestra will prepare students for performing beyond the high school level. Attendance at scheduled performances and after school rehearsals is mandatory and is a part of the student's grade. In addition to the standard string consort, this ensemble may include woodwind, brass, and percussion students that are also enrolled in the band at the director's discretion. String students will provide their own instruments as possible, and as needed, the larger instruments will be provided by the school. Students who play cello and bass do not need to transport their instruments to school, as home practice instruments and school instruments will be provided. **DESE 125520-2**

05585 Philharmonic Orchestra (1 Credit)

The Philharmonic Orchestra is a performing ensemble. Admittance to this class is by audition or by the director's approval. Advanced training is provided to refine technique, music reading skills, and music interpretation in order to perform advanced orchestral literature including a broad range of styles, genres, and time periods. The Philharmonic Orchestra will prepare students for performing in advanced ensembles beyond the high school level. Attendance at scheduled performances and after school rehearsals is mandatory and is a part of the student's grade. In addition to the standard string consort, this ensemble may include woodwind, brass, and percussion students that are also enrolled in the band at the director's discretion. String students will provide their own instruments as possible, and as needed, the larger instruments will be provided by the school. Students who play cello and bass do not need to transport their instruments to school, as home practice instruments and school instruments will be provided. **(Prerequisite: Building Approval) DESE 125520-3**

05575 AP Music Theory (1 Credit)/w

The AP Music Theory course corresponds to a typical introductory college music theory course that covers topics such as musicianship, theory, musical materials, and procedures. Musicianship skills, including dictation and other listening skills, sight singing, and harmony, are considered an important part of the course. Through the 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 skills is a primary objective. Performance is also part of the curriculum through the practice of sight singing. Students understand basic concepts and terminology by listening to and performing a wide variety of music. Notational skills, speed, and fluency with basic materials are also emphasized. **(Prerequisite: Building approval) DESE 126995**

0560 Class Guitar I (0.5 Credit)

Class Guitar is a semester-long course in basic music fundamentals which will be taught using the guitar. This course is designed for students with no prior experience. Instruments will be provided for all students who cannot supply their own. Only acoustic guitars will be used, and opportunities will be given to play both alone and in ensembles. Fundamentals of acoustic guitar playing will be taught, including: tuning, playing technique, basic music notation, sight reading, melody/harmony, basic chords, playing in different keys. **DESE 125525-1**

0561 Class Guitar II (0.5 Credit)

Class Guitar II is a semester-long course where students will learn advanced techniques in guitar performance. Students continue to receive instruction in music reading skills, right and left hand techniques and ensemble performance. Music in a variety of different styles will be studied. The course will prepare students to perform the guitar as a melodic and accompanying instrument beyond high school. Instruments will be provided for all students who cannot provide their own. **(Prerequisite: Successful completion of Guitar 1 or Building approval).DESE 125525-2**

05625 Advanced Music Ensemble (11-12) (1 Credit) cc/w

Wind Ensemble
Symphonic Orchestra
Philharmonic Orchestra
Chamber Choir
Concert Choir
Jazz Band

Advanced Music Ensemble (AME) is a year-long course that allows juniors and seniors in band, choir, and orchestra an opportunity to pursue a higher level of study and performance on their primary instrument through a prescribed list of activities (listed below) and the opportunity to earn college credit. AME is bound by the same course description as the corresponding regular ensemble and all work is to be done outside of class time, similar to an independent study. Due to the nature of the class, students may only enroll in one (1) section of AME per school year. **(Prerequisite: Completed application and Building approval) DESE 125510-4**

Course requirements:

- Audition for the corresponding St. Louis Metro 8 All-District Honors ensemble, and All-State, if eligible.
- Present a solo for District Solo & Ensemble Festival, and State Solo & Ensemble, if eligible.
- Complete a prescribed research project once per semester.
- Participate in a performance jury for a music faculty panel once per semester.
- Meet regularly with and document work with a director-approved private music instructor.
- Function in a leadership role within the corresponding ensemble.
- Compile an online portfolio of all AME work.

FAMILY AND CONSUMER SCIENCES, PRACTICAL ARTS

	Culinary Arts Pathway	Early Childhood and Education Pathway		Apparel, Textiles and Interior Design Pathway	
		Early Childhood Education	Pathways to Teaching	Apparel, Textiles and Construction	Housing and Interior Design
Content Specific High School Coursework	♦Introductory Foods ♦Culinary Arts 1 ♦Culinary Arts 2 ♦International Foods/ Culinary Arts 3 ♦Culinary Arts Practicum	♦Child Development I Child ♦Development II Child ♦Development Practicum	♦Pathways to Teaching and Practicum	♦Apparel, Textiles and Construction I ♦Apparel, Textiles and Construction II	♦Housing and Interior Design
				♦Apparel, Textiles and Interior Design Merchandising Practicum	
Career and Technical Student Organizations	♦FCCLA	♦FCCLA	♦FCCLA ♦Educators Rising	♦FCCLA	♦FCCLA
Industry Recognized Credential (IRC)/TSA	♦Culinary Arts-AAFCS (IRC)	♦Early Childhood Education – AAFCS (IRC)		♦Fashion Textiles and Apparel AAFCS (IRC)	♦Interior Design Fundamentals AAFCS (IRC)
Additional Certifications	♦ServSafe	♦Articulation agreement with SCCC	♦Dual credit with UMSL		
Career possibilities	Chef, Restaurant Manager, Nutritionist, Culinary Scientist, Dietician, Food Stylist, Caterer	Early childhood education, elementary education, or any other child-related career.	Early Childhood, Elementary, middle or high school teacher. Special Education, Administration, Counseling, Speech Language Pathologist	Retail Buyer, Fashion Coordinator, Pattern Design, Fashion Alterations/Tailor, Wedding Consultant, Personal Shopper	Interior Designer, Home and Corporate Staging, Textile Products Designer, Textiles Tester, Interior Personal Shopper

Culinary Arts Pathway

Culinary Arts: The Culinary Arts pathway is designed to introduce students to foods and nutrition, specific recipe and menu preparation and international cuisines. After the completion of Introductory Foods, Culinary Arts I, Culinary Arts II and Advanced Culinary Arts, students are expected to take an Industry Recognized Credential (IRC) in Culinary Arts*. Career fields related to these courses include: Culinary and Restaurant Management (Dietitian, Food Scientist, Pastry Chef), Hospitality and Tourism Management (Hotel and Restaurant Management, Event Planner), Career Pathways for the Teaching Profession (Early Childhood, FACS Teacher)

0608 Introductory Foods (0.5 Credit)

Students can take this class on its own or as part of a four course sequence designed to introduce students to the culinary arts. This semester-long course will provide an opportunity for students to develop basic food preparation skills. Classroom and lab work experiences emphasize nutrition as students examine preparation principles and techniques of a variety of foods that promote optimal health of individuals across the lifespan. **(DESE 096824).**

0606 Culinary Arts 1 (0.5 Credit)

This lab-based class provides many hands-on opportunities to learn safety and commercial food handling standards, knife skills, and menu planning. Topics of study include: Salad and Garnishes, Fruits and Vegetables, Sandwiches and Appetizers, Breakfast Foods and Poultry. **Prerequisite: Passing grade in Introductory Foods (DESE 096829).**

0607 Culinary Arts 2 (0.5 Credit) This hands-on course extends learning about safety and food preparation skills to food preparation experiences necessary to work in the culinary arts industry. Students will continue to learn about food science as well as advanced topics related to restaurant management. Topics of study will include: Potatoes and Grains, Meat and Seafood, Desserts/ Baked Goods, Stocks, Soups and Sauces. **Prerequisite: Passing grades in Culinary Arts 1. (DESE 096827).**

06090 International Foods/Culinary Arts 3 (0.5 Credit)

A semester course, emphasizing a variety in food products, preparation techniques, experimentation in meal patterns, and the significance of food as it relates to international cuisine. The student will plan, prepare and serve foods representing various regions throughout the world. This class includes a balance of written class work, demonstrations and hands-on experience including the exploration of food industry professions. **Prerequisite: Passing grades in Culinary Arts 2. (DESE 096910).**

**** Credentials:** At the completion of the International/ Culinary Arts 3, students can earn an Industry Recognized Credential (IRC) in Culinary Arts.

0625 Culinary Arts Practicum (0.5 Credit)

The Culinary Arts Practicum is an individual enrichment course that allows students to demonstrate professional food preparation methods and techniques for all menu categories to produce a variety of food products, demonstrate menu planning principles and techniques based on standardized recipes, and implement food service management and leadership. Students will select areas of interest and project with approval by the instructor. The student will meet daily, working with the teacher on an independent basis during the semester long course. Students can enroll in this course up to two times. Assessment will include a portfolio related to culinary arts, selected project work and a visual display. **Prerequisite: Completion of International/Culinary Arts 3 and passing the Culinary Arts IRC. (DESE 096827-1).**

Early Childhood and Education Pathway

Early Childhood Education: The early child development pathway is designed to introduce students to basic developmental properties spanning prenatal through preschool-aged children. After the completion of the Child Development Practicum, students are expected to take an Industry Recognized Credential (IRC) in Early Childhood education*. Career fields related to these courses include: early childhood education, elementary education, or any other child-related career.

0618 Child Development I (0.5 Credit)

This is the first semester class that students can take on its own or as part of a three course sequence designed to introduce students to child development and early childhood education. Students will use technology and electronic baby simulators for first hand experience caring for an infant. The course also focuses on all stages and characteristics of development that span from prenatal to preschool-aged children and include multiple aspects of health, safety, and special needs related to child development. **Prerequisite: Sophomore standing. (DESE 096821).**

0619 Child Development II (0.5 Credit)

This is the second class of a three course sequence in the early childhood pathway. This semester-long, lab class examines the personal and professional characteristics needed by individuals seeking a career working with children. Students will work first hand with children ages 2-5 through an onsite preschool lab. Units include ethics and professionalism in child development careers, analyzing developmental stages, appraising health concerns, providing children's activities, establishing a quality early childhood program, and interacting with children. Students will be working with children from the community, so success is dependent on professionalism, attendance, and citizenship. **Prerequisite: Junior Standing and Child Development I. (DESE 096826).**

0627 Child Development Practicum (0.5 Credit)

This is a capstone course for students who have completed the first two courses in the early childhood pathway and who are interested in more advanced learning. Students will continue to explore the field of child development through a hands-on setting working with children in an onsite preschool lab. Students will also explore careers focusing on children ages birth to five through a semester-long, independent research project. The students will observe community child care centers, prepare for completion of the eligibility requirements for the Child Development Associates, and serve as a resource and leader to Child Development II students, while demonstrating professional behaviors and attitudes. **Prerequisite: Junior standing and Child Development II. (DESE 096826-1).**

****Credentials:** At the end of the Child Development Practicum students all students can earn the Early Childhood Education – AAFCS (IRC).

Career Pathway for the Teaching Profession: The Teaching pathway is designed to introduce students to occupations in teaching and education that span from elementary to high school. Career fields related to these courses include: early childhood education, elementary teacher, middle school teacher and a high school teacher.

06115 Pathways to Teaching (1 Credit) cc/w

This yearlong foundational course prepares students for future positions in the field of education by including a blend of coursework and field observations. Teaching as a Profession students study, apply, and practice the use of current technologies, effective teaching and learning strategies, the creation of an effective learning environment, the creation of instructional opportunities for diverse learners and students with special needs, and plan instruction based on knowledge of subject matter, students, community, and curriculum performance standards. Required membership in Educators Rising.

Prerequisite Junior or Senior Standing. (DESE 096842).

**** Dual Credit Agreement with UMSL-** An agreement has been established between the four Fort Zumwalt School District High Schools and the University of Missouri St. Louis. Students who successfully complete the Pathways to Teaching course are eligible for college credit through UMSL.

Apparel, Textiles and Interior Design Pathway

Apparel, Textiles and Interior Design Pathway provides students with the academic and technical preparation necessary to pursue high-skill, high-demand careers in these related and growing industries. The sector encompasses two distinct career pathways: (1) Apparel, Textiles and Construction and (2) Housing and Interior Design. The standards are designed to integrate academic and career technical concepts and prepare students for Industry Recognized Credentials from the American Association for Family and Consumer Science (Fashion Textiles and Apparel and Interior Design Fundamentals). Participation in FCCLA and other FACS courses are encouraged for students who want to go into postsecondary options of careers in this area.

06021 Apparel, Textiles and Construction 1 (ATC 1) (0.5 Credit)

This is a semester course designed for the student interested in fashion apparel, textiles and construction. In this course students will obtain a foundation needed to identify fibers, weaves and other aspects of textiles. Students will also obtain the knowledge of sewing terms and tools needed to construct garments using manufactured and other various types of patterns. Self initiative, motivation, time management, planning, independent work, following directions, and evaluating are crucial skills in this course where Art, communication, mathematics, science and technology are applied. Project equipment, additional supplies, and an activity fee are the responsibility of the student. **(DESE 098620).**

06022 Apparel, Textiles and Construction 2 (ATC 2) (0.5 Credit)

This is a semester course designed for the student who has a continual interest in fashion, apparel, and construction. It may also be beneficial for a student who seeks a career in Fashion apparel, accessory design, costume design and more. In this course students will utilize advanced garment construction techniques, basic pattern making, and an expansion of applied textiles knowledge. Several garments and skills examples will be constructed during this semester. Successful completion of this class provides students with an understanding of textile application and construction with an emphasis on quality. Self initiative, motivation, time management, planning, independent work, following directions, and evaluating are crucial skills in this course where art, communication, mathematics, science and technology are applied. Project equipment, additional supplies, and an activity fee are the responsibility of the student. **Prerequisite: Completion and passing grade of Apparel, Textiles and Construction 1. (DESE 098622).**

06240 Apparel, Textiles and Interior Design Practicum (0.5 Credit)

Because of the flexibility of this semester-long class, both ATC and Design students will take this practicum as a completion of their chosen pathway. Students have the option of focusing on a career in Fashion Apparel Merchandising or a career in Design Merchandising. Assessment will include a portfolio related to fashion or interior design, selected project work and a visual display. Participation approved by the instructor. This class may be repeated up to two times. Project equipment, additional supplies, and an activity fee are the responsibility of the student. **Prerequisite: Completion and passing grade of Apparel, Textiles, and Construction I and II or Housing and Interior Design and Junior standing (DESE 096909).**

In this course ATC students will demonstrate a practical application of fashion design to pattern making, advanced construction, and/or fabric embellishment related to the area of fashion study suggested by the individual learner. Students will select areas of interest and projects with approval by the instructor. The student will meet daily, working with the teacher on an independent basis during the semester long course.

****Credentials:** At the end of Apparel, Textiles and Interior Design Practicum students can earn the Fashion Textiles and Apparel AAFCS (IRC).

This course allows Design students to analyze the influences on architectural and furniture designs and evaluate client's needs, goals, and resources in creating design plans for housing, interiors, and furnishings. Students will select areas of interest and projects with approval by the instructor. The student will meet daily, working with the teacher on an independent basis during the semester long course. Assessment will include a portfolio related to housing and interior design, selected project work and a visual display. Project equipment, additional supplies, and an activity fee are the responsibility of the student.

****Credentials:** At the end of the Interior Design Practicum students can earn the Interior Design Fundamentals AAFCS (IRC).

0615 Housing and Interior Design (0.5 Credit)

This introductory course is designed for the student interested in housing and interior design. Students will cover the basic knowledge of social and cultural reasons for choosing where to reside, the use of the elements and principles of design, fabric selection, floor planning, and the psychological impact of the space around us. Students will learn how these concepts are applied in the home and in the Housing Industry. Self-initiative, motivation, time management, planning, independent work, following directions and evaluating are crucial skills in this course where art, communication, mathematics, science and technology are applied. Career opportunities in Housing and Interior Design will be explored.

Prerequisite: Sophomore standing (DESE 096818).

0616 Family Relationships (0.5 Credit)

This course is designed to help prepare the student for future adult roles. Topics will focus on life skills including: self-management, interpersonal communication, dating, engagement and marriage, money management, family, parenthood, major life adjustments, and crisis management. Self initiative, motivation, time management, planning, independent work, following directions, and evaluating are crucial skills in this course. **(Prerequisite: Junior or senior standing.) DESE 098623**

BUSINESS AND MARKETING EDUCATION, PRACTICAL ARTS

Business Core Classes

♦Introduction to Business
♦Marketing Foundations
♦Accounting / ♦Entrepreneurship
♦AP Economics

*Personal Finance is a high school graduation requirement

Content Specific Coursework/ Pathways:

Business Management & Administration	Finance	Information Technology	Marketing
♦Introduction to Business ♦Computer Applications or ♦Microsoft Office Skills ♦Desktop Publishing ♦Business Production ♦Business Independent Study ♦Supervised Work Program-Business	♦Accounting ♦Advanced Accounting ♦AP Economics ♦Personal Finance	♦IT Essentials ♦Intro to Networking ♦PLTW Cybersecurity ♦PLTW CSE ♦PLTW CSP	♦Marketing Foundations ♦Entrepreneurship ♦Web Design ♦Advanced Marketing ♦Supervised Work Program - Marketing

Core Business Pathway

Course Business Pathway: The core business pathway is designed to introduce students to basic properties of Business and Marketing as well as promote advanced study. Completing the pathway prepares students for postsecondary programs in Business, Marketing, Financing, and Accounting. The core Business pathway offers students dual credit courses that are an introduction to many topics in undergraduate business and marketing programs.

06340 Introduction to Business (0.5 Credit)

This course provides opportunities to experience a variety of topics in the field of business and to provide a foundation for other business courses. Students will explore all aspects of the business world including: marketing, economic decisions and systems, ethics, social responsibility, business organizations and entrepreneurship. Through the use of interactive technology, collaborative presentations and project management, students are made aware of the integral role that they play in today's ever-changing global economy. **DESE 034300**

06425 Marketing Foundations (1 Credit)

Marketing allows a business to generate profit while satisfying customers' wants and needs. This course will introduce the student to the field of marketing; covering such topics as customer relationships, product development, sales and advertising. Students will focus on real-world marketing concepts and hands-on learning. It is recommended for the college-bound student interested in marketing or business, as well as the non-college bound student interested in marketing occupations. Marketing students are also strongly encouraged to join DECA, an Association of Marketing Students. **Supervised Work Program- Marketing (Prerequisite: Sophomore Standing) DESE 040001**

06465 Accounting (1 Credit)

Prepare yourself for a business/management degree or career. Managing financial records is vital in all career clusters. This full-year course is designed to build a basic understanding of accounting principles, concepts, and procedures, which are necessary for businesses to make financial decisions. Successful completion of this class will prepare you for the Advanced Accounting class. **Seniors enrolled in Accounting may enroll in Supervised Work Program-Business to earn an additional .5 to 1 credit while employed with an approved place of business.) (Prerequisite: Sophomore Standing) DESE 034310**

06475 Advanced Accounting (1 Credit)

This course is designed to help students acquire a more thorough, in-depth knowledge of accounting procedures and techniques utilized in solving business problems and making financial decisions. Students will develop skills in analyzing and interpreting information, preparing formal statements and supporting schedules, and using inventory and budgetary control systems. Computer applications should be integrated in each appropriate instructional unit.

Seniors enrolled in Advanced Accounting may enroll in Supervised Work Program-Business to earn an additional .5 to 1 credit while employed with an approved place of business.) (Prerequisite: Junior Standing) DESE 034312

0652 Entrepreneurship (0.5 Credit)

This course is for more than just students interested in business. This is a course for designers, engineers, techies, writers, and all students interested in excelling in the 21st Century. Students will develop an entrepreneurial mindset, a mindset capable of critical thinking and problem solving. Class participants will build a basic knowledge of various entrepreneurial ventures. Students will also be challenged to identify and develop their personal professional strengths, along with their innovative spirits. **(Prerequisite: Sophomore Standing) DESE 034305**

06645 AP Economics (1 Credit) /w

The purpose of the AP Economics course is to give students a thorough understanding of the principles of micro and macroeconomics that apply to the functions of individual decision makers, both consumers and producers, within the economic system. It places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and of the role of governments in promoting greater efficiency and equity in the economy. The study of national income and price-level determination and also developing students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics will be included. Students are expected (although not required) to take Advanced Placement Microeconomics and Macroeconomics exams. Students can earn personal finance credit if they earn an 80% or higher on the DESE EOC. **(Prerequisite: Junior Standing) DESE 156995/156895**

Business Management and Administration Elective Courses

Business Management and Administration: The Business Management and Administration courses focus on technologies, media classes, and specialized courses that can stand alone or supplement the core Business Pathway. These courses provide students with specialized industry skills related to occupations in Business and Marketing. The Business electives supplement students' experiences in specific courses in the core Business pathway (e.g., *Introduction to Business*).

0633 Computer Applications(0.5 Credit)

Expand the skills you need to be successful in high school and beyond. The demand for individuals to use computer software to create documents, gather information, and solve problems will continue to grow. This course is designed to help students develop skills in the areas of word processing, spreadsheet applications, presentation applications, Internet usage, database management and integrated software applications using Microsoft products. **DESE 034352**

06495 Microsoft Office Skills(1 Credit)/w

This year-long course is designed to ensure you master the essential Microsoft software skills needed for college and career readiness. Students will learn ways to enhance documents in Word, develop professional spreadsheets and charts in Excel, create high-quality presentations in PowerPoint, and design useful databases in Access. When complete, students will be prepared to take the Microsoft Office Specialist (MOS) certification test(s). **(Prerequisite: Junior/Senior Standing)(Seniors enrolled in this course may enroll in Supervised Work Program-Business to earn an additional .5 to 1 credit while employed within an approved place of business.)** **DESE 034352**

0631 Desktop Publishing(0.5 Credit)

Desktop Publishing is a semester course designed to teach the fundamentals needed to produce quality publications such as flyers, brochures, calendars, storybooks, magazine advertisements, letterhead, business cards, signs and certificates. Project equipment, additional supplies, and an activity fee are the responsibility of the student. **(Seniors enrolled in this course may enroll in Supervised Work Program-Business to earn an additional .5 to 1 credit while employed within an approved place of business.)** **DESE 034353**

064855 Business Production (0.5 Credit)

The Business on Context course engages students in extending Business and Marketing topics they learned in their earlier grades in an authentic business setting. Students develop critical thinking, problem solving, and innovation as they will be an integral part of a school business. Integration of accounting, finance, marketing, business management, legal and economic environments will be developed throughout projects in this course. Working to develop a business plan that includes structuring the organization, financing the organization, and managing information, operations, marketing, are a major focus of the course. Also, students develop entrepreneurial skills to run an actual business, by producing, marketing and selling products to customers in the school and community, while tracking expenses and maximizing profits. Repeatable. **(Seniors enrolled in Business Production may enroll in Supervised Work Program-Business to earn an additional .5 to 1 credit while employed with an approved place of business.)** **DESE 0343010**

06675 Supervised Work Program-Business (0.5 -1 credit per semester)

Earn while you learn! The Supervised Work Program- Business program coordinates on-the-job work experience which gives the students the opportunity to apply academic and workplace skills. A student may earn ½ unit of credit per semester for working an average of 10 hours per week or 1 full unit of credit per semester for working an average of 20 hours per week. If a student's schedule reflects two hours off for internship credit, the student must work at least 20 hours a week to earn two passing grades. Each student must be classified as senior status prior to the beginning of the term, must be enrolled in a secure approved employment, complete an application, provide character recommendations and receive approval from the instructor. **(Prerequisite: Senior Standing, Approved Application, and enrollment in one of the following classes: Web Design, Desktop Publishing, Microsoft Office Skills, Accounting, or Advanced Accounting.)** **DESE 034380**

0648 Business Independent Study (0.5 Credit)

This independent study is designed for the student wanting to further explore business topics beyond the course offerings. **(Prerequisite: Senior Standing) (Seniors enrolled in Independent Study may enroll in Supervised Work Program-Business to earn an additional .5 to 1 credit while employed within an approved place of business.)** **DESE 034399**

Finance Elective Courses

Finance Elective Courses: The finance elective course offerings include both stand alone courses and advanced coursework in Accounting. The courses prepare students in banking (including commercial), corporate finance, financial planning, and money management. The courses complement the Core Business pathway courses in finance (e.g., *Accounting*)

06545 Advanced Marketing (1 Credit)

In this hands-on course, second-year marketing students will build upon their understanding of the concepts learned in Marketing Foundations. Through real-world projects and hands-on activities, students will learn how customer behavior and data can be used to grow the business. Students will apply their understanding to the many different aspects of marketing, including advertising and promotion in the sports and entertainment, retail, and hospitality industries. Marketing students are also strongly encouraged to join DECA, an Association of Marketing Students. **(Prerequisite: Marketing Foundations) (Seniors enrolled in Advanced Marketing may also enroll in the early-release Marketing Work Program. Students will earn credit while applying the marketing concepts taught in the classroom at their part-time jobs.) DESE 040002**

0636 Personal Finance (0.5 Credit)

Personal Finance is a required course for high school graduation which gives students a basic understanding of money, banking, investment, credit and consumer buying issues. Simulated activities are used to make these topics more relevant to the student. Dual credit through Missouri State University is offered in this course. **(Prerequisite: Sophomore standing required - Course recommended for Juniors) DESE 996400**

Information Technologies

Information Technologies: The information technology courses are hands-on, skills-based experiences that align with standards necessary to earn industry recognized credentials in IT. All of the courses can serve as standalone experiences or prepare students for postsecondary programs in Cyber Security, Networking, and Information Technology.

06445 IT Essentials (1 Credit) cc/w

This course covers the fundamentals of computer and mobile device hardware and software, and advanced concepts such as security, networking, and the responsibilities of an IT professional. Students who complete this course will be able to describe the internal components of a computer, assemble a computer system, install operating systems, and troubleshoot them using software tools and diagnostics. Students will also be able to connect to the Internet and share resources in a networked environment **(Sophomore/Junior/Senior standing) DESE 034354**

**** Credential:** Students who complete the IT Essentials course are prepared to take the COMPTia Industry Recognized Credential

06805 PLTW Computer Science Essentials (1 Credit)/w

This year-long course provides an excellent entry point for students to begin or continue on from their PLTW Computer Science Gateway experiences. Computer Science Essentials will expose students to a diverse set of computational thinking concepts, fundamentals, and tools, allowing them to gain understanding and build confidence. In Computer Science Essentials, students will use visual, block-based programming and seamlessly transition to text-based programming with languages such as Python to create apps and develop websites, and learn how to make computers work together to put their design into practice. This course can be counted as a practical arts credit. **DESE 100416**

06835 PLTW Cybersecurity (1 Credit)/w

Cybersecurity introduces the tools and concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy. Cybersecurity, students solve problems by understanding and closing these vulnerabilities. This course raises students' knowledge of and commitment to ethical computing behavior. It also aims to develop students' skills as consumers, friends, citizens, and employees who can effectively contribute to communities with a dependable cyber-infrastructure that moves and processes information safely. This course can be counted as a practical arts credit. **(Prerequisite: Sophomore standing) DESE 100434**

06815 PLTW Computer Science Principles (1 Credit)/w

Computer Science Principles helps students develop programming expertise and explore the workings of the Internet. Using Python® as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. Projects and problems include app development, visualization of data, cybersecurity, and simulation. Computer Science Principles aligns with the College Board's 2013 CS Principles framework. This course can be counted as a practical arts credit. **(Prerequisite: Computer Science Essentials or building approval) DESE 100415**

****Credit by Assessment** is available for the PLTW Computer Science Courses from Missouri S&T. Learn more [HERE](#):

06455 Introduction to Networks (1 Credit) cc/w

This course focuses on learning the fundamentals of networking. Students will develop networking skills and understand the role of networks in business situations. This course provides hands-on lab experiences where students learn how to plan and install networks and connect them to the internet, troubleshoot connectivity issues, and recognize and avoid security threats. This is the first of two (2) courses that serve as preparation for the Cisco Certified Entry Networking Technician (CCENT) Certification. Possible career options include: IT systems and network technicians, second level or higher Computer Technician, and DataCenter Technician or similar positions. (Prerequisite: Sophomore Standing, Computer Maintenance course is recommended but not required) **(Sophomore/Junior/Senior Standing, IT Essentials recommended but not required). DESE 034354-1.**

Marketing Elective Courses
<p>Marketing: The marketing courses offer both basic as well as advanced studies to better understand strategies, tactics, and business processes related to marketing. prepares students for postsecondary education in marketing and sales. The marketing electives supplement students' experiences in courses in the core Business pathway (e.g., <i>Marketing Foundations</i> and <i>Entrepreneurship</i>).</p> <p><u>06545 Advanced Marketing (1 Credit)</u></p> <p>In this hands-on course, second-year marketing students will build upon their understanding of the concepts learned in Marketing Foundations. Through real-world projects and hands-on activities, students will learn how customer behavior and data can be used to grow the business. Students will apply their understanding to the many different aspects of marketing, including advertising and promotion in the sports and entertainment, retail, and hospitality industries. Marketing students are also strongly encouraged to join DECA, an Association of Marketing Students. (Prerequisite: Marketing Foundations) DESE 040002</p> <p>Seniors enrolled in Advanced Marketing may also enroll in the early-release Marketing Work Program. Students will earn credit while applying the marketing concepts taught in the classroom at their part-time jobs.</p> <p><u>0638 Web Design (0.5 Credit)</u></p> <p>This course is an introduction to the design and creation of web pages and websites. It will provide the student with a solid knowledge base to design, build, and publish dynamic content for the web using Web page editing/publishing software. Students will learn to code using HTML and CSS and will use online development programs to build web sites. Supervised Work Program - Business DESE 034393-1</p>

06685 Supervised Work Program -Marketing (0.5 -1 credit per semester)

The Marketing Internship Program is designed to bring the marketing concepts taught in the classroom to life through part-time, marketing-related employment. This experience will provide an opportunity for work experience and develop self-confidence in the student as they are confronted with the demands of a boss, co-workers, and the public. It will provide self-satisfaction as the student starts to earn an income while completing necessary employment records and marketing-related assignments for the classroom.

(Prerequisite: Senior status, application, and enrollment in one of the following classes: Marketing Foundation and Advanced Marketing.) DESE 040080

- A student may earn ½ credit per semester for working an average of 10 hours per week or 1 full credit per semester for working an average of 20 hours per week. If a student's schedule reflects two hours off for internship credit, the student must work at least 20 hours a week to earn two passing grades.
- Each student must be classified as a senior status prior to the beginning of the term, must be enrolled in a marketing class, secure approved employment, complete an application, and receive approval from the instructor.

**** Credential:** Students who complete 2.5 hours in Marketing Electives and enroll in the internship can complete the ASK Marketing Industry Recognized Credential

ENGINEERING AND INDUSTRIAL TECHNOLOGY, PRACTICAL ARTS				
	Metals Machining and Welding	Woods Cabinetry and Carpentry	Drafting 3d solid modeling and Architecture	Media Technology Photo and Video production
Content Specific High School Course Work	♦Metals 1-Intro ♦Metals 2-Advanced ♦Metals 3-Welding ♦Metals 3-Machining ♦Metals 4- Engineering	♦Woods 1 -Intro ♦Woods 2 -Advanced ♦Carpentry ♦Woods 3 -Engineering	♦Intro to Drafting ♦Engineering Drafting ♦Architecture ♦3D Solid Modeling ♦Civil Eng. & Architecture ♦Drafting - Capstone	♦Video Production 1 ♦Video Production 2 ♦Video Production Capstone
Supporting Coursework	♦All Engineering and IT Coursework			
CTSOs	♦TSA ♦Educators Rising			
Industry Recognized Certificates	♦USDOL Apprenticeship -Machining -Welding	♦USDOL Apprenticeship -Cabinetmaking -Carpentry ♦Carpenters Apprenticeship Book 2 IRC	♦SolidWorks Certification ♦USDOL Apprenticeship -Mechanical Eng. Tech	<i>Adobe Certified Professional in video design</i>
College credit -Articulation agreements*	♦Articulation agreement Ranken ♦Articulation agreement SCCC ♦College Credit State Tech	♦Articulation agreement SCCC	♦Articulation agreement SCCC	
Career Paths	Machinist, Welder, Sheet metal/HVAC, fabricator, Plumber/Pipe fitter, Manufacturing	Carpenter, cabinetmaker, Construction manager, Contractor, Manufacturing	Engineering, Architect, Draftsman, Design engineer, 3D Modeling Designer/Drafter, Manufacturing	Video/Film production, Special effects artists, Animators, Audio/Video/Lighting technicians, Online content creation

****Students completing two CTE related Courses can apply for the Fort Zumwalt USDOL apprenticeship program****

Metals: Machining and Welding Pathway

Metals: Machining and Welding Pathway: This Pathway provides students with the practical experience, knowledge and ability to plan, setup and operate precision machines, welding equipment, sheet metal machines and other metal working tools. The machining and welding program offers both stand alone experiences as well as in depth study and possible post secondary credit attainment. Students who successfully complete both Metals I and Metals II can apply for the Fort Zumwalt USDOL apprenticeship program. go.FZSD.us/apprenticeships

07000 Metals I-Introduction to Metal Technology (0.5 Credit)

This course caters to individuals aspiring to pursue careers in engineering, fabrication, manufacturing, industrial technology and industries associated with STEM (science, technology, engineering and math). The engineering design process is introduced through fundamental metalworking skills. Students will apply math, science, and engineering standards to hands-on projects. Selected projects and exercises are used to show the basic processes involved in the following areas: sheet metal, measuring and layout, hand tools, threading, foundry, heat treating/forging, and welding. Adherence to rigid safety standards is required at all times.

(Prerequisites: None) DESE 105470-0

07010 Metals II-Advanced Metal Technology (0.5 Credit)

This course is highly recommended for students interested in careers related to engineering, fabrication, manufacturing, precision machining, welding technologies, and industries associated with STEM. This course introduces skills used in precision machining and fabrication that are employed throughout the engineering and manufacturing industries. Precision measuring will be introduced. An emphasis will be placed on the safe operation and set up of the lathe and milling machines. A deeper understanding of the processes of welding and fabrication will be introduced. Adherence to rigid safety standards is required at all times. **(Prerequisite: Metals I - Introduction to Metal Technology with a minimum grade of C or building approval approval). DESE 105470-2**

**** Articulation Agreement with St. Charles Community College-** An agreement has been established between the four Fort Zumwalt School District High Schools and St. Charles Community College. Students who successfully complete the Metals II - Advanced Metal Technology course will receive credit for CDM 235 Manufacturing Processes (3 credits).

0703 Metals III- Precision Machining (0.5 Credit)

This course is highly recommended for students interested in careers related to engineering, precision machining, manufacturing, and industries associated with STEM. The emphasis is on precision measuring and machining. Students will focus on the processes involved in the safe setup and operation of precision lathes and mills. CNC (Computer Numerical Control) machines will be introduced. **(Prerequisite: Metals II - Advanced Metal Technology with a minimum grade of C and building approval approval. Taking Metals 3 and Metals 4 back to back is recommended but not required. DESE 105470-3**

**** Credit by Assessment with Ranken Technical College-** An agreement has been established between the four Fort Zumwalt School District High Schools and Ranken Technical College. Students who successfully complete Metals III-Precision Machining will be able to test out of the first semester of Machining Principles at Ranken Technical College.

0704 Metals III- Welding and Fabrication (0.5 Credit)

This course is highly recommended for students interested in careers related to engineering, welding technologies, fabrication, manufacturing, and industries associated with STEM. The emphasis is on developing proper welding techniques in all positions. Students will focus on Arc Welding (SMAW), MIG Welding (GMAW), and TIG Welding (GTAW). **Prerequisite: Metals II - Advanced Metal Technology with a minimum grade of C and building approval. Taking Metals 3 and Metals 4 back to back is recommended but not required. DESE 105470-3**

**** Credit by Assessment Ranken Technical College-** An agreement has been established between the four Fort Zumwalt School District High Schools and Ranken Technical College. Students who successfully complete Metals III-Welding and Fabrication will be able to test out of the first semester of Fundamentals of Welding Technology Credit..

**** Dual Credit Agreement with State Technical College-** An agreement has been established between the four Fort Zumwalt School District High Schools and State Technical College. Students who successfully complete the Metals III course will receive credit for WLT 128 Basic Welding (3 credits).

0705 Metals IV - Engineering Metal Technology (0.5 Credit)

This course is repeatable within the metals subject area with increasingly more complex projects in an area of interest. This course is designed to allow the advanced student the opportunity to concentrate their studies in an area of interest within the field of metal technology such as:

- Advanced Precision Machining
- Advanced Forging and Heat Treating
- Advanced Foundry Techniques
- Advanced Welding Techniques
- Advanced Sheet Metal
- CNC (Computer Numerical Control) machines and CAM (Computer-Aided Machining)

The emphasis will be on research, study, and advanced engineering processes with the ultimate goal of project design and creation. Adherence to rigid safety standards is required at all times. This course is highly recommended for students interested in careers related to engineering, fabrication, manufacturing, precision machining, CNC, welding technologies, and industries associated with STEM. **(Prerequisite: Metals III – Precision Machining or Metals III – Welding and Fabrication with a minimum grade of a C and building approval.**

****Credit by Assessment** - an agreement between the four Fort Zumwalt School District High Schools and Ranken Technical College. A student who successfully completes either Metals III class is allowed to take a written test proctored by a Ranken instructor. If a student passes the written test he/she may then take a hands-on test with a Ranken instructor. The student will be charged \$200 for the hands-on test. Upon passing the hands-on test, the student will receive full credit for the corresponding first semester class (either Machining Principles or Fundamentals of Welding Technology) at Ranken, pending enrollment in Advanced Manufacturing Technology or Fabrication & Welding Technology. Students taking the Machining Principles class must still complete the required manufacturing internship through Ranken.

Woods: Cabinetry and Carpentry Pathway

Woods: Cabinetry and Carpentry Pathway: Within this pathway, students gain hands-on experience, knowledge, and proficiency in the planning, setup, and operation of a diverse range of woodworking tools, including the table saw, miter saw, router, planer, jointer, and various others. This comprehensive program not only imparts practical skills but also serves as an introduction to potential career paths in construction and cabinetmaking. Participants emerge well-equipped with the technical skills necessary for working with precision tools, as well as a foundational understanding of the opportunities within the broader fields of construction and cabinetmaking. Students who successfully complete both Woods I and Woods II or Carpentry can apply for the Fort Zumwalt USDOL apprenticeship program. go.FZSD.us/apprenticeships

07100 Woods I - Introduction to Wood Technology (0.5 Credit)

This course caters to individuals aspiring to pursue careers in cabinetmaking, construction, industrial technology, engineering, and industries associated with STEM (science, technology, engineering and math). The engineering design process is introduced through fundamental woodworking skills. Students will create projects using the following manufacturing processes; hand and power tools, wood joinery, machine setup and operation, and wood finishing. Adherence to rigid safety standards is required at all times.

(Prerequisites: None) DESE 105482-1

07110 Woods II- Advanced Wood Technology (0.5 Credit)

This course expands the student's knowledge, skills, and experiences in woodworking. The wood lathe and turning projects are introduced, as well as, the use of fixtures and jigs. Project planning and design are emphasized to build projects safely and efficiently with hand and power tools. This course is highly recommended for students interested in careers related to construction systems, industrial technology, and engineering. **(Prerequisite: Introduction to Wood Tech with a minimum grade of C or building approval) DESE 105482-2**

**** Articulation Agreement with St. Charles Community College-** An agreement has been established between the four Fort Zumwalt School District High Schools and St. Charles Community College. Students who successfully completes the Drafting II-Architectural Design course will receive credit for CDM 235 Manufacturing Processes (3 credits)

07115 Carpentry (0.5 Credit)

This course caters to individuals aspiring to pursue careers in carpentry, construction trades, or other STEM-related fields. The course covers essential topics such as safety protocols, precise measuring and marking techniques, as well as the utilization of both hand and power tools. Students will gain foundational carpentry skills and engage in hands-on projects, constructing small structures using carpentry and construction processes. Strict adherence to safety standards is mandatory throughout the duration of the course. **(Prerequisite: Woods I - Introduction to Wood Tech with a minimum grade of C and building approval approval) DESE 105482-2**

****Credentials:** At the end of Carpentry students can earn the Career Connections level I and II Industry Recognized Credential

07120 Woods III-Engineering Wood Technology (0.5 Credit)

This course is repeatable within the woods subject area with increasingly more complex projects in an area of interest. This course is highly recommended for students interested in careers related to cabinetmaking, construction, industrial technology, engineering, and industries associated with STEM. This course is designed to allow students to explore a broad range of advanced woodworking opportunities. These engineering students will develop skills in collaboration, problem solving, research, and the advanced engineering processes with the ultimate goal of project design and creation. CNC (Computer Numerical Control) machines and CAM (Computer-Aided Machining) software will be introduced. Adherence to rigid safety standards is required at all times. **(Prerequisite: Woods II – Advanced Wood Technology with a minimum grade of C and building approval. Students may repeat the course to complete projects started in the prior semester.) DESE 105482-3**

Drafting: 3D Solid Modeling and Architecture

Drafting: 3D Solid Modeling and Architecture: This pathway offers students a hands-on approach to drawing, providing practical experience, drafting expertise, and proficiency in utilizing cutting-edge Computer-Aided Design (CAD) software such as AutoCAD, SolidWorks, and Revit Architecture. Tailored for individuals with a keen interest in construction, architecture, engineering, and STEM-related fields, these courses go beyond traditional drafting to encompass the dynamic realm of 3D solid modeling and architectural design. Students who successfully complete drafting 3 and pass the Solid works CWSA exam can apply for the Fort Zumwalt USDOL apprenticeship program. go.FZSD.us/apprenticeships

07200 Introduction to Drafting (0.5 Credit)

This course caters to individuals aspiring to pursue careers in engineering, architecture, technology, construction, and industries associated with STEM (science, technology, engineering and math.) Students will learn fundamental drawing skills using STEM. Areas of study include: careers, sketching, geometric construction, orthographic projection, dimensioning, and pictorial drawings. Industry leading Computer-Aided Design (CAD) software will be introduced. This course will provide the skills and knowledge to go on to the Drafting II classes through the Engineering and/or Architectural courses. **(Prerequisite: None) DESE 105430-1**

0725 Architectural Drafting (0.5 Credit)

This course is highly recommended for students interested in careers related to architecture, engineering, interior design, construction and industries associated with STEM. This course will build on the areas of study from the Drafting I - Intro to Drafting course to refine problem solving skills in the creation of complex architectural drawings. Students will produce architectural drawings using Computer-Aided Design (CAD) software. Areas of study include: foundation plans, floor plans, elevations, wall sections, detail views, plot plans and basic 3-D renderings. **(Prerequisite: Introduction to Drafting with a minimum grade of C or building approval) DESE 105431-1**

**** Articulation Agreement with St. Charles Community College-** An agreement has been established between the four Fort Zumwalt School District High Schools and St. Charles Community College. Students who successfully complete the Drafting II-Architectural Design course will receive credit for CDM 205 Architectural Drafting I | **(3 credit)**.

06955 Civil Engineering and Architecture (CEA) (1 Credit)/w

This course touches on many of the varied factors involved in building design and construction including building components and systems, structural design, stormwater management, site design, utilities and services, cost estimation, energy efficiency, and careers in the design and construction industry. The major focus of the CEA course is to expose students to the design and construction of residential and commercial building projects, design teams and teamwork, communication methods, engineering standards, and technical documentation. Students will analyze, design and build electronic and physical models of residential and commercial facilities. While implementing these designs students will continually hone their interpersonal skills, creative abilities and understanding of the design process. **(Prerequisite: Architectural Drafting with a minimum grade of C or Principles of Engineering Design) DESE 100408**

**** **Credit by Assessment** is available for the PLTW Engineering Courses from Missouri S&T. Learn more **HERE**:

0726 Engineering Drafting (0.5 Credit)

This course is highly recommended for students interested in careers related to engineering, drafting and design technology and industries associated with STEM. This course will build on the areas of study from Intro to Drafting course to refine problem solving skills in the creation of complex drawings. Students will focus entirely on Computer- Aided Design (CAD) skills as they relate to the field of engineering. Areas of study include: section drawings, auxiliary views, surface developments, and working drawings. Students will be introduced to 3D CAD solid modeling programs. **(Prerequisite: Introduction to Drafting with a minimum grade of C or building approval approval) DESE 105430-2**

**** Articulation Agreement with St. Charles Community College-** An agreement has been established between the four Fort Zumwalt School District High Schools and St. Charles Community College. Students who successfully complete the Drafting II-Engineering Drafting course will receive credit for CDM 103 CAD Systems 1 **(2 credits)**.

0722 3-D Solid Modeling and Design (0.5 Credit)

This course is highly recommended for students interested in playing a vital role in becoming the next generation of engineering and design innovators. Students may take this course multiple times with increasingly more complex projects in an area of interest. Students who focus on engineering will expand on the concepts from the Engineering Drafting class with the use of a 3-D CAD solid modeling software system. Through surface and solid modeling, students will create and edit 3D shapes using a parametric coordinate system. Assemblies and engineering drawings will complete a set of working drawings. Students will construct, simulate, print and manage 3D designs. **(Prerequisite: Engineering Drafting with a minimum grade of C and building approval) DESE105430-3.**

**** Credentials:** By the end of this course, all students will take the SolidWorks CSWA exam, an internationally recognized industry standard 3D solid modeling certification.

**** Articulation Agreement with St. Charles Community College-** An agreement has been established between the four Fort Zumwalt School District High Schools and St. Charles Community College. Students who successfully complete the Drafting III-Engineering Drafting course will receive credit for CDM 221 Solid Modeling I **(3 credits)**.

0729 Drafting – Capstone (0.5 Credit)

This course is a culminating class incorporating skills learned in the engineering and/or architectural drafting classes. This course is for students who are seeking careers in Drafting and Design, Architecture, Engineering, or Manufacturing. Students will engage in one quarter of advanced engineering or architectural drafting skill building projects and the other quarter with critical thinking skills to design and build a capstone project based on their specific discipline. A final portfolio or presentation of product design is required. There will not be a separate section of Drafting IV-Capstone and students will complete the course during the same time slot as one of the listed prerequisites. **(Prerequisite: One of the following: 3-D Solid Modeling and Design, Architectural Drafting, or Civil Engineering and Architecture (CEA), and building approval) DESE105430-4.**

Video Production: Video Production

Video Production: The Video production pathway offers students both stand alone and in depth study of topics related to video production. The courses prepare students for a range of careers in video and media programming.

07300 Video Production 1 (0.5 Credit)

Unlock the world of professional video creation in this course focused on learning industry-relevant skills in video editing and production. The course helps prepare students to take the *Adobe Premiere Pro Certification* exam that validates job ready skills for digital careers. Designed to empower aspiring content creators, filmmakers, visual effect artists, and enthusiasts, this class provides a foundation in video production and editing to foster creativity and employability. Students apply learned skills to real-world projects, gaining hands-on experience. **(Prerequisite: None) DESE 105435-1**

07310 Video Production 2 (0.5 Credit)

This course goes beyond the basics and builds upon what was learned in Video Production I to cultivate advanced skills and techniques in video production, editing, and effects. Adobe After Effects, the industry-standard software for video compositing, motion graphics design, and animation will be used alongside Adobe Premiere Pro. The course helps prepare students to take the *Adobe After Effects Certification* exam that validates job ready skills for digital careers.

(Prerequisite: Video Production I with a minimum grade of C) DESE 105435-2

0736 Video Production Capstone (0.5 Credit)

Immerse yourself in the dynamic world of video production with this hands-on practicum course. This course is designed for students eager to enhance their skills toward a mastery level in video content creation through the use of industry standard software. Through a series of real-world projects, you'll gain invaluable experience in producing compelling video content across various genres. Develop technical expertise using industry-standard equipment and software, while honing your creative storytelling abilities. Students who earn certifications for both Premiere Pro and After Effects qualify for the specialty credential *Adobe Certified Professional in Video Design*.

(Prerequisite: Video Production II with a minimum grade of C and/or building approval) DESE 105435-3

STEAM PATHWAYS			
	PLTW Biomedical Sciences	PLTW Engineering	Computer Science
Content Specific High School Course Work	<ul style="list-style-type: none"> ◆Principles of Biomedical Sciences ◆Human Body Systems ◆Medical Interventions ◆Biomedical innovations 	<ul style="list-style-type: none"> ◆Introduction to Engineering ◆Principles of Engineering ◆Civil Engineering and Architecture ◆Engineering Design & Development 	<ul style="list-style-type: none"> ◆PLTW Computer Science Essentials ◆PLTW Cybersecurity ◆PLTW Computer Science Principles ◆AP Computer Science Applications

PLTW Biomedical Sciences

Biomedical Sciences: Whether discovering new cancer treatments or teaching healthy lifestyle choices to their communities, today's biomedical science professionals are tackling big challenges to make the world a better place. PLTW Biomedical Science students are taking on these same real-world challenges – and they're doing it before they even graduate from high school. Working with the same tools used by professionals in hospitals and labs, students engage in compelling, hands-on activities and work together to find solutions to problems. Students take from the courses in-demand knowledge and skills they will use in high school and for the rest of their lives, on any career path they take. The PLTW biomedical science courses count as science credits.

06725 Principles of Biomedical Science (1Credit)/w

In the introductory course in the PLTW Biomedical Science program, students explore concepts of biology and medicine as they take on roles of different medical professionals to solve real-world problems. Over the course of the year, students are challenged in various scenarios including investigating a crime scene to solve a mystery, diagnosing and proposing treatment to patients in a family medical practice, to tracking down and containing a medical outbreak at a local hospital, stabilizing a patient during an emergency, and collaborating with others to design solutions to local and global medical problems. This course counts as a science credit.

DESE 070411

06735 Human Body Systems (1Credit)/w

Students 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 on a skeletal Maniken®; 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. This course counts as a science credit. **(Prerequisite: Successful completion of Principles of Biomedical Science) DESE 070412**

06745 Medical Interventions (1Credit)/w

In this course, students 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. This course counts as a science credit. **(Prerequisite: Successful completion of Human Body Systems) DESE 070413**

06755 Biomedical Innovations (1Credit)/w

In this capstone course, students design innovative solutions for the health challenges of the 21st century and have the opportunity to work on an independent project. Teachers can design activities to have students perform independently with a mentor or advisor from a university, hospital, research institution, or the biomedical industry at their discretion. This course counts as a science credit. **(Prerequisite: Successful completion of Medical Interventions or building approval) DESE 070414**

****Credit by Assessment** is available for the PLTW Biomedical Sciences courses from Missouri S&T. Learn more [HERE](#).

PLTW Engineering

Engineering: Engineering empowers students to step into the role of an engineer, adopt a problem-solving mindset, and make the leap from dreamers to doers. The program's courses engage students in compelling, real-world challenges that help them become better collaborators and thinkers. Students take from the courses in-demand knowledge and skills they will use in high school and for the rest of their lives, on any career path they take. The PLTW engineering courses count as practical arts credit.

06915 Introduction to Engineering Design (1Credit)/w

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3D modeling software, and use an engineering notebook to document their work. This course counts as a practical art credit. **DESE 100405**

06925 Principles of Engineering Design (1Credit)/w

Students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation. This course counts as a practical art credit. **(Prerequisite: Introduction to Engineering Design or building approval) DESE 100404**

06955 Civil Engineering and Architecture (CEA) (1Credit)/w

This course touches on many of the varied factors involved in building design and construction including building components and systems, structural design, stormwater management, site design, utilities and services, cost estimation, energy efficiency, and careers in the design and construction industry. The major focus of the CEA course is to expose students to the design and construction of residential and commercial building projects, design teams and teamwork, communication methods, engineering standards, and technical documentation. Students will analyze, design and build electronic and physical models of residential and commercial facilities. While implementing these designs students will continually hone their interpersonal skills, creative abilities and understanding of the design process. **(Prerequisite: Drafting II - Architectural Drafting with a minimum grade of C or Introduction to Engineering and Design or Building Approval) DESE 100408**

06965 Engineering Design & Development (1Credit)/w

The knowledge and skills students acquire throughout the PLTW Engineering course work unifies in Engineering and Design and Development. Students will be tasked with identifying a “real-life” issue and then will research, design and test a solution. Students are required to present solutions to a panel of professionals at the end of the course. Students apply the professional skills they have developed to document a design process to standards and will complete this course ready to take on any post-secondary program of study or career. **(Prerequisite: Successful completion of at least two courses in PLTW Engineering or building approval, Junior or Senior standing.) DESE 100422**

****Credit by Assessment** is available for the PLTW Engineering courses from Missouri S&T. Learn more [HERE](#).

Computer Science

Computer Science: Computer Science empowers students in grades 9-12 to become creators, instead of merely consumers, of the technology all around them. The program's interdisciplinary courses engage students in compelling, real-world challenges. As students work together to design solutions, they learn computational thinking – not just how to code – and become better thinkers and communicators. Students take from the courses in-demand knowledge and skills they will use in high school and for the rest of their lives, on any career path they take. The computer science courses count as practical arts credit.

06805 PLTW Computer Science Essentials (1Credit)/w

This year-long course provides an excellent entry point for students to begin or continue on from their PLTW Computer Science Gateway experiences. Computer Science Essentials will expose students to a diverse set of computational thinking concepts, fundamentals, and tools, allowing them to gain understanding and build confidence. In Computer Science Essentials, students will use visual, block-based programming and seamlessly transition to text-based programming with languages such as Python to create apps and develop websites, and learn how to make computers work together to put their design into practice. This course can be counted as a practical arts credit. **DESE 100416**

06835 PLTW Cybersecurity (1Credit)/w

Cybersecurity introduces the tools and concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy. Cybersecurity, students solve problems by understanding and closing these vulnerabilities. This course raises students' knowledge of and commitment to ethical computing behavior. It also aims to develop students' skills as consumers, friends, citizens, and employees who can effectively contribute to communities with a dependable cyber-infrastructure that moves and processes information safely. This course can be counted as a practical arts credit. **(Prerequisite: Sophomore standing) DESE 100434**

06815 PLTW Computer Science Principles (1Credit)/w

Computer Science Principles helps students develop programming expertise and explore the workings of the Internet. Using Python® as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. Projects and problems include app development, visualization of data, cybersecurity, and simulation. Computer Science Principles aligns with the College Board's 2013 CS Principles framework. This course can be counted as a practical arts credit. **(Prerequisite: Computer Science Essentials or building approval) DESE 100415**

****Credit by Assessment** is available for the PLTW Computer Science courses from Missouri S&T. Learn more [HERE](#).

03555 Advanced Placement (AP) Computer Science A (1Credit)/w

AP Computer Programming, a highly rigorous, year-long course. Students will apply previous programming knowledge to the syntax of Java. Among the topics covered are classes, objects, inheritance, and code reusability. This course is designed to prepare students for the Advanced Placement Computer Science A exam near the end of the spring semester. Students are responsible for the cost of this optional exam. This course can be counted as a practical arts credit. **(Prerequisite: Successful completion of Computer Science Principles or building approval) DESE 991195**

PHYSICAL EDUCATION AND HEALTH

REQUIRED COURSES:

0800 General Physical Education (0.5 Credit)

General Physical Education is a semester course that provides students with knowledge, skills and effective experiences in body development. The course will provide opportunities for obtaining and assessing their individual skills, developing personal health/fitness plans, skills and strategies in activities for lifelong participation and maintenance of wellness.

Highly recommended to take during freshman year. (NOTE: Students may repeat this course for an additional ½ credit.) DESE 086000-1

0805 Health and Family Education (0.5 Credit)

Health is a semester course designed to meet the needs of today's students in physical, mental, and social health. This course includes units in communicable diseases, family relations, substance abuse, nutrition, fitness, and health other units pertaining to the development and care of a healthy body. **(Highly recommended to take during freshman year.) DESE 085300**

ELECTIVE ACTIVITY COURSES (***Discretion should be used when requesting multiple PE classes in any given semester***)

08130 Lifetime and Individual Activities (0.5 Credit)

Lifetime and Individual Activities is a general semester course that provides students with knowledge, skills and effective experiences. The course will provide opportunities for obtaining and assessing individual skills, as well as skills and strategies in lifetime activities. Students will gain the knowledge for lifelong participation and maintenance of wellness.

(Prerequisite: General Physical Education. Note: A student who has earned a C or higher may repeat with prior approval.) DESE 086030

0820 Weight Training and Fitness (0.5 Credit)

Weight Training and Fitness is a semester course that will help students develop strength, agility, flexibility and an appreciation of a healthy lifestyle through personal fitness and wellness. This course is designed to provide students with knowledge, skills and effective experiences in body development. Weight Training and Fitness helps students gain and maintain physical conditioning to prevent injury and increase performance in other areas of physical activity.

(Prerequisite: General Physical Education. Note: A student who has earned a C or higher may repeat with prior approval.) DESE 086025

0829 Body Sculpting (0.5 Credit)

Body Sculpting is a non-competitive semester course that will use aerobic and anaerobic methods of training. It will promote personal fitness as a lifestyle to promote overall health and wellness. Students will strengthen, define and train all the muscle groups. Classes will use the weight room, body bars, bands, fitness balls, exercise videos, and other fitness equipment to implement exercises for total body fitness. **(Prerequisite: General Physical Education. Note: A student who has earned a C or higher may repeat with prior approval.) DESE 086025**

08220 Cardiovascular Fitness for Life (0.5 Credit)

Cardiovascular Fitness for Life, a semester course is designed to develop a lifelong commitment to fitness. Students will supplement cardiovascular exercises with classroom activities. The class will use the track, fitness equipment, stairs, weight room and aerobic activities. Students will learn how to use fitness assessment equipment such as pedometers, heart rate monitors, body composition analyzers, and scales. Students will be provided with classroom lessons, pertaining to personal fitness and nutrition for lifelong goals. **(Prerequisite: General Physical Education. Note: A student who has earned a C or higher may repeat with prior approval.) DESE 086000-2**

0809 Team Sports (0.5 Credit)

Team Sports, a semester course, consists of units of activities to inform the individual about the rules of team sports, build up his/her physical strength and endurance, improve his/her balance, coordination, cardiovascular system and cooperate as a team. **(Prerequisite- General Physical Education and Sophomore, Junior, or Senior status. Note: A student who has earned a C or higher may repeat with prior approval.) DESE 086035**

08250 Adaptive Physical Education (0.5 Credit)

This course provides specially designed instruction provided to students who are unable to participate in a regular physical education class, even with modifications, accommodations or supplementary aids and services. Adapted P.E. includes movement education and motor development. Taught by a physical education teacher or special education teacher. **(Prerequisite: Must be required by the IEP) DESE 086010**

ELECTIVE CLASSROOM COURSES:*(**Classroom courses cannot be used for additional ½ credit of Physical Education requirement*)*

0831 Positive Leadership in Sports (0.5 Credit)

Positive Leadership in Sports, a semester class, will examine the history of sports and how leadership shaped those events. Issues involving the integration of sports, gender equity, labor issues, drugs and performance enhancing substances, gambling, and other issues will be studied from a historical and leadership point of view. It will also enable students to gain knowledge and understanding of leadership traits and team building as it relates to their lives. Models for constructing positive areas of leadership will be emphasized. **(Prerequisite: General Physical Education, Sophomore, Junior or Senior standing, building approval or coach's recommendation) DESE 086099**

08060 Outdoor Education and Hunter Safety (0.5 Credit)

This class will emphasize rules and regulations that govern conservation in Missouri. If a student has already received his or her certification, he/she may not take this course a second time. **(Prerequisite: General Physical Education, Sophomore, Junior, Senior standing) DESE 085312**

ACT PREP

0850 ACT Prep (0.5 Credit)

This preparatory course is designed to develop the skills necessary to improve ACT scores. This course emphasizes test-taking techniques in addition to providing preparation for each portion of the test: English, Mathematics, Reading, and Science. **(Prerequisite: second semester Sophomore, Junior, or Senior standing. Availability of this class may be limited.) DESE 994025**

TRANSITION

99184/99185 Transition Skills (0.5 Credit)

This course equips students with essential skills to navigate high school successfully and prepare for life after graduation. Students will develop organization and time management strategies, build self-awareness and self-advocacy, and investigate post-secondary options, including college, career and technical training, and employment. Activities focus on fostering independence and readiness for adult life. Note: Students are not able to select this course during registration. Scheduling is arranged through collaboration with teachers and counselors. **DESE 994210**

APPRENTICESHIP

0860 Supervised Apprenticeship Program (0.5 - 1 credit per semester)

****The Fort Zumwalt School District in partnership with local industries has established a Nationally recognized Apprenticeship Program through the Missouri Registered Apprenticeships and the Department of Labor. The apprenticeship program is intended to provide students with the necessary technical and employability skills to be prepared for an entry-level career or to serve as additional training in a technical field. The Supervised Apprentice Program coordinates on-the-job work experience which gives the student the opportunity to apply academic and workplace skills. A student may earn ½-1 unit of credit per semester for working an average of 10 hours per week or 1 full unit of credit per semester for working an average of 20 hours per week. Each student must be classified as junior status prior to the beginning of the term, must be enrolled in an approved apprenticeship program, complete an application, provide character recommendations, receive approval from the building, and maintain 95% attendance. The Supervised Apprenticeship Program allows for repeatable credit. (Prerequisite: Junior or senior standing. Students must complete district application, necessary prerequisite coursework and be accepted by the apprenticeship employer) DESE 996002**

PEER MENTOR

06100 Culinary Arts I-Peer Mentor (0.5 credit): This course combines students of all abilities in a hands-on, lab-based class to learn safety and commercial food handling standards, knife skills, and menu planning. Topics of study will include Salads and Garnishes, Fruits and Vegetables, Sandwiches and Appetizers, Breakfast Foods, and Poultry. Students will work towards the industry recognized ServeSafe credential. **Prerequisite: Passing grade in Introductory Foods, Sophomore, Junior or Senior status, Application Process and Building Approval, the grade is Pass/Fail (DESE 096829)**

0832 Adaptive PE-Peer Mentor (0.5 credit)

This course combines students of all abilities to participate in developmentally appropriate activities including lifetime activities, physical fitness, and sports. Students work together to increase competence and confidence in a variety of physical activities. **Prerequisite: Completion of PE credit, Junior or Senior status, Application Process and Building Approval, the grade is Pass/Fail (DESE 086010)**

00795 Peer Mentor (0.5 credit)

Peer Mentors are natural supports to students with disabilities in select courses. Peer mentors will learn about diversity and disability awareness, how to provide support in the school and community, the disclosure of disability and confidentiality, and how to include individuals with disabilities in the school and community. **Prerequisite: Passing grade in prerequisite classes as necessary, Junior, or Senior standing, complete the application process and receive building approval, the grade is Pass/Fail (DESE 992010)**

8132 Peer Mentor A+ (No Credit)

Peer Mentors are natural supports to students with disabilities in select courses. Peer mentors will learn about diversity and disability awareness, how to provide support in the school and community, the disclosure of disability and confidentiality, and how to include individuals with disabilities in the school and community. Students earn A+ hours instead of credit and must complete A+ training prior to enrollment.

Prerequisite: Passing grade in prerequisite classes as necessary, Junior, or Senior standing, complete the application process and receive building approval. (DESE 992010)

Students should be advised that having the class that only gives you A+ hours (called Peer Mentor), does not count for Missouri State High School Activities Association (MSHSAA) eligibility; they will be earning only the MINIMUM 3 credits required by MSHSAA to be eligible for extracurricular activities such as sports, band, choir, etc. This means any semester F will result in the student becoming INELIGIBLE to participate in activities until the semester after he/she again earns 3 credits. If the student has Peer Mentor A+ AND a Study Hall, the student is not eligible under MSHSAA rules.

*A+ Coordinator must approve participation in Peer Mentor A+

St. Charles County CAPS provides high school students in St. Charles County with a pre-professional, innovative and entrepreneurial education through career-oriented experiences that are both hands-on and real world. St. Charles County CAPS students are immersed in professional environments, engaging in curriculum developed by industry professionals and program instructors - ensuring that what is taught in the classroom is relevant to the workforce. Learning is enhanced by project work direct from industry partners who engage to mentor students and ensure timely, accurate and real project results. Learning at St. Charles County CAPS is real-time, real world, and hands-on. Emphasis is placed on developing professional skills, such as communication and collaboration, which employers deem highly important to individual success.

Students attend the CAPS program for half of their school day and the other half is at their home school. The morning CAPS session is from 7:30 AM to 10 AM and the afternoon session is from 12 PM - 2:30 PM. **Students who participate in St. Charles County CAPS must provide their own transportation to and from their home school and the business site. 95% attendance is expected to remain in the course.**

A complete application is required to apply. CAPS interviews may occur as well for strand placement purposes. The SCC CAPS application and deadline to apply can be found under Enrollment on the SCC CAPS website - <https://scccaps.org/>.

0957 Entrepreneurship & Business Management (1.5 elective credits each semester) - *Examine innovation as a business activity and develop project management skills as you work with clients to solve real-world problems*

Overview: This course strand is designed for students to create real startup ventures and solve real business needs. Students will be mentored by real employers and gain marketable professional skills in an off-campus location. This course will provide students a challenging, innovative, authentic, experiential learning environment that allows them to discover personal passions. Students will develop professional skills that are necessary to thrive in collaborative, innovative, and fast-paced environments. Their growth mindset and confidence will increase. Students will learn startup principles and develop an entrepreneurial mindset. They will turn ideas into actions, by validating their ideas, perfecting a pitch, and seeking resources and opportunities for a product or service. Students will also work with organizations to work on projects that solve real needs. This course culminates in an instructor-student agreed upon capstone project and internship showcasing their work in this exciting field of study. ***Students must provide their own transportation to and from the business site. 95% attendance is expected to remain in the course. (Prerequisite: Senior level course)***

College Credit Offered:

- Lindenwood University
 - **Profession-Based Essentials (1 credit hour):** A profession-based skills development course that prepares students for a profession-based work experience, internship, or practicum.
 - **Profession-Based Work Experience (1-3 credit hours):** A profession-based work experience that enables students to work within a business context, clarify their career goals, and develop their professional skills under the supervision, guidance, and mentoring of an industry professional. Credit will vary depending upon time spent. One hour of credit requires 50 hours of work time.

0958 Healthcare (1.5 elective credits each semester) - *Explore a variety of healthcare career fields through coursework, shadowing opportunities, projects and internships*

Overview: This course strand is ideal for students who intend to go into a medical field. Students will engage in the team approach of healthcare at hospitals and/or healthcare facilities, giving students actual experience with health practitioners. Students will have the opportunity to learn about a variety of careers in the medical field, from medical practitioner to hospital administrator. Students will participate in medical training and clinical presentations prior to participating in clinical observational rotation assignments. Students will develop professional skills that are necessary to thrive in collaborative, innovative, and fast-paced environments. Students will learn about Safety, HIPAA, CPR, and Basic First Aid competencies. In addition, students will have a capstone project. ***Students must provide their own transportation to and from the business site. 95% attendance is expected to remain in the course. This unweighted program does not replace the fourth course in the Project Lead the Way (PLTW) Biomedical Sciences strand titled PLTW Biomedical Innovations.***

(Prerequisite: Human Anatomy & Physiology or PLTW Human Body Systems or equivalent preferred. Senior level course -Senior level course)

College Credit Offered:

- Lindenwood University
 - **Profession-Based Essentials (1 credit hour):** A profession-based skills development course that prepares students for a profession-based work experience, internship, or practicum.
 - **Profession-Based Work Experience (1-3 credit hours):** A profession-based work experience that enables students to work within a business context, clarify their career goals, and develop their professional skills under the supervision, guidance, and mentoring of an industry professional. Credit will vary depending upon time spent. One hour of credit requires 50 hours of work time.

0959 Creative Media. Engineering.Applied Technology (1.5 elective credits each semester) - *Be immersed in professional environments where technology is utilized to design products and solve business problems*

Creative Media Overview: This course strand is designed for students interested in developing professional and technical skills required for careers in various areas of creative media. Students will have the opportunity to explore the following areas as they relate to creative media: video production, graphic design, audio production, and digital photography. **Students must provide their own transportation to and from the business site. 95% attendance is expected to remain in the course. (Prerequisite: PLTW Computer Science or related business or graphic design courses preferred. Senior level course)**

College Credit Offered:

- Lindenwood University
 - **Profession-Based Essentials (1 credit hour):** A profession-based skills development course that prepares students for a profession-based work experience, internship, or practicum.
 - **Profession-Based Work Experience (1-3 credit hours):** A profession-based work experience that enables students to work within a business context, clarify their career goals, and develop their professional skills under the supervision, guidance, and mentoring of an industry professional. Credit will vary depending upon time spent. One hour of credit requires 50 hours of work time.

Engineering Overview: This course strand is designed for students who have a passion for the engineering design process, applying math, science, and engineering standards to hands-on projects. Students will be mentored by real employers and gain marketable professional skills in an off-campus location. **Students must provide their own transportation to and from the business site. 95% attendance is expected to remain in the course. (Prerequisite: PLTW Introduction to Engineering. Senior level course)**

College Credit Offered:

- Lindenwood University
 - **Profession-Based Essentials (1 credit hour):** A profession-based skills development course that prepares students for a profession-based work experience, internship, or practicum.
 - **Profession-Based Work Experience (1-3 credit hours):** A profession-based work experience that enables students to work within a business context, clarify their career goals, and develop their professional skills under the supervision, guidance, and mentoring of an industry professional. Credit will vary depending upon time spent. One hour of credit requires 50 hours of work time.

Applied Technology Overview: This course strand is designed for students interested in developing professional and technical skills required for careers in various areas of IT. Students will have the opportunity to explore the following areas as they relate to PCs and mobile devices: software engineering, web development, operating systems, hardware technologies, network design/technologies, MIS, and emerging technologies. **Students must provide their own transportation to and from the business site. 95% attendance is expected to remain in the course. (Prerequisite: PLTW Computer Science or related business or graphic design courses preferred. Senior level course)**

LEWIS AND CLARK CAREER CENTER

Enrollment is a competitive process at each sending school. Students who want to be considered for a technical program need to complete a Lewis & Clark application form and return it to their sending school guidance office.

Student information is compiled regarding grades, attendance, discipline patterns and aptitude testing. Students who have completed the entire application procedure will be rated. Enrollment is based on the cooperative decision of the enrollment team at each sending school. For priority consideration, students need to complete the application procedure including testing by the enrollment date set annually at each sending school. Applications received after enrollment will be considered on a space available basis.

All classes at Lewis & Clark Career Center meet for three periods each day and earn three units of credit per year. Articulation agreements are in place in certain programs for qualified students who complete their program.

Grading

Students will be graded using a standards-based grading approach. During the first week of class, students will be given a list of standards for their course. Each standard will have a corresponding scale stating the expectation of the student to obtain a Level 1, 2, 3, or 4 on that standard. All students are expected to strive to obtain a Level 3 or 4 on each of their standards. At the end of the semester, standard levels will be averaged toward a final letter grade according to the scale below:

3.00 – 4.00 = A
2.50 – 2.99 = B
2.00 – 2.49 = C
0.00 – 1.99 = F

Because the standards are considered essential skills for the course, any student still at a Level 1 on a standard at the end of the semester will fail the course.

Levels of Achievement

There are three levels of achievement a student can acquire at Lewis and Clark Career Center.

- 1. Basic/Credit for Class:** The student must meet the following requirements to receive credit for his/her Lewis and Clark program.
 - Receive a passing grade at semester
 - Obtain a Level 2 or higher on all academic standards
- 2. Employability Certificate:** Our employability certificate is a little different than a traditional high school diploma. Students not only have to pass their course but must also exhibit professionalism. An employability certificate signifies that you are recommended for employment in your field of study. In addition to earning credit for their class, students must also meet the following requirements:
 - 12 or less days absent for a one year program/ 24 days or less for a two year program
 - All class standards at 3 or above
 - All employability standards at a 3 or above
 - No more than 4 days of out of school suspension during the program (here or from home school)
- 3. Honors Certificate:** The highest level of certificate earned at Lewis and Clark, the honors certificate signifies that the student is not only employable in his or her chosen program but excels in the field and displays exceptional employability behaviors and skills. To earn an honor's certificate a student must meet the following requirements:

- 6 or less days absent for a one year program/12 days or less for a two year program
- 50% of class standards at a Level 4, with the remainder of the standards at a Level 3
- 4 out of the 6 employability standards at a Level 4, with the remainder of the employability standards at a Level 3
- No out of school suspension days during the program (here or from home school)

Lewis & Clark Career Center
Course Clusters

<u>Advanced Manufacturing</u> <ul style="list-style-type: none"> • Precision Machine Technology • Welding 	<u>Construction Trades</u> <ul style="list-style-type: none"> • Brick & Stone Masonry • Building Trades • Electrical Trades • Heating, Ventilation, & Air Conditioning (HVAC)
<u>Automotive & Mechanical Technology</u> <ul style="list-style-type: none"> • Collision Repair • Auto Service Technology • Power Equipment Technology 	<u>Education</u> <ul style="list-style-type: none"> • Early Childhood Careers
<u>Information Technology</u> <ul style="list-style-type: none"> • Lewis & Clark Cyber Academy • Computer Software Development 1 & 2 	<u>Health Sciences</u> <ul style="list-style-type: none"> • Health Occupations • Dental Assisting
<u>Hospitality</u> <ul style="list-style-type: none"> • Applied Retail & Business Skills 	<u>Public Service & Safety</u> <ul style="list-style-type: none"> • Law Enforcement • Firefighting/EMT

ADVANCED MANUFACTURING

0947 PRECISION MACHINE TECHNOLOGY

2 year program; 3 units of credit per year

Prerequisite: C or better in Algebra I

The goal of this program is to supply the industry a highly qualified workforce by graduating exceptional students that are highly motivated and skilled in the needs and requirements expected by the manufacturing community. The students will learn the history of machining, machine safety, blueprint reading, mechanical design, utilization of conventional machine techniques and Computer Numerical Controlled (CNC) programming.

Year one will consist of: Safety and OSHA, Brief History of Machining, Blueprint Reading, Basic Mechanical Design, Machining Safety, Manufacturing Processes, Semi Precision Measurement, Precision Measurement, Layout, Metallurgy and Heat Treat, Manufacturing Processes, Drill Press, Conventional Engine Lathe, Conventional Vertical Mill, Surface Grinder, Brief History of CNC Machining, Introduction to Computer Numerical Control Systems and Programming.

Instructional delivery will be both in the classroom and the shop. Both project-based and problem-based learning methods will be utilized. (*Prerequisite: Junior/Senior level course*)

0905 WELDING

2 year program; 3 units of credit per year

Prerequisite: Asthma Free

Combination welding is open to students interested in welding and metalworking as an occupation. Students are instructed in shop safety and the proper procedures for each welding process. Oxy fuel cutting, arc, mig and tig welding, plasma cutting, and air arc cutting processes are taught in all four weld positions and on the five basic weld joints. Metallurgy, blueprint reading, reading a tape measure, metal fabrication techniques and weld symbols are included in the program.

The lab is setup to simulate the welding industry. Students are evaluated by written tests and by testing their welds as specified by the American Welding Society code.

Students interested in a career in welding should have good eye/hand coordination, mechanical aptitude, and manual dexterity, freedom from asthma, allergies and physical disabilities which prevent bending, stooping, lifting and working in awkward positions. (*Prerequisite: Junior/Senior level course*)

AUTOMOTIVE & MECHANICAL TECHNOLOGY

0903 AUTO COLLISION REPAIR

2 year program; 3 units of credit per year

This course is open to juniors who have an interest in auto collision repair as a wage earning occupation.

One year of the two year program students will learn non-structural repair methods. These include mig welding, straightening and aligning sheet metal, applying and shaping plastic fillers, plastic panel identification and plastic repair methods. The other year will concentrate on painting and refinishing. Students will learn proper paint preparation procedures, masking techniques and detailing cars. Primer, sealer and basecoat/clearcoat application will be covered along with paint defect identification and repair. Proper spray gun techniques will be taught and practiced with lots of hands on spraying of primers, paints and clears.

Both years customer satisfaction, measuring and damage analysis along with writing a damage report will be covered. The course is geared to prepare students for entry level auto collision repair and to help prepare for the ASE (Automotive Service Excellence) certification tests. The curriculum is based on the I-CAR (Inter-Industry Conference on Auto Collision Repair) instruction and is used throughout the course. Students will have the opportunity to earn the I-CAR ProLevel 1 in Non-Structural Repair and Refinishing Certification. (*Prerequisite: Junior/Senior level course*)

0901 AUTO SERVICE TECHNOLOGY

2 year program; 3 units of credit per year

This course is open to individuals who have an interest in auto service trades in terms of a career goal. It is recommended that students have credit in general shop, general metals course and basic computer skills.

Automotive instruction at Lewis & Clark consists of a two-year program that provides the student with the basic theory and skills needed to become an entry level automotive technician and service today's automobiles. Classroom instruction is followed by shop activities related to the lecture. Customer cars are repaired in the same manner as in the professional shop under the instructor's supervision. Students will gain experience in shop management by writing repair orders, ordering parts, issuing supplies and tools used in the trade.

This course is ASE (Automotive Service Excellence) certified by NATEF (National Automotive Technician Education Foundation). Both NATEF and ASE are nationally recognized and provide certification for shops and technicians across the country. *(Prerequisite: Junior/Senior level course)*

Areas of instruction include:

Engine Repair

Brakes

Steering and Suspension

Heating / Air Conditioning

Electrical / Electronics

Engine Performance

Manual/Automatic Transmission (Basic)

Instructional time is (approximately) 50% class and 50% lab.

0919 POWER EQUIPMENT TECHNOLOGY

1 and/or 2 year program; 3 units of credit per year

College credit can be purchased through The University of Central Missouri (optional)

This program prepares juniors and/or seniors to diagnose and repair two- and four-cycle engines on such equipment as lawn mowers, chainsaws, roto tillers, edgers and trimmers. Power equipment instruction ranges from home-use equipment to commercial equipment.

Students will learn to adjust, clean, lubricate and when necessary replace worn or defective parts such as spark plugs, ignition parts, valves and carburetors. Other skills taught include wheel alignment, deck repair, blade balancing, blade and chain sharpening, battery testing and electrical repair. Troubleshooting and problem solving on all types of equipment are stressed.

Good reading skills are required, as students will need to be able to refer to service manuals for detailed directions. *(Prerequisite: Junior/Senior level course)*

INFORMATION TECHNOLOGY COURSES

09130 LEWIS & CLARK CYBER ACADEMY

1 year program: 3 units of credit

Lewis & Clark Cyber Academy will provide a strong background in networking and cybersecurity. This class provides excellent opportunities for entry level IT employment. Students will learn basic networking and cybersecurity skills, how to configure and troubleshoot networks, monitor networks, reconnaissance, incident response, enumeration, social and physical security. All students are required to take the TestOut Network Pro and Security Pro certifications. These certifications prepare students for the COMPTIA Network Plus and Security Plus.

(Prerequisite: Junior/Senior level course)

09420 COMPUTER SOFTWARE DEVELOPMENT 1

1 year program: 3 units of credit

Prerequisites: 10th grade reading level

This program is open to juniors, seniors, and post-secondary students who have an interest in Software Development as a wage earning occupation or post-secondary degree.

Students will learn Linux/Unix Operation and Administration, practice Software Version Control (through Git/Github), use the Agile software development methodology (mainly SCRUM), and develop software using languages such as MIT's App Inventor, Python, and Java.

This course incorporates the PLTW Computer Science courses CSP and CSA as part of the curriculum, along with Grok Learning (Python curriculum), and the Linux+ and LPIC-1 learning standards.

Students who successfully complete this program will be able to develop software using industry-recognized tools and methodologies. (Agile, Github, Android Studio) (**Prerequisite: Junior/Senior level course**)

09430 COMPUTER SOFTWARE DEVELOPMENT 2

1 year program: 3 units of credit

Prerequisites: 10th grade reading level, completed Computer Science 1 with 85% or higher, and have instructor approval OR 10th grade reading level, have completed BOTH CSP and CSA with an EOC score of at least 7 or higher, and instructor approval. Student may have to submit examples of work.

This program is open to juniors, seniors and post-secondary students who have an interest in Software Development as a wage earning occupation or post-secondary degree.

Students will learn Intermediate Linux/Unix Administration, and continue improving software development techniques by studying game development with both Python and C++. Other topics will include Encryption, Web development, and robotics as time allows. Students will also be expected to emulate Industry practices by acting as mentors to first year students.

Students who successfully complete this program will be able to develop more advanced software for PC, Mobile, and Web-based applications. (**Prerequisite: Junior/Senior level course**)

CONSTRUCTION TRADES

0922 BRICK & STONE MASONRY

2 year program; 3 units of credit per year

This program is designed to prepare students for apprenticeship or entry-level jobs in masonry construction. Students will learn to lay brick and block in various bond patterns used in commercial and residential construction. Course will include construction techniques for building fireplaces and chimneys, arches, special wall openings, double width and reinforced masonry, wall anchoring systems, flashings and prevention of water penetration and masonry paving. Students will also gain knowledge of various types of stone construction and tuck-pointing.

Units of study will cover safety practices and procedures; tools and equipment used in masonry construction; properties, sizes and uses of clay and concrete masonry units; experience in laying brick, block and stone in various bond patterns; reinforced masonry walls; masonry veneer construction; layout and construction of fireplaces and chimneys; mathematics for masonry and measuring systems; blueprint reading and construction plans.

Students must be able to work at heights on scaffolds, lift and handle heavy materials, work in group situations as a team member, follow the instructions and accomplish all tasks in an accurate and safe manner. (**Prerequisite: Junior/Senior level course**)

0909 BUILDING TRADES

2 year program; 3 units of credit per year

This course is open to juniors who show an interest and aptitude in the field of construction as a wage earning occupation. Students are familiarized with entry level skills for the major trades involved in residential construction such as carpentry, siding, interior trim, drywall hanging, roofing, concrete work and landscaping.

Most of the program involves the actual building of a house in Lewis & Clark Career Center's own subdivision. Students not only gain experience in home construction, but also will learn about subdivision construction. Houses are sold upon completion. Students will gain experience in building both a single and a two-story dwelling.

Students will have the opportunity for OSHA 10 and WORKKEYS.

It is recommended that students have one year of industrial arts. (*Prerequisite: Junior/Senior level course*)

0924 ELECTRICAL TRADES

2 year program; 3 units of credit per year

Prerequisite: Algebra with a "C" or higher

Read at or above Grade Level

This course will teach students to identify, install, and troubleshoot electrical wiring and associated devices that are commonly used in both residential and commercial environments. Students will participate in the construction of a new house. The program includes switches, receptacles, lighting, low voltage communications wiring, service installation, and other wiring associated with residential electricity. Students will also learn fundamental commercial wiring including Start – Stop Stations, single and 3 phase motors, and transformers.

Students must be physically fit and capable of working under adverse weather conditions including both very hot and freezing cold. We work during all types of weather in the school house. We work with real circuits, so the ability to abide by strict safety rules is extremely important. An aptitude for math in general and algebra in particular is required, as is an aptitude to read and produce technical documents and drawings. (*Prerequisite: Junior/Senior level course*)

0911 HEATING, VENTILATION AND AIR CONDITIONING (HVAC)

2 year program; 3 units of credit per year

Prerequisite: Algebra

This course will provide students with training in heating, ventilation, air conditioning, and refrigeration to qualify them for employment as an apprentice or helper assistant to an A/C mechanic in service and/or installation of equipment. We will cover tool selection and use, tubing, piping, brazing, soldering and basics of vapor compression refrigeration, air conditioning & heating systems. Electric circuits and components, troubleshooting, basic sheet metal, customer relations, and preparation for the EPA exam will also be covered.

Applicants should have a good mechanical aptitude and be able to understand both written and verbal instructions. Students should be in good physical condition and free from respiratory problems. (*Prerequisite: Junior/Senior level course*)

EDUCATION

0945 EARLY CHILDHOOD CAREERS

1 or 2 Year Program (Completion of 2 years for CDA eligibility)

3 units of credit per year

Prerequisite; Prior Child Development course recommended

This course will prepare students for entry-level employment in the field of early childhood education, while providing the foundations for study in higher education programs that lead to certification in early childhood or elementary education. Students will gain the leadership, employment, and communication skills necessary for success in Early Childhood Careers. Over the course of the program students will explore career opportunities and identify personal traits needed for success in careers working with young children. They will be given opportunities to work directly with children ranging in age from birth to age 8 in various childcare and elementary school settings. Students will earn certification in infant, child, and adult First Aid/CPR. In addition, students will earn a Missouri state certificate for the Infant Safe Sleep Course. Students completing this program will be able to describe typical child development, demonstrate knowledge of creating safe and

healthy learning environments, and be competent in lesson planning and implementation. Students will practice appropriate behavior management techniques, and will learn about nutritional guidelines, state licensing expectations, and the legal and ethical responsibilities of child care workers and/or classroom teachers. Students who have met all requirements and attended two years of the program will be eligible to test for the CDA (Child Development Associate) credential upon graduation. *(Prerequisite: Junior/Senior level course)*

HEALTH SCIENCES

0915 HEALTH OCCUPATIONS

1 year program; 3 units of credit

The Health Occupations course offers learning experiences for juniors and seniors in high school designed to create or further stimulate their interest in the many career opportunities available in the health field. This course is designed to be challenging and meet the needs of all learning styles. The student will learn beginning skills and the basic procedures needed for an entry-level job and a sound basis for continuing their education in the medical field.

The first semester involves classroom theory, demonstrations and practice. During the second semester, students begin to draw upon previously acquired knowledge and basic skills by applying them to various health services through supervised clinical observations and hands-on clinical experiences.

Students must have an up to date immunization record, a negative TB test, a negative urine drug screen, a flu vaccine, must register on the Family Safety Registry, and maintain a 75% average and 90% attendance to remain in the program and be placed in clinical rotations. Students are placed in clinical rotations Monday through Thursday and continue classroom work on Fridays.

Prerequisite: It is recommended that students have earned at least a C in Biology and have strong study habits, as this course is intense. This course is intense in its preparation for clinical rotations. Successful students possess a strong work ethic and an interest in science and medicine. *(Prerequisite: Junior/Senior level course)*

0951 DENTAL ASSISTING

2 year program; 3 units of credit per year

Students will learn dental examination, treatment, radiographic and laboratory procedures, patient scheduling, and record maintenance. Instruction is also provided in infection control and hazard management, chair-side assistance, emergency and preventative procedures, dental specialties and office administration. Students will become CPR certified and take the Missouri Basic Skills exam and may participate in a clinical internship. Upon completion of the program, and two years of full-time work experience students may take the National Board Exam to become a certified dental assistant. *(Prerequisite: Junior/Senior level course)*

RETAIL BUSINESS

0918 APPLIED RETAIL AND BUSINESS SKILLS

1 and/or 2 year program; 3 units of credit per year

This course is designed for juniors or seniors with special needs who have an interest in the retail industry. A prerequisite for the course is potential ability to work in competitive employment.

The program provides an active, hands-on, multimedia approach that emphasizes instructional strategies that are successful with special needs populations. The students take “ownership” of and operate a fully functional store on the Lewis & Clark campus. The students in the Applied Retail & Business Skills program rotate through the following stations at JC’s, the school store: cashier, inventory control, maintenance, bookkeeper, food preparation, and food manager. The classroom instruction includes lessons to inform and enhance training and skills learned through operations. Also included are lessons on self-awareness, social skills, communication skills, and employability skills.

Skills learned at the Lewis & Clark campus are reinforced through community-based training. Students that qualify for the independent internship will be eligible for placement within the community with minimal supervision. The remaining

students will complete their internships at JC's (Lewis & Clark store) with continued supervision; with the emphasis on job readiness and work hardening skills, along with a heavier workload and increased responsibilities. (*Prerequisite: Junior/Senior level course*)

PUBLIC SERVICE AND SAFETY

0949/0950 LAW ENFORCEMENT

1 and/or 2 year program; 3 units of credit per year

The Law Enforcement program is a one year program with an optional second year that focuses on the core principles of criminal justice, the basic knowledge, skills, and standards taught at Missouri Peace Officers Standards and Training Program (POST) Certified Police Academies, and the curriculum from Missouri's Department of Elementary and Secondary Education (DESE). Professionalism, character, and integrity are embedded into this program and serve as a foundation for every participant. In addition, the program includes a strong emphasis on communication (verbal, non-verbal, and written) and teamwork. This course will include many opportunities for students to connect classroom experiences through practical application. Students will be involved with investigation techniques, law enforcement procedures and protocols, and courtroom etiquette. Students will be taught the materials and skills using a variety of teaching and learning methods. They will have daily lessons or learning activities where students will be expected to actively participate. Some examples include: class discussions, lectures and slide presentations, practical skill demonstrations, drills and exercise, physical training sessions, team building activities and "role play" scenarios. Students will be required to complete various assessments, worksheets, written assignments, oral presentations, practical exams, group/team projects, and physical training tests.

This program will be foundationally built on principles of character and leadership development. As such, student professionalism, participation and behavior will be assessed and included in the student's overall grade at between 25%-35% of the total grade. Students will have an opportunity to earn class professionalism points each day for professionalism. Examples of being professional include: being on time, wearing a clean neat uniform, listening and following instructions, actively participating in class, and using professional language. (*Prerequisite: Junior/Senior level course*)

0955 FIREFIGHTING/EMT

2 year program; 3 units of credit per year

This hands-on, career-focused program is designed for high school students interested in a dynamic and rewarding career as a firefighter, paramedic, or in the broader field of emergency services. Students will receive academy-level training and gain the essential skills and knowledge needed to respond to critical situations.

What You'll Learn:

- Firefighting Skills: Master techniques for fire suppression, search and rescue, and hazardous materials response. You'll learn to operate fire apparatus, hoses, ladders, and other essential equipment.
- Emergency Medical Training: Develop life-saving medical skills as you train to become an Emergency Medical Technician (EMT). Learn patient assessment, trauma care, CPR, and how to manage a variety of medical emergencies.
- Real-World Scenarios: The curriculum goes beyond the classroom with realistic emergency simulations and field exercises. You'll apply your knowledge in high-pressure situations, building confidence and critical thinking skills.
- Career Preparation: This program prepares students for the physical and mental demands of the job, emphasizing teamwork, leadership, and effective communication—all of which are crucial for success in the public safety sector.

Upon successful completion, students will be prepared to take the exams for several industry-recognized certifications, which can provide a direct pathway to employment after high school. These may include: National Registry of Emergency Medical Technicians (NREMT) Basic Certification, Firefighter I and II certifications, Hazardous Materials Awareness and Operations, AHA Heartsaver CPR and First Aid. (*Prerequisite: Junior/Senior level course*)