FRANCIS HOWELL SCHOOL DISTRICT
4545 Central School Road
St. Charles, MO 63304
Phone: (636) 851-4000
Dr. Pam Sloan, Superintendent

FRANCIS HOWELL NORTH HIGH SCHOOL
2549 Hackmann Road
St. Charles, MO 63303
Phone: (636) 851-4900

PRINCIPAL:
Mr. Andrew Downs

ASSOCIATE PRINCIPAL:
Dr. Katie Greer

ASSISTANT PRINCIPALS:
Mrs. Erin Steep (A-De)
Mrs. Kelly Longo (Ma-Sa)
Dr. Chris Birch (Sc-Z)

DEAN OF STUDENTS:
Mr. Jeff Blankenship (Di-Lu)

ACTIVITIES DIRECTOR:
Mr. Michael Janes

GUIDANCE OFFICE:
Phone: (636) 851-5099
Registrar: Mrs. Sandy Kuhl
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Guidance Secretary: Mrs. Patti Balch
Guidance Secretary: Mrs. Cindy McDaniels

GUIDANCE COUNSELORS:
Mrs. Jennifer Schwarz (A-Com)
Mrs. Stephanie Johnson (Con-Go)
Mrs. Lisa Woodrum (Gr-H)
Mrs. Mary Kerr-Grant (I-Mc)
Mrs. Ann Herman (Me-Pa)
Mrs. Rachel Faulkner (Pe-Sp)
Mrs. Amy Moore (St-Z)
Mr. Barry Morrison (Educational Support Counselor)

MISSION STATEMENT

Graduates of Francis Howell North High School will contribute as productive citizens to our ever-changing global society. Therefore, it is our mission to provide an environment which will inspire students to be lifelong learners and to develop their individual academic, social, aesthetic, and physical potentials.

VISION STATEMENT

High levels of learning are expected and ensured; daily attendance is a prerequisite for academic success. The members of the school community have focused resources including time, skill, and effort, to create the optimal learning environment in which students readily strive for and meet the highest levels of academic success.

School-wide support ensures each student is involved and accepted. The school community is focused on each student setting goals, achieving success and personal growth in a well-balanced school experience. All students will participate in at least one extra-curricular activity, and their behaviors will reflect the PRIDE shield (character, commitment, effort, and respect)

Collaboration dominates school culture and improvement. All members of the school community are involved in a collaborative environment embedded into the school day. All opinions are valued, and all voices can be heard as the community moves forward proactively to ensure high levels of student learning and achievement.

VALUES

We provide a safe and caring learning environment where all students are valued and respected.
We are committed to using best teaching practices daily.
We monitor and measure student goals and growth using assessments for learning.
We are committed to the PLC process.
We respect other's property, both personal and community.
We will prepare students for successful transition to the post-secondary world.

DISTRICT POLICY AGAINST DISCRIMINATION

It is the policy of the Francis Howell School District not to discriminate on the basis of race, sex or disability status in its educational activities or employment practices.
Inquiries related to race or sex discrimination should be referred to the District's designee for Title VI and Title IX compliance. Inquiries related to disability status should be referred to the Director of Alternative Learning. Their offices are in the Francis Howell Administration Building, 4545 Central School Road, St. Charles, MO 63304, (636) 851-4000.

SPECIAL SERVICES

The Francis Howell School District offers a broad range of services to accommodate the special educational needs of students in the community. Please refer to the special services section of the course listings for a complete list of available services.

Prior to the student receiving special education services, an individual comprehensive evaluation in the areas of intelligence, behavior and related areas must be completed. Before placement is final, an individual education program must be developed and parental permission secured.

EDUCATIONAL SUPPORT COUNSELING

Guidance Counselors have the option of requesting additional support/counseling for students from the Educational Support Counselor in the building. Requests for services are based on personal, social and emotional needs which may include behavioral or attendance concerns.

CONTINUITY AND EDUCATIONAL PLANS

We continue to stress the continuity of the high school experience and importance of educational planning. The freshman and sophomore years will establish a solid foundation of basic studies and required courses. The junior and senior years will allow greater flexibility for the student and family to choose from several broad areas of study: College Preparatory, Technical/Vocational, Occupational (Work/Study) and General.

College Preparatory Courses

Provide students the opportunity to prepare for entry into a college setting.

Technical/Vocational Courses

Provide students the opportunity to select a program from the Lewis and Clark Career Center. Entry into a technical or vocational field upon graduation is the primary goal.

Occupational (Work/Study) Programs

Provide seniors the opportunity to prepare for general employment in a chosen field upon graduation. Available areas of study include: Business/Cooperative Work Experience, Marketing/Cooperative Work Experience, and Culinary Work Experience.

General Course Study

Provides students the opportunity to complete the minimum requirements for graduation and prepare for a variety of career choices, including: vocational or technical training, the military or two-year degree and certificate programs. Additional "select" courses might be required by a college or technical school in a particular field or program. Therefore, students are encouraged to consult their individual counselor on a frequent basis to insure successful progress toward graduation in their respective choice of studies or programs.

COURSE DESCRIPTION INFORMATION

UNIT OF CREDIT

One unit of credit is awarded for the successful completion of a year-long course. One-half unit of credit is awarded for successful completion of a semester course. Credits are awarded at the completion of each semester. Credit will not be awarded by quarter.

REQUIRED COURSE

A required course is one that either the State Department of Education or the Francis Howell School District requires for graduation. All required courses must be successfully completed prior to graduation.

NORMAL PROGRAM

Each student is expected to make continual progress toward graduation requirements. Keeping in mind that the graduation requirements are minimum standards, a normal program will be considered to be six units of credit per year.

ELECTIVE

An elective course is one that a student chooses to take but is not specifically required for graduation.

PREREQUISITE

A prerequisite course is one that must be successfully completed before another related course may be taken. (Example: Accounting I must be completed before enrolling for Accounting II).

HIGH SCHOOL GRADUATION REQUIREMENTS

A student must complete a minimum of 24 units of credit to graduate.

Communication Arts	4.0 units
Mathematics	3.0 units
Social Studies	3.0 units
Science	3.0 units
Fine Arts	1.0 units
Practical Arts	1.0 units
Physical Education	1.0 units
Health	0.5 units
Personal Finance	0.5 units
Electives	7.0 units

REQUIRED COURSES

Communication Arts: English I, English II, English III, and one credit from Communication Arts electives
Math: Any 3 full Math credits
Social Studies: United States History, Modern World History, American Government
Science: Physical Science, Biology, Science elective
Fine Arts: includes Art, Music, and Theatre (one unit of credit)
Practical Arts: includes Business, Family and Consumer Science, Industrial Technology, Lewis & Clark Vocational Career Center, Yearbook Publication, Newspaper Production, Photojournalism (one unit of credit)
Personal Finance: This course satisfies 1/2 of the required Practical Arts 1.0 unit. Courses for personal finance will be offered in the Family and Consumer Science as well as Business curricula (1/2 unit of credit)

P.E.: (one unit of credit)
Health: (1/2 unit of credit)

HIGH SCHOOL CREDITS EARNED WHILE IN MIDDLE SCHOOL

Due to a change in BOE Policy 2525, students who successfully complete a high school course while in middle school will have the course recorded on their high school transcript for G.P.A. and credit notation. These courses include, but are not limited to, the following:

- Algebra
- Challenge Science 8 (same as Physical Science Honors)
- French 1
- German 1
- Spanish 1

Note: Students who enrolled/completed these courses in middle school prior to the policy change (November 2013) will have the choice of "opting-in" for the G.P.A. and credit notation.

CORRESPONDENCE CREDIT

Credit from accredited correspondence/online schools may be applied toward meeting Francis Howell School District graduation requirements. Before enrolling in any such coursework, students should first check with their guidance counselor to be certain that the institution is accredited by a reputable agency, and that the course selections will meet designated graduation requirements. *These courses are taken at the expense of the student.*

MISSOURI VIRTUAL INSTRUCTION PROGRAM (MoVIP)

The Francis Howell School District participates in the Missouri Virtual Instruction Program (MoVIP). Through the MoVIP program, District students have the opportunity to participate in tuition-paid online courses in a variety of content areas, grades 9-12. *Students and their parent(s)/guardian(s) are **strongly encouraged** to meet with their guidance counselor before enrolling in any MoVIP course.*

The District will accept all MoVIP high school course credit earned in grades 9-12. District staff members will assign a grade depending upon the percentage of work satisfactorily completed for each MoVIP course. In awarding credit and assigning grades, the District will apply the same standards for credit award and grade assignment as are applied to courses completed in the District's traditional curriculum. Again, students and their parent(s)/guardian(s) should meet with their guidance counselor before enrolling in any MoVIP course to be certain that the course selection(s) will meet designated graduation requirements. *These courses are taken at the expense of the student.*

GRADE POINT AVERAGE

The following scale is used to calculate the grade point average (GPA) each semester:

All courses are graded with letters.

		Regular Class	Honors Class
A	90 – 100%	4 points	5 points
B	80 – 89%	3 points	4 points
C	70 – 79%	2 points	3 points
D	60 – 69%	1 point	1 point
F	0 – 59%	0 point	0 point

- ◊ Current grade point average = the average of the course grades for all courses taken that semester only.
- ◊ Cumulative grade point average = the average of the semester grades for all courses taken during high school.
- ◊ Each class with a passing grade (any grade higher than an "F") = ½ credit per semester

HOW SEMESTER GRADES ARE COMPUTED

Quarter Grade	40%
Quarter Grade	40%
Semester Exam	20%
Semester Grade	100%

CUM LAUDE PROCEDURES

Requirements to be eligible for Cum Laude Awards:
Students must accumulate a minimum of 27 credits at graduation, unless prorated due to Advanced Standing acknowledgement of high school level coursework successfully completed before grade nine (see NOTES below). Only high school courses, including MoVIP courses, qualify for Cum Laude credit. Classes taken through dual enrollment, correspondence, or night school do not meet this standard.

NOTES:

1 - Students transferring from other school districts must have taken the maximum amount of credits available at their previous school(s) and then meet the above credit requirements prorated for the period they attend high school in the District.

2 – While high school credit is not awarded for college credit earned through dual enrollment, students who successfully complete the highest level of District coursework available in any of the four (4) core subject areas may petition to dual enroll at a local college or university in order to take more advanced courses in said subject area(s). District schedule allowances may be necessary to accommodate these dual enrollment situations, and the Cum Laude total credit requirement may be prorated as a result.

Cum Laude GPA requirements are:

- 4.2 and above = Summa Cum Laude
- 4.0 - 4.19 = Magna Cum Laude
- 3.8 - 3.99 = Cum Laude

NOTE: GPA will be calculated to include all high school classes (including MoVIP classes), but exclude correspondence and night school courses. GPAs will not be rounded up.

Students are required to take a minimum of eight semesters in each of the core areas: math, communication arts, science, and social studies.

Students are required to earn a minimum of "proficient" on all but one MAP/End-of-course exams taken over high school level coursework.

On college entry exams, students are required to attain a minimum of a 27 composite score on the ACT or a combined 1220 on two of the three sections of the SAT.

Cum Laude honors will be announced as students' names are read at commencement. Students will wear a Cum Laude medallion with the color ribbon selected by the individual high school:

- Summa Cum Laude = gold medallion
- Magna Cum Laude = silver medallion
- Cum Laude = bronze medallion

A seal will be placed on the students' diplomas indicating the appropriate honor.

Class rank will be reported on transcripts only.

A+ SCHOOLS PROGRAM

A student who qualifies according to the following criteria and continues a post-secondary education at a Missouri public community college or career/technical school **may be eligible for state reimbursed tuition for up to 105% of the hours required for the degree program**, contingent upon the high school being granted A+ Schools status each year and the availability of State funds.

1. Enter into a written agreement with the school by signing and submitting the A+ Agreement Form no later than September 1st of the student's senior year;
2. Attend a designated A+ School for three consecutive years prior to high school graduation;
3. Graduate from high school with a **minimum unweighted grade point average of 2.5** on a 4.0 scale;
4. Maintain a **95% attendance rate** for all four years of high school;
5. Perform **50 hours of unpaid peer mentoring or tutoring** of other students on FHSD property, under the supervision of a FHSD employee, to be completed by January 1st of the student's senior year;
6. Maintain a record of **good citizenship** according to the *State A+ Schools Program*, *FHSD Code of Conduct*, and *High School Student Handbook*;
7. Students must earn a score of proficient or advanced on the Algebra I end of course exam or a higher level DESE approved end-of-course exam in the field of mathematics. Students who earn a 17 on the ACT math subscore meet this requirement. Also students can take the COMPASS to earn a qualifying math score. The COMPASS test is a free test given during the school day twice a year. Students can sign up for the COMPASS test with their counselor.
8. Maintain a documented, good faith effort to secure all available federal post-secondary student financial assistance funds that do not require repayment. The *Free Application for Federal Student Aid* (*FAFSA*) should be completed and submitted after January 1st of the student's senior year. Individuals may do so at www.fafsa.gov.
9. All individuals required to register under the Military Selective Service Act must provide proof of registration. Individuals required to do so may register at www.sss.gov.

For more information, please contact the A+ Coordinator at 636-851-5924.

HONOR ROLL

The honor roll is computed at the end of each semester. A student must have earned a 3.0 GPA for the semester to be included in the honor roll.

ACADEMIC AND SPECIAL AWARDS

Qualified graduates may earn the following awards: the Missouri College Preparatory Studies Certificate, the President's Award for Educational Excellence, and/or the Standard of Academic Accomplishment Award (SAA).

The criteria for these awards are outlined below. Students are encouraged to plan accordingly and to petition for the awards for which they qualify during the spring of their senior year. Additional information regarding these awards is available in the Guidance Office.

MISSOURI COLLEGE PREPARATORY STUDIES CERTIFICATE

The Missouri State Board of Education awards the College Preparatory Studies Certificate (CPSC) to Missouri students who successfully complete a rigorous academic program in high school. The certificate is awarded in addition to the regular high school diploma granted by local school districts. Created by the Board in 1985, the certificate is designed to provide incentive and recognition for public and non-public high school students who exceed the state's minimum graduation requirements.

Awarding the College Preparatory Studies Certificate is voluntary on the part of school districts, and meeting the requirements is voluntary on the part of the students. While the certificate is primarily intended as an incentive for college-bound students, those who are not planning to enter college also may wish to work toward earning the award.

To be eligible for the certificate, a student must meet these requirements:

1. Complete a rigorous high school program cooperatively planned by the school, the student and the student's parents. The program must include at least these units of credit:

Subjects Units

English/Communication Arts	4.0 units
Mathematics	4.0 units
Science	3.0 units
Social Studies	3.0 units
Fine Arts	1.0 units
Practical Arts	1.0 units
Personal Finance	0.5 units
Health	0.5 units
Physical Education	1.0 units
Specified Core Electives	3.0 units
General Electives	4.0 units
Total	**25.0**

2. Earn at least a 3.0 grade point average (GPA), on a 4.0 scale, in the combined subject areas of English/Communication, Mathematics, Science and Social Studies or overall Grade Point Average.

3. Score above the prior year's national composite average on the American College Test (ACT) or on the Scholastic Aptitude Test (SAT). This criterion is revised annually to reflect the latest national averages from the ACT and SAT. *Check the current year's certificate order form for the required minimum scores.*

4. Complete a strong academic program in the subject areas of English/Communication Arts, Mathematics, Science, Social Studies and specified core electives. ***No substitutions are authorized.***

5. Students must also maintain an attendance rate of at least 95% in grades 9-12.

For further information, please visit the Missouri Department of Elementary and Secondary Education website at:
http://dese.mo.gov/divimprove/curriculum/collegeprep/

PRESIDENT'S AWARD FOR EDUCATIONAL EXCELLENCE

A student must meet all specified requirements for the Missouri College Preparatory Certificate to qualify for the President's Award. A student must have a minimum GPA of 3.5 on a 4.0 system and score at or above the 85th percentile on an ACT, SAT or other achievement test.

STANDARDS OF ACADEMIC ACCOMPLISHMENT AWARD

In order to receive the Standard of Academic Accomplishment Award (SAA), a student must complete all the specified courses required for the Missouri College Prep Certificate. If a student has a GPA of less than 3.0 but greater than 2.5 or has scores at the National average on the ACT or SAT, he/she may still be deemed qualified if the principal believes these grades/scores are truly commensurate with the student's ability level. **A student must participate in at least one extra-curricular activity for each of the four high school years**. A student must have excellent citizenship/attendance record in each of his/her four years in high school.

Exception: Three units of approved mathematics credit may be substituted for Geometry and Algebra 2 as required by the Missouri College Preparatory Studies Certificate.

4.0 AWARD

Seniors earning a 4.0 cumulative GPA after 7 semesters of high school will receive a special cord to be awarded at Senior Awards night. Seniors will also be able to wear these special cords at graduation. In addition, seniors with a 4.0 cumulative GPA will be invited to attend a 4.0 luncheon with the superintendent and principal.

HONORS PROGRAM

The Francis Howell School District offers an Honors Program at the high school level.

Honors courses include:
AP Economics
English I Pre AP
English II Pre AP
AP English Language and Composition
AP English Literature and Composition
Newspaper Production

Yearbook Publication
Geometry
Algebra II
Math Analysis*
Trigonometry*
AP Calculus AB*
AP Calculus BC*
AP Statistics*
United States History
Modern World History
AP Government & Politics
AP US History
AP European History
AP World History
AP Psychology
Physical Science
Biology
AP Biology
Chemistry I
AP Chemistry II
Physics I
AP Physics II
AP Environmental Science (online)
Biology III
World Language: Levels III, IV, V*
AP World Language
Treble Choir/Chorale*
Concert Choir*
Chamber and Show Choir*
Symphonic Band/Wind Ensemble*
Jazz Ensemble*
AP Music Theory*
AP Art History I
AP Art History II
AP Studio Art
Gifted Mastery*
Introduction to Engineering Design
Principles of Engineering
Digital Electronics
Engineering Design and Development
AP Human Geography (online)
Human Body Systems
Computer Science and Software Engineering

*Criteria for these courses are determined by meeting the prerequisites.

Admission to the Honors Program is based upon the classroom grade in that subject area from the previous year(s) and test scores **on district** approved achievement tests.

Honors, Advanced Placement and Advanced Credit courses give students a head start on college while they are still in the supportive environment of a high school classroom. When college admissions personnel see these types of classes on a transcript, they realize the student has been exposed to greater depth of curriculum, which in turn requires students to develop time management and study skills. The combination of these abilities transfers directly to the intensity of college coursework. While we strongly encourage students to challenge themselves with a rigorous schedule of classes, **please understand that students who choose to be enrolled in an Honors class will not be allowed to drop to a corresponding regular section after the end of the preceding school year.** Teachers are hired and class sections are designed on students' initial requests and our schedule does not offer the flexibility for students to make these changes.
Students who transfer to an FHSD high school with weighted grades from another district will only have those courses honored that are the same as weighted courses offered in FHSD.

Grade 9 Honors Course Eligibility

English Language Arts
- Challenge ELA 8—70% or higher class average
- ELA 8—Gates Lexile 1200L; Advanced on MAP and class average 90% or higher

Math
- Advanced MAP and 90% or above (student must be in Algebra 8)

Science
- Gates Percentile Score + class average = 175 points.

Social Studies
- Gates Percentile Score + class average= 175 points

Notification of eligibility for Honors will be made in writing by the counselor, and eligibility letters must be signed and returned before a student may be placed in an Honors course.

Grade 10 Honors Course Eligibility

For entry into the 10th Grade Honors Program, students must meet one of the following criteria:

1) Students currently in 9th Grade Honors must earn a minimum of 80% (B) to continue in 10th Grade Honors.

2) Students who were eligible for 9th Grade Honors but elected not to participate must average an 85% in the respective subject for both semesters of 9th grade.
3) Students not currently in Honors and not eligible for 9th Grade Honors must average a minimum of 85% in the respective subject for both semesters of 9th grade.

Grade 11 Honors Course Eligibility

For entry into the 11th Grade Honors Program, students must complete the following steps:

1) Student must indicate their interest in Honors to the respective teacher.

2) Student must request a recommendation from the respective teacher.

3) Student must submit parental approval on the appropriate Honors form by the designated deadline.

Second Semester Qualification for Honors Program

Students not qualifying at the end of the first semester, but who do qualify at the end of the second semester, **MAY** be added to the program via a parent appeal begun through the Guidance Office.

Honors Forms

Honors forms will be distributed by the students' current core area teacher. Students new to the high school can access Honors forms from their counselor.

Appeal Process

If a student is not admitted to the Honors Program under normal conditions, the student/parent may appeal. Likewise, if a student has been enrolled in an Honors Program course and wants to drop, the student/parent will need to appeal. In both cases, the student/parent should contact their guidance counselor to initiate the appeal process.

ADVANCED CREDIT PROGRAM (DUAL CREDIT CLASSES)

Advanced Credit (AC) courses are college credit courses offered in conjunction with area universities, including the University of Missouri at St. Louis (UMSL) or Lindenwood University (LU). Students have the option of paying for college credit at a reduced rate. Official transcripts must be requested from the individual university. Advanced Credit courses that may be offered include:

- AP Art History
- Spanish III, Spanish IV, Spanish V
- AP Calculus AB & BC
- Marketing II
- Accounting II
- French III, French IV, French V
- Graphic Design I, Graphic Design II

Please see your counselor for this year's list of eligible courses.

1) For UMSL, Seniors and Juniors are eligible for enrollment if they have an unweighted 3.0 or higher G.P.A

2) Sophomores are eligible for enrollment only in World Language classes. To do so, they must have scored at or above the 90th percentile on the composite scores on PLAN, PSAT, ACT or SAT or have an overall GPA of 3.0 and a GPA of 3.5 in Foreign Language classes taken prior to enrollment in courses with UMSL designation.

All of the above advanced credit courses are also awarded honor points, except Speech II.

Students who have successfully completed at least one Advanced Credit course by the end of the first semester of their senior year and plan to attend UMSL full time are eligible to apply for a special scholarship to UMSL. The listed courses may not carry AC credit every year. The instructor will inform students if the course is not carrying AC credit.

ADVANCED PLACEMENT PROGRAM

Advanced Placement (AP) is a program of college-level courses coupled with national standardized examinations for currently enrolled secondary school students. The Francis Howell School District, the College Board and the Educational Testing Service provide this opportunity for students to earn college credit while still in high school.

Students who qualify for an AP course have the option, in May of each year, to take the standardized AP credit examination. AP college credit can only be attained as a result of a successful score on the standardized examination. High school graduation credit will be awarded upon successful completion of the course regardless of whether or not the standardized examination is taken.
Students must pay a fee for each AP examination, as charged by the College Board and Educational Testing Service.

Please check with your guidance counselor for a list of the current Advanced Placement (AP) courses at your high school. The following courses may be offered for AP:

- AP Economics
- AP English Language and Composition
- AP English Literature and Composition
- AP Art History
- AP United States History
- AP Government and Politics
- AP Calculus AB
- AP Calculus BC
- AP Statistics
- AP Biology
- AP Chemistry
- AP Physics
- AP Environmental Science (online)
- AP European History
- AP World History
- AP Psychology
- AP French
- AP Spanish
- AP Studio Art
- AP Music Theory
- AP Human Geography (online)

Students who qualify and wish to enroll in more than two AP courses should consult with their counselor prior to enrollment deadlines. All AP courses are awarded Honor Points. Please remember to carefully read all of the information contained in the Honors Program section on pages vi and vii. More information is available at: www.collegeboard.com/student/testing/ap/about.html

ST. CHARLES COMMUNITY COLLEGE ARTICULATION AGREEMENT

High school students may earn advanced credit at St. Charles Community College through vocational articulation agreements. However, *articulated credit applies only to Applied Science degrees, not Associate of Art transfer degrees.*

In the Francis Howell School District, the following courses are articulated with (SCC).

- Introductory Accounting
- Business Computer Programming I & II
- Business Entrepreneurship / Junior Achievement
- College 101
- Desktop Publishing
- Marketing I and II
- Introduction to Business
- Personal Finance
- CAD I
- CAD II
- Residential Architecture
- Child Development I
- Child Development II

Students should supply SCC with a transcript from their high school showing grades of "B" or better in the course or courses for which articulation credit is to be granted. Tuition will be waived for articulation courses. Students must accumulate 15 credit hours at SCC with a 2.5 GPA or better to receive the articulation credit.

CAREER EDUCATION WORK STUDY PROGRAMS

The Francis Howell School District offers three vocational work-study programs for Seniors. These programs include:

Business/Cooperative Work Experience
Marketing/Cooperative Work Experience
Culinary Arts Work Experience

These programs allow high school students release time and credit for supervised work experience. **Students must be enrolled in a minimum of four credit classes in their high school**.

CAREER EDUCATION WORK STUDY PREREQUISITES

Business/Cooperative Work Study

- One Unit of Business
- 12th grade status and work program teacher approval
- Concurrent enrollment in Business Technology

Marketing/Cooperative Work Experience

- 12th grade status and work program teacher approval
- Concurrent enrollment in Marketing I or II

Culinary Arts Work Experience

- 12th grade status and concurrent enrollment in Culinary Arts

LEWIS AND CLARK CAREER CENTER

Students who want to be considered for a technical program need to complete a Lewis and Clark application form and return it to their home school guidance office. Depending on the program, students must be completing 10th or 11th grade to apply.

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 according to the timeline established by their high school and Lewis and Clark Career Center.

All classes at Lewis and 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. Students who complete the technical program with a minimum of 90% attendance and a "C" average will receive a certificate of completion.

Please note: *Due to time allotted for travel to and from Lewis and Clark Career Center, students earn a maximum of 6 credits per year. Students who are credit deficient and choose to attend Lewis and Clark may jeopardize their "on-time" graduation. See your counselor for potential credit assistance options.*

DUAL ENROLLMENT

Dual enrollment provides seniors the opportunity to earn college credit while also attending high school. Students must complete a Dual Enrollment Form and apply to a local college with which FHSD has an articulation agreement. Students must then furnish proof of this enrollment and paid receipt to their counselor for final admission to the program**. Dual enrollment students must have a 3.0 cumulative GPA and attend high school for a minimum of four periods.** If they attend high school for five periods, they must be enrolled in at least one three credit hour college class. If students attend high school for four periods, they must enroll in at least six college credit hours.

GIFTED EDUCATIONAL PROGRAM

The Francis Howell School District offers a program for gifted students. Students in the program must meet the guidelines established by the Francis Howell School District and the Missouri State Department of Elementary and Secondary Education. Students who are interested in entering the program should check with their building level Gifted facilitator to review eligibility requirements.

TESTING DURING HIGH SCHOOL

EOC
End of Course Exam / State Assessment Program
For the 2015-2016 school year, end of course exams will be given to students upon completion of these courses: Biology, Algebra I, Algebra II (if Algebra I taken in Middle School), English II & Government.

ACT, SAT
These are placement tests used for admission purposes and some scholarship applications for students planning to pursue education beyond high school at a two- or four-year college. Fees are charged.

All juniors will take the ACT plus writing in April during the school day. This assessment is at no cost to the students.

PSAT/NMSQT
Preliminary SAT offered to Sophomores and Juniors. Juniors use PSAT scores to qualify for the National Merit Scholarship. Fees are charged.

OASIS
Lewis and Clark Career Center administers this aptitude test to students who apply for admission to the technical school.

YEARS THAT TESTS ARE ADMINISTERED

9th Grade
End of Course Exams – Dependent upon completion of a course with a state-developed end of course exam.

10th Grade
End of Course Exams - Dependent upon completion of a course with a state-developed end of course exam.
PLAN (pre-ACT) September
***PSAT/NMSQT** – October - College bound students - fee charged and sign-up required.

11th Grade
End of Course Exams - Dependent upon completion of a course with a state-developed end of course exam.
***PSAT/NMSQT** – October - College bound students - fee charged and sign-up required;
ACT/SAT – Sept./Oct./Dec./Feb/April/June/ - All college bound students - registration fee.

12th Grade
End of Course Exams - Dependent upon completion of a course with a state-developed end of course exam.
ACT/SAT – Sept./Oct./Dec./Feb./April/June - All college bound students - fee and sign-up required

*Students can qualify for the National Merit Scholarship during their junior year only.

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 World Language. Listed below are the course requirements for admission to various area universities. Keep in mind that class rank and ACT or SAT scores also affect admissions to college.

MISSOURI STATE COLLEGES
(see listing of colleges below)

English	4.0 credits
Math (Algebra I or higher)	3.0 credits
Social Studies	3.0 credits
Science	3.0 credits
Fine Arts	1.0 credit
Electives**	3.0 credits

*Truman State University requires 2.0 World Language credits.
**(Electives from World Language and/or combinations of the core courses)

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 COLLEGES
(see list below)

English	4.0 credits
Math (Algebra I or higher)	4.0 credits
Social Studies	3.0 credits
Science	3.0 credits
Fine Arts	1.0 credit
World Language	2.0 credits

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

SCHEDULE CHANGE POLICY

Please make your choices of courses for next year very carefully. Once the enrollment process has been completed, student initiated schedule changes will not be considered. Parents are requested to review their student's course requests prior to the completion of enrollment and sign the course request form.
Teaching assignments, textbook allocations, supply and equipment expenditures are made based upon the spring enrollment period. Student requests for changes disrupt this process and will not be honored.

Schedule changes due to the cancellation of courses or sections, failures of required or prerequisite classes or other unplanned occurrences will be handled by the high school guidance office. Students impacted by these situations will be contacted about possible alternatives. Any changes during the school year must receive administrative approval.

DROPPING A CLASS

If a student drops a class after the first 10 days of a semester, the student receives an "F" for the semester.

CAREER CRUISING

We offer an Internet accessible career and educational planning program called Career Cruising. The program provides students and parents with the necessary tools for career and educational planning. Students will be trained in how to utilize Career Cruising during classroom presentations. Parents are encouraged to use the program at home with their student to help explore career options, develop a comprehensive educational plan, and research colleges and scholarships. Students will be given an access code and instructional guide, or parents can contact the Guidance Office.

ACTIVITIES INFORMATION

Questions or Additional Information:
Contact Mike Janes, Activities Director 636-851-5003

PHILOSOPHY OF ACTIVITIES

The philosophy of activities in the Francis Howell School District is such that it is considered an integral part of the school's program of education: providing experiences that will help young men and women physically, mentally and emotionally. Students are stimulated to want to win and excel, but the principles of good sportsmanship prevail at all times to promote the educational values of contests. The element of competition and winning, though it exists, is controlled so that it does not determine the nature of the program. This is considered to be educationally and psychologically sound because of the training it offers for living in a competitive society.

We believe that participation in activities, both as a player and as a student spectator, are an integral part of the student's educational experiences. Such participation is a privilege that carries with it responsibilities to the school, to the team, to the student body, to the community and to the student himself/herself. In his/her play and his/her conduct, he/she is representing all the groups. Hopefully, such experiences contribute to the knowledge, skill and emotional patterns that he/she possesses, thereby making him/her a better person and citizen.

WHO IS ELIGIBLE FOR 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 Francis Howell School District.

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

1. Student must be enrolled in courses offering 3.0 units and must earn 3.0 credits the preceding semester. 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 1.0 credit in summer school shall be counted toward 1st semester eligibility.
2. Must not have reached 19th birthday prior to July 1st preceding the opening of the school year.
3. Are ineligible after the class in which they entered 9th grade has graduated.
4. Are ineligible for varsity competition for one calendar year if they transfer to Francis Howell 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. Must be a good school citizen. Behavior unbecoming a participant could result in the principal revoking the privilege of a student to participate in an activity temporarily or permanently.
6. Must have satisfactorily passed the physical examination. Exams can be taken after February 1st of the preceding year and before school.
7. Must have a signed parent permission form and activities handbook acknowledgment 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.

FRANCIS HOWELL SCHOOL DISTRICT ELIGIBILITY STANDARDS

Any student who represents one of the Francis Howell High Schools by participating on athletic teams or other groups that perform in public (bands, chorus, dramatics, cheerleaders, pommers, speech, etc.) shall meet the standards of eligibility specified in the constitution of the Missouri State High School Activities Association and those additional standards of the Francis Howell School District.

1. Student must maintain a minimum 1.5 GPA.
2. Student must attend all practices, contests, and other performances unless excused by the coach.
3. Student must not wear school equipment at any time except while participating in practice or school contest.
4. Once student has made a team in a sport, student cannot go out for another sport until the first sport season is over.
5. Student must not have any outstanding athletic fines.
6. Student must attend school the entire day of a game and must attend school on Friday to play on Saturday.
7. Student must have satisfactorily passed a physical examination dated after February 1st and preceding the first day of the season for the sport in which student is to participate. The examination report must specifically state that student "may participate in sports," and must be signed by the physician who conducted the examination.
8. Any student who falsifies the physical examination form or any other required participation form is subject to suspension and/or permanent removal from the team or group by the Activities Director and/or building Principal, and may be suspended or removed from additional activities depending upon the nature and magnitude of the offense.
9. Student must be a credible school citizen in accordance with the following standards:
    - Students who are serving out-of-school (or in-school) suspension may not practice for, or participate in, school activities during the suspension. Multiple and/or serious violations of the Code of Student Conduct may result in removal from current and future school activities.
    - Student must not use, possess, or distribute tobacco products while on school property or at school activities, whether on or away from district property.
    - Student must not use, possess, or distribute alcohol or controlled substances at any time, whether on or away from school property.
    - Student must not be arrested for, charged with, or convicted of a felony or misdemeanor under either criminal or juvenile law, whether the offense occurs on or away from school property.

    When a student is accused of an offense under either criminal or juvenile law, the charges may be dismissed or the student acquitted due to the high standard of proof required under criminal and juvenile proceedings: guilt beyond a reasonable doubt. However, the District reserves the right to make an independent determination regarding whether the student engaged in the misconduct alleged, and is required only to establish by a preponderance of the evidence (more likely than not) that the student engaged in such misconduct.

TRANSFER STUDENTS

All participants new to the Francis Howell School District in the past year are required to file a Transfer of Eligibility form. The Activities Director's office must receive the completed form from the athlete's former school before s/he can participate in games.

NCAA-Eligibility Center

If a student is planning to enroll in college as a freshman and wishes to participate in Division I or Division II athletics, he/she must be certified by the NCAA. The Eligibility Center ensures consistent application of NCAA initial eligibility requirements for all prospective student athletes at all member institutions.

Athletes should code 9999 on their ACT Registration Form in order for the NCAA to receive their official test scores.
If you have questions about the NCAA eligibility, please call the NCAA Eligibility Center toll-free at 877-262-1492.

The web address is www.eligibilitycenter.org

Select Login/New Account

Supply e-mail address to receive instructions for registering.

To view the 48H list of approved core courses, click on "For High School", view "Core Course list", and enter the high school code, 262-844.

It is the responsibility of student athletes to register with the NCAA Eligibility Center.

The NCAA recently released the new SAT/ACT sliding scale that corresponds with the increased GPA requirements for the class of 2016 and beyond. Any student-athlete beginning high school in the fall of 2012 and after who is even remotely considering the

possibility of playing a sport collegiately needs to understand these changes. The wiggle room to correct academic shortcomings has been greatly reduced.

Here is a summary of the new D1 academic requirements for a Full Qualifier that take affect for the class of **2016 and beyond**:

- The minimum **core course GPA** has increased from **2.00** to **2.30**
- **10** of the **16** core course requirements must be satisfied **prior to the start of the senior year**
- **7** of those **10** core courses must be from the **English, Math and Science subsections**
- **Grades earned** in the **10** core courses are **"locked in"** for the purpose of calculating the final core course GPA
- Any **retakes** of the first 10 core courses must **be completed prior to senior year**

The NCAA has also introduced a new status for the class of 2016 - the **"Academic Redshirt."** An "Academic Redshirt" may receive a scholarship and practice with their team, but **may not participate in game competition** as a college freshman. Students with a GPA of 2.30 or above may achieve either "Academic Redshirt" or "Full Qualifier" status, depending on their SAT/ACT test scores. Students with a core course GPA between 2.00 and 2.29 cannot attain "Full Qualifier" status but may achieve "Academic Redshirt" status by meeting minimum sliding scale test score requirements.

The new sliding SAT/ACT scale results in significant changes in minimum test score requirements. The **minimum SAT score** required to compete as a college freshman **increased by 180** points while the **minimum ACT score increased** by an average of **14 points** (sum score).

Here are two examples of the changes to the new sliding scale:

- **Prior to 2016: 2.00** core course GPA + **1010** SAT or **86** ACT = **Full Qualifier**
- **2016 and after: 2.00** core course GPA + **1020** SAT or **86** ACT = **Academic Redshirt**
- **Prior to 2016: 2.50** core course GPA + **820** SAT or **68** ACT = **Full Qualifier**
- **2016 and after: 2.50** core course GPA + **1000** SAT or **85** ACT = **Full Qualifier**

Remember, the NCAA does not include the writing component of the SAT or ACT and the ACT score is a sum score (not average) of the English, math, reading and science sections.

Finally, just because a student-athlete meets the minimum NCAA academic standards, it doesn't mean they will be admitted to play sports at the college of their choice. Many universities have academic standards for incoming freshman athletes that are **much higher than the NCAA minimum requirements**.

So what does this all mean? **Student-athletes must start tracking courses early**. A student-athlete should calculate their initial core course GPA at the conclusion of their first semester in high school and continue to do so each semester thereafter.

Now more than ever, every semester counts.

NAIA-Eligibility Center

If a student is planning to enroll in college as a freshman and wishes to participate in National Association of Intercollegiate Athletics, he/she must be certified by the NAIA. The Eligibility Center ensures consistent application of NAIA initial eligibility requirements for all prospective student athletes at all member institutions.

Athletes should code 9876 on their ACT Registration Form in order for the NAIA to receive their official test scores.

If you have questions about the NAIA eligibility, please call the NAIA Eligibility Center at 816-595-8180.

The web address is www.playnaia.org

It is the responsibility of student athletes to register with the NAIA Eligibility Center.

High School Credit Recovery

High School students have the opportunity to recover 1 full credit (two 0.5 credits) in the summer Credit Recovery program. Students enroll based on credit recovery needs. Students attend 10 days for 6 hours per day to recover each 0.5 credit course. Summer program offerings are approved each year by the Board of Education and enrollments begins in early May. Course offerings are dependent on student enrollments.

Courses traditionally offered as Credit Recovery include:

Algebra I	Algebra IA	Algebra IB	Geometry
Algebra II	Physical Science	Biology	American History
World History	American Government	Personal Finance	Health
Personal Lifetime Fitness	9th Grade Comm. Arts	10th Grade Comm. Arts	11th Grade Comm. Arts

Schools will advertise summer program offerings through school and district eNews as well as the district summer school website.

Sessions usually run during the month of June and end before the July 4th holiday. For additional High School Summer Credit Recovery information, please contact the building administrator, Counselor's office, or contact FHSDsummerschool@fhsdschools.org or call (636) 851-4012.

High School Credit Advancement

High School students have the opportunity to earn 1 full credit (two 0.5 credits) in the summer Credit Advancement program. Students enroll from the list of courses offered. Students attend 20 days for 3 hours per day to earn each 0.5 credit course. To earn 1 full credit, a student would attend 20 days for 6 hours per day. Summer program offerings are approved each year by the Board of Education and enrollments begins in early May. Course offerings are dependent on student enrollments.

Courses traditionally offered as Credit Advancement include:

Credit Enrichment Course Offerings	
Weightlifting	0.5
Team Sports	0.5
Personal Finance – Online Course	0.5
Intro to Computer Applications	0.5
Health—Online Course	0.5
ACT Preparation – free ACT Prep leading up to the June National ACT Testing date. This course concludes the day prior to this testing date.	No Credit

Sessions usually run during the month of June and end before the July 4th holiday. For additional High School Summer Credit Advancement information, please contact the building administrator, Counselor's office, or contact FHSDsummerschool@fhsdschools.org or call (636) 851-4012.

FINE ARTS AND PRACTICAL ARTS OVERVIEW

*Full-Year 1.0 Unit Courses (All Others Half-Year 0.5 Unit Courses)

FINE ARTS

1.0 units of credit for graduation requirements

ART

*AP Art History	Graphic Design I	Printmaking I
*Advanced Placement Art Studio	Graphic Design II	Printmaking II
*Introduction to Art	Drawing I	Sculpture I
Ceramics I	Drawing II	Sculpture II
Ceramics II	Painting I	
	Painting II	

MUSIC

*Introduction to Music Appreciation	*Concert Band	*Percussion
*Music Theory Honors	*Concert Choir	*Symphonic Band
*Chamber Choir	*Concert Choir Honors	*Symphonic Band Honors
*Chamber Choir Honors	*Jazz Ensemble	*Treble Choir/Chorale
*Chorus	*Jazz Ensemble Honors	*Treble Choir/Chorale Honors

THEATRE

Actor's Studio I	Actor's Studio II	
Technical Theatre I	Technical Theatre II	Intensified Theatre

PRACTICAL ARTS

1.0 units of credit for graduation requirements

BUSINESS

*Computer Science & Software Engineering	*Business Technology	*Marketing/Cooperative Work Experience
*AP Economics (And Personal Finance)	Desktop Publishing	Multimedia I
*Accounting I	Desktop Publishing II	Multimedia II
*Accounting II	*Introduction to Business	Personal Finance
Business Computer Programming I	Introduction to Computer Applications	Personal Finance Online
Business Computer Programming II	*Marketing I	Web Page Design
*Business/Cooperative Work Experience	*Marketing II	Web Page Design II
Business Entrepreneurship/Junior Achievement		You and the Law

COMMUNICATION ARTS

Digital Photojournalism	*Newspaper Production	*Newspaper Production Honors
*Yearbook Publication	*Yearbook Publication Honors	

FAMILY AND CONSUMER SCIENCES

Foods & Nutrition I	Clothing & Textiles I	Child Development I
Foods & Nutrition II	Clothing & Textiles II	Child Development II
*Culinary Arts	Fashion Design	Human Relations
*Culinary Arts Work Experience	Advanced Clothing	FACS Senior Leadership
International Cuisine	Housing & Interior Design	*Pathway to Teaching Careers

INDUSTRIAL TECHNOLOGY

*CAD I	*CAD II	*Residential Architecture
*Woodworking I	*Woodworking II	

PROJECT LEAD THE WAY - ENGINEERING

*Introduction to Engineering Design	*Principles of Engineering	*Digital Electronics
*Engineering Design and Development	*Principles of the Biomedical Sciences	*Human Body Systems
*Computer Science & Software Engineering		

LEWIS AND CLARK CAREER CENTER (2-Year Programs Where Students Earn 3.0 Units of Credit/Year)

Applied Retail & Business Skills	Combination Welding	Electrical Trades
Auto Collision Repair	Computer Information Systems 1	Health Occupations & Health-Related Occupations
Auto Service Technology	Computer Maintenance and Networking	
Brick, Block, Stone Masonry	Design Drafting Technology/CAD	Heating, Ventilation/A.C.
Building Trades-Carpentry	Early Childhood Careers	Power Equipment Technology

POTENTIAL FOUR YEAR PLAN

To aid in academic planning, students must complete a four year plan of courses that will be printed on the back of the next year's registration form. That form will duplicate this one which can be kept for the students' own records.

NINTH GRADE		TENTH GRADE	
English I or Pre-AP	1 credit	English II or Pre-AP	1 credit
Mathematics	1 credit	Mathematics	1 credit
Physical Science or Pre-AP OR Biology or Pre-AP	1 credit	Biology or Pre-AP OR Science Elective	1 credit
American History or Honors	1 credit	World History or Honors	1 credit
Physical Education/Health*	1 credit	Electives:	
Electives:		_____	1 credit
_____	1 credit	_____	1 credit
_____	1 credit	_____	1 credit

ELEVENTH GRADE		TWELFTH GRADE	
English III or AP Eng. Lang.	1 credit	English IV, AP Eng. Lit. or English Elective	1 credit
Mathematics	1 credit	Electives:**	
Science Elective	1 credit	_____	1 credit
Am. Govt. I & II or AP Govt.	1 credit	_____	1 credit
Electives:**		_____	1 credit
_____	1 credit	_____	1 credit
_____	1 credit	_____	1 credit
_____	1 credit	_____	1 credit

*In addition to the .5 PE credit their Freshman year, all students are required to take another .5 credit of PE in their Sophomore, Junior, or Senior year.

**All students are required to complete .5 credit of Personal Finance in 11th or 12th grade. This credit counts towards the required 1.0 credit of Practical Art.

**All students are required to complete 1.0 credit of Fine Art and 1.0 credit of Practical Art in grades 9-12

BUSINESS

0303001 Semester 1 **ACCOUNTING I** **1 Unit**
0303002 Semester 2
Prerequisite: None
Grades 10-12

Accounting is an essential course for anyone planning a college major in business or an immediate career in the business world. This course is especially appropriate for small business (single ownership or partnership) operation. Emphasis is placed on why financial records are kept, how they are kept, and how to use them as guidelines for decision making. **Internet use is an integral part of this course.** *Qualifies for articulated Associate of Applied Science (A.A.S.) credit at St. Charles Community College (**not** A.A. transfer credit).*

0303051 Semester 1 **ACCOUNTING II** **1 Unit**
0303052 Semester 2
Prerequisite: Successful completion of Accounting I or teacher recommendation
Grades 11-12

In this second-year accounting course, students will apply the basic principles learned in the first-year course to methods commonly found in business, especially corporations. Students will prepare and analyze financial statements and budgets, and use computers to further explore accounting. This course helps students match the rapid pace of college accounting required for any business degree and to be better qualified for an entry-level accounting job. **Internet use is an integral part of this course**. *May qualify for dual credit at Lindenwood University.*

0303271 Semester 1 **AP ECONOMICS (AND PERSONAL FINANCE*) – NCAA-approved** **1 Unit**
0303272 Semester 2
Prerequisite: None
Grades 11-12

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 economics performance measures, the financial sector, stabilization policies, economic growth, and international economies will be included. Students are expected (although not required) to take the Advanced Placement Micro Economics and Macro Economics exams.

*The personal finance proficiency test will be administered in accordance with the state graduation requirements. Students must pass the proficiency test with a 70% or higher and maintain a B grade average in AP Economics in order to gain credit for personal finance.

BUSINESS COMPUTER PROGRAMMING I

See Computer Science and Software Engineering

0303753 **BUSINESS COMPUTER PROGRAMMING II** **.5 Units**
Prerequisite: Business Computer Programming I
Grades 9-12

This course is a continuation of Business Computer Programming I and focuses on more advanced programming skills including how to test monitor, debug and maintain computer programs. Students will explore the world of game programming and learn how to write their own code**. Internet use is an integral part of this course.** *Qualifies (in conjunction with Business Computer Programming I) for articulated Associate of Applied Science (A.A.S.) credit at St. Charles Community College (**not** A.A. transfer credit).*

0303153 **BUSINESS ENTREPRENEURSHIP / JUNIOR ACHIEVEMENT** **.5 Units**
Prerequisite: None
Grades 11-12

The primary goal for this course is to introduce students to our nation's free enterprise system, the operation of small businesses and entrepreneurs and the impact of the economy and marketing trends on business. The students will operate a student company (or corporation) in which they will decide what product to sell, calculate its retail price, how to market the item, and how much profit (or loss) was made. Students will share the profits of the company for the semester. All textbook materials are provided by Junior Achievement. *Qualifies (in conjunction with Introduction to Business) for articulated Associate of Applied Science (A.A.S.) credit at St. Charles Community College (**not** A.A. transfer credit).*

0303501 Semester 1 **BUSINESS TECHNOLOGY** **1 Unit**
0303502 Semester 2
Prerequisite: None
Grades 11-12

This course is designed to prepare students for college business classes and to develop the qualities, knowledge, and skills necessary for entry-level business employment. Areas of study include: Microsoft Office: Word, Access, Excel, PowerPoint, and Publisher; voice recognition software, iPads, resume writing, interview skills, 21st Century technology, movie making, and much more. Senior students enrolled in this course may obtain a part-time business job as described in Business/Cooperative Work Experience. **Internet use is an integral part of this course.**

0303651 Semester 1 **BUSINESS / COOPERATIVE WORK EXPERIENCE** **1-2 Units**
0303652 Semester 2
Prerequisite: Enrollment in Business Technology
Grade 12

Students receive on-the-job training in a business/office situation. The instructional program is planned, supervised, and evaluated by both the teacher-coordinator and the employer. One unit of credit is earned for working 10 to 19 hours each week. Two units of credit are earned for working 20 or more hours each week. The amount of credit may be different each semester.

0304053 **DESKTOP PUBLISHING** **.5 Units**
Prerequisite: None
Grades 9-12

Students develop proficiency in using desktop publishing software to create a variety of business and promotional publications such as: newsletters, CD covers, marker boards, flyers, greeting cards, menus, magazine covers, and calendars. The course includes: desktop publishing terminology, current desktop programs and digital images to create typefaces, layouts and graphics. It is strongly recommended that students have taken Introduction to Computer Applications prior to taking this course. **Internet use is an integral part of this course.** *Qualifies for articulated Associate of Applied Science (A.A.S.) credit at St. Charles Community College (**not** A.A. transfer credit).*

0304063 **DESKTOP PUBLISHING II** **.5 Units**
Prerequisite: Successful completion of Desktop Publishing I
Grades 9-12

Desktop Publishing II is the continuation of Desktop Publishing I. Students will develop advanced desktop publishing skills using industry standard software such as Adobe Photoshop, Adobe InDesign, and Adobe Illustrator. Students will gain the skills necessary to communicate effectively using desktop publishing software while producing personal and professional publications. Skills will be attained to design and edit computer graphics and images as well as concentrate on graphic manipulation and photo editing. Completion of Desktop Publishing II

can lead to accreditation as an Adobe Certified, Associate in Visual Communication (ACA) which is an Industry Recognized Credential beneficial to students entering the field of technology after graduation.

0303301 Semester 1 **INTRODUCTION TO BUSINESS** **1 Unit**
0303302 Semester 2
Prerequisite: None
Grades 9-10

A practical presentation of basic business principles. Students will explore all aspects of the business world including: marketing, management, finance, economics, ethics and social responsibility, possible careers and technology used. Workplace communication and leadership skills will be taught throughout the class. This course will also serve as a preview to all other courses offered in the business department**. Internet use is an integral part of this course**. *Qualifies (in conjunction with Business Entrepreneurship/ Junior Achievement or Personal Finance for articulated Associate of Applied Science (A.A.S) credit at St Charles community college (not A.A. transfer credit).*

0304003 **INTRODUCTION TO COMPUTER APPLICATIONS** **.5 Units**
Prerequisite: None
Grades 9-12

This semester course introduces students to basic keyboarding skills while working in the Windows Operating System and the business applications Microsoft Word, Excel, and PowerPoint. Learning many timesaving skills in Microsoft Office will be a powerful asset that will be a focus of this class. **Internet use is an integral part of this course.** ***This course is strongly recommended for students interested in taking Desktop Publishing, Multimedia, or Web Page Design courses.***

0403801 Semester 1 **MARKETING I** **1 Unit**
0403802 Semester 2
Prerequisite: None
Grades 11-12

This course is designed to introduce the student to the field of marketing, covering such topics as: advertising, promotions, product development, distribution, communication, human relations, and career exploration. Marketing students are strongly encouraged to join DECA, an Association of Marketing Students. This course is recommended for the college-bound student interested in marketing or business, as well as the non-college bound student interested in marketing occupations. Senior students enrolled in Marketing I may obtain a part-time job as described in Marketing/Cooperative Work Experience. **Internet use is an integral part of this course.** *Qualifies (if followed by Marketing II) for articulated Associate of Applied Science (A.A.S.) credit at St. Charles Community College (**not** A.A. transfer credit).*

0403901 Semester 1 **MARKETING II** **1 Unit**
0403902 Semester 2
Prerequisite: Successful completion of Marketing I
Grade 12

This course is designed to give additional attention to the topics covered in Marketing I with an emphasis on personal selling, market research, pricing and entrepreneurship. This is a project-based course in which the students will have the opportunity to develop sales presentations, conduct a marketing research project as it relates to advertising, create a sales catalog using different pricing strategies and investigate the process of starting your own business. Marketing students are strongly encouraged to join DECA, an Association of Marketing Students. This course is recommended for the college and non-college bound student. Students enrolled in Marketing II may obtain a part-time job as described in Marketing/Cooperative Work Experience. **Internet use is an integral part of this course.** *Qualifies (in conjunction with Marketing I) for articulated Associate of Applied Science (A.A.S.) credit at St. Charles Community College (**not** A.A. transfer credit) and dual credit at Lindenwood University.*

0403851 Semester 1 **MARKETING/COOPERATIVE WORK EXPERIENCE** **1-2 Units**
0403852 Semester 2
Prerequisite: enrollment in Marketing I or II (Marketing II students take first priority)
Grade 12

Students receive on-the-job training in a marketing/sales area of their choice. Marketing jobs provide educational opportunities beyond the school environment by working on an approved job site during the afternoon or evening. One unit of credit is earned for working 10 to 19 hours each week. Two units of credit are earned for working 20 or more hours each week. The amount of credit may be different each semester. This instructional program is planned, supervised, and evaluated by both the teacher-coordinator and employer.

0303903 **MULTIMEDIA I** **.5 Units**
Prerequisite: None
Grades 9-12

This course will introduce students to career and communication skills in digital video production, using Adobe tools. This project-based course will develop skills in the areas of project management and collaboration, design, research and communication, and professional video production. It is strongly recommended that students have taken Introduction to Computer Applications prior to taking this course. **Internet use is an integral part of this course.**

0303923 **MULTIMEDIA II** **.5 Units**
Prerequisite: Multimedia I
Grades 9-12

Multimedia II is the continuation of Multimedia I. Students will continue to develop skills in project management and collaboration, design, research and communication, and professional video production. Each project will add more challenging skills as students learn storytelling, capturing and editing video and audio, and finalizing content for DVD, web, or digital videotape. Completion of Multimedia II can lead to accreditation as an Adobe Certified Associate in Video Communication (ACA) which is an Industry Recognized Credential beneficial to students entering the field of technology after graduation. **Internet use is an integral part of this course.**

0303803 **PERSONAL FINANCE** **.5 Units**
Grades 11-12

Students will learn how to maximize their earnings, create a budget, plan for major expenditures, save for the future, invest wisely, and keep financial records. Students will learn about banking, taxes, credit, insurance, the stock market, and retirement accounts. Personal Finance prepares students to handle personal financial matters as a teenager and adult, including how to make money work for them. Students will be involved in a variety of simulations and classroom activities that can put them on the road to becoming an educated consumer. This course fulfills the state requirement for .5 credits of Personal Finance. *In conjunction with Introduction to Business, qualifies for articulated Associate of Applied Science (A.A.S.) credit at St. Charles Community College (**not** A.A. transfer credit).*

0303853 **PERSONAL FINANCE ONLINE** **.5 Units**
Grades 11-12

Beginning with the 14-15 school year, students have the opportunity to take Personal Finance online, in a blended learning environment, which means some of the coursework will be completed online and some of the coursework will be done in class with the teacher. This course will be offered at the beginning or the end of the day and will have limited enrollment.

Students will learn how to maximize their earnings, create a budget, plan for major expenditures, save for the future, invest wisely, and keep financial records. Students will learn about banking, taxes, credit, insurance, the

stock market, and retirement accounts. Personal Finance prepares students to handle personal financial matters as a teenager and adult, including how to make money work for them. Students will be involved in a variety of simulations and classroom activities that can put them on the road to becoming an educated consumer. This course fulfills the state requirement for .5 credits of Personal Finance. *In conjunction with Introduction to Business, qualifies for articulated Associate of Applied Science (A.A.S.) credit at St. Charles Community College (**not** A.A. transfer credit).*

0303851 Semester 1 **COMPUTER SCIENCE & SOFTWARE ENGINEERING** **1 Unit**
0303852 Semester 2
Prerequisite: None
Qualifies for Honors credit when a 6 or higher (9 maximum) is earned on the PLTW final exam. Grade 9-12

Computer Science & Software Engineering is the first of four computer science course offerings that are planned to be phased in over the next four years (see below for phase-in process) and are part of a curriculum known as Project Lead the Way (PLTW). This is a foundation course in the computer science curriculum sequence that offers a dynamic high school program providing students with real-world learning and hands-on experience. Students will create apps for mobile devices, automate tasks in a variety of languages, find patterns in data, and interpret simulations. Students collaborate to create and present solutions that can improve people's lives. This course meets the third course requirement of the PLTW Engineering sequence. After completing this course, students are eligible to sit for AP Computer Science test.

Proposed Phase-in Process and Sequence for PLTW Computer Science Courses:

2016-17 Computer Science Applications
Students collaborate to produce programs that integrate mobile devices and leverage those devices for distributed collection and data processing. Students analyze, adapt, and improve each other's programs while working primarily in Java™ and other industry-standard tools.

2017-18 Simulation and Modeling
Students create models and simulate social, physical, and biological systems. Students apply statistics and data analysis to understand systems and predict behavior, and they compare models to complex, real data. Students create simulations to communicate central ideas in the physical, biological, and social sciences and deepen their understanding of concepts in discrete math and computer science. This course emphasizes collaboration, professional writing, and the scientific method.

2018-19 Artificial Intelligence
Students will develop artificially intelligent systems that create solutions to real problems found in science and industry. Students analyze problems for computational difficulty and analyze solutions for computational efficiency. Students engage in a wide array of applications, including automated vehicles and computer vision.

0303103 **WEB PAGE DESIGN I** **.5 Units**
Prerequisite: None
Grade 9-12

This course will cover the fundamental concepts of Web page design and creation, Web graphics and how the Internet and World Wide Web works. Students will design and develop Web pages using Web page editing/publishing software and optimize images for Web pages. Students will combine text images, sound, and interactivity to web pages. Students will be introduced to multimedia software. It is strongly recommended that students have taken Introduction to Computer Applications prior to taking this course. **Internet use is an integral part of this course.**

0303123 **WEB PAGE DESIGN II** **.5 Units**
Prerequisite: Web Page Design I
Grade 9-12

This course is a continuation of Web Page Design and focuses on web site planning, usability, design, page layout and graphic preparation skills necessary to produce full-functioning web pages. Includes advanced examinations of Cascading Style Sheets (CSS), WYSIWYG editors and other web technologies. Students create several web

examples, incorporating more complex features and skills. Internet use is an integral part of this course. **Internet use is an integral part of this course.**

0303203 **YOU AND THE LAW** **.5 Units**
Prerequisite: None
Grades 11-12

This course is a combination of consumer and personal law, with a strong foundation of business law, making it especially relevant and useful in students' daily lives. The following law topics will be included: civil, criminal, contract, employment, family, and housing (concerning apartment rental). In addition, occupations in the legal field will be discussed. **Internet use is an integral part of this course.**

ENGLISH LANGUAGE ARTS

0505001 Semester 1 **ENGLISH I – NCAA-approved** **1 Unit**
0505002 Semester 2 Prerequisite: None

This skill-based course is an introduction to the literacy skills students will need to be college and career ready: reading, writing, listening/speaking, and research. Emphasis will be placed on approaching reading and writing as processes. Expository, narrative, descriptive and persuasive writing will be addressed. Research will be integrated throughout the course. Students will read and respond to literature concerning self-exploration and cross-curricular studies.

0505101 Semester 1 **PRE-AP ENGLISH I – NCAA-approved** **1 Unit**
0505102 Semester 2 Prerequisite: Must meet honors criteria

This course is for the advanced student and will be an introduction to the literacy skills and thinking skills students will need to be college and career ready and in future AP classes. This course will focus on reading, writing, listening/speaking, and research. Emphasis will be placed on approaching reading and writing as processes. Expository, narrative, descriptive and persuasive writing will be addressed. Research will be integrated throughout the course. Students will read and respond to literature using self-exploration skills and cross-curricular studies. This course will be vertically aligned to the AP standards and will be designed to achieve success in future AP classes.

0505151 Semester 1 **ENGLISH II – NCAA-approved** **1 Unit**
0505152 Semester 2 Prerequisite: English I

This skill-based course will focus on the literacy skills necessary to be college and career ready: reading, writing, listening/speaking and research. Emphasis will be placed on approaching reading and writing as processes. Expository, narrative, descriptive and persuasive writing will be addressed. Research will be integrated throughout the course. Students will be read and respond to literature from a variety of cultures.

0505251 Semester 1 **PRE-AP ENGLISH II – NCAA-approved** **1 Unit**
0505252 Semester 2 Prerequisite: English I and meet honors criteria

The course is for the advanced student and will be an introduction to the literacy skills students will need to be college and career ready and in future AP classes. This course will focus on reading, writing, listening/speaking, and research. Emphasis will be placed on approaching reading and writing as processes. Expository, narrative, descriptive and persuasive writing will be addressed. Research will be integrated throughout the course. Students will read and respond to literature using self-exploration skills and cross-curricular studies. This course will be

vertically aligned to the AP standards and will be designed to achieve success in future AP classes. Summer homework is a required element of this course.

0505301 Semester 1 **ENGLISH III – NCAA-approved** **1 Unit**
0505302 Semester 2 Prerequisite: English II

This junior-level course will ensure students are college and career ready by exploring how American literature and writing has evolved over time. Students will explore text features, author purpose and style, societal background and influence, historical events and their impact on morale, the evolution of writing techniques and how they affect a text. The foundation of these units serves as a foundation in American Literature to prepare students for European literature.

0505551 Semester 1 **AP ENGLISH LANGUAGE AND COMPOSITION – NCAA-approved** **1 Unit**
0505552 Semester 2 Prerequisite: Pre AP English II; English II

This course is limited to juniors who have the opportunity to gain college credit through Advanced Placement. Intensive work in composition and stylistic techniques of writers is strongly emphasized. AP English Language and Composition will engage students in becoming skilled readers of prose written with a variety of purposes. Through their reading and writing, students will understand and be able to analyze the interactions among a writer's purposes, their audiences' expectations and their subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing. Formal research will be an integral part of this course. This course is designed as a capstone for taking the Advanced Placement English Language and Composition Test. Summer homework is a required element of this course. Advanced credit, when available.

0505451 Semester 1 **SENIOR LITERATURE AND COMPOSITION – NCAA-approved** **1 Unit**
0505452 Semester 2 Prerequisite: English III

Senior Literature and Composition prepares students for post-secondary literacy tasks by incorporating reading (both literature and informational texts at the college and career readiness level) with analytical student writing. Throughout the course of the year, students will develop and demonstrate their writing ability through narrative, expository, and argumentative styles. The class also incorporates various methods of integrated literacy (listening skills, media, and speaking). Students will evaluate complex texts from a range of genres, cultures and time periods. This evaluation incorporates an understanding of writing as a craft; including consideration of the author's style and purpose in writing. Through wide and deep reading, students will actively determine central themes and ideas and analyze those themes throughout the text. Through discussion and writing students may relate a work to its historical and social context while also reflecting on its relevance today.

0505501 Semester 1 **AP ENGLISH LITERATURE AND COMPOSITION – NCAA-approved** **1 Unit**
0505502 Semester 2 Prerequisite: English III

This course is limited to seniors who have the opportunity to gain college credit through Advanced Placement. Intensive work in composition and literary analysis is strongly emphasized. Formal research is required. AP English Literature and Composition will engage students in carefully reading and writing critical analysis of imaginative literature from both British and American writers from the sixteenth century to contemporary times. Through the close reading of these selected texts, students will deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. This course is designed as a capstone for taking the Advanced Placement English Literature and Composition Test. Summer homework is a required element of this course. Advanced credit when available.

0506153 **THE NOVEL – NCAA-approved** **.5 Units**
Prerequisite: English III or concurrent enrollment in English III

This course is designed for the student who enjoys reading, discussing, and analyzing literature. Students will read a variety of novels of teacher and student choice. The novels read will be from a variety of genres. Vocabulary development, reading skills, and the reading process will be integral components of this course. Improvement of writing skills will be emphasized.

0505903 **CREATIVE WRITING – NCAA-approved** **.5 Units**
Prerequisite: English III or concurrent enrollment in English III

In this course, students experiment with the writing process and the modes of writing, both fiction and nonfiction. Students will be expected to work cooperatively with their peers and their instructor toward strengthening their writing and their reading skills. Students will read and analyze published works as a model for their own writing. Through frequent writing and formal/informal assessment, students' style will be further developed.

0508503 **MYTHOLOGY – NCAA-approved** **.5 Units**
Prerequisite: English III or concurrent enrollment in English III

This course will build upon the skills taught in English I and English II and reinforce the skills presented in and required for English III and English IV to prepare students for the challenging reading and writing they will encounter in college and beyond. Students will focus on practicing all communication skills including reading, writing, speaking, listening, viewing, finding, and interpreting information with mythological-related readings. Students will study and analyze mythological tales from around the world and then apply this information to classic literary works in order to explain and analyze the allusions used.

0508703 **SPORTS LITERATURE AND COMPOSITION – NCAA-approved** **.5 Units**
Prerequisite: English III or concurrent enrollment in English III

With the premise of the connection between sports and society, this course will prepare students for the challenging reading and writing they will encounter in college and beyond. Students will practice all communication skills including reading, writing, speaking, listening, viewing, finding, and interpreting information. They will also be expected to combine their knowledge and experience by reflecting, exploring, and generating new ideas.

0506353 **SPEECH I – NCAA-approved** **.5 Units**
Prerequisite: None

In this course students learn the elements of effective communication by reading, examining, and writing various types of speeches. Interpersonal communication will be studied, and formal speech presentations will be required.

0506403 **SPEECH II – NCAA-approved** **.5 Units**
Prerequisite: Speech I

This course is an advanced study of the art of communication and concentrates particularly on mass communication and persuasion which will build upon the elements of communication learned in Speech I. Published works will be studied, analyzed, and evaluated for their effectiveness. Formal presentations are required.

0505953 **DEBATE – NCAA-approved** **.5 Units**
Prerequisite: English I

In this course, students discuss contemporary problems and debate current universal issues. Research techniques, organizational skills, and the fundamentals of oral presentation will be key components. Students will do written casework, in-class evaluations, and formal oral presentations of both policy and value debates.

0506453 **JOURNALISM – NCAA-approved** **.5 Units**
Prerequisite: None

The student will explore all aspects of newspaper, magazines and yearbooks and/or broadcast and emergent media while they write, interview, edit, and design publications and apply media law and ethics. Due to the fact that this course is the foundation course for the publication courses, this course is recommended before taking Newspaper Production or Yearbook Publication.

0506473 **JOURNALISM: BROADCAST WRITING AND PRODUCTION** **.5 Units**
Prerequisite: None

Students will learn to create (write, shoot, edit) and produce a studio broadcast. There will be a heavy emphasis on non-fiction writing (scripts, interviews questions), reading and news/media literacy. This class will be responsible for producing at minimum two broadcasts with the hope of producing more weekly broadcasts.

ELA ELECTIVES (for Practical Arts Credit)

0506101 Semester 1 **NEWSPAPER PRODUCTION** **1 Unit**
0506102 Semester 2
Credit: 1 Unit of Practical Arts or Elective Credit
Prerequisite: Journalism, Digital Photojournalism and/or teacher recommendation

This class will be responsible for the production of the school newspaper. Students will be trained and work in the following areas: writing, photography, design, business and emerging media. This is a co-curricular course.

0506111 Semester 1 **NEWSPAPER PRODUCTION HONORS** **1 Unit**
0506112 Semester 2
Credit: 1 Unit of Practical Art or Elective Credit
Prerequisite: Teacher Recommendation (Journalism or Digital Photojournalism highly encouraged)

This class will be responsible for the production of the school newspaper. Students will be trained and work in the following areas: writing, photography, design, business and emerging media. This is a co-curricular course. This course is designed for the student who wishes to take a more rigorous approach to the study of advanced Newspaper Production. In addition to normal production duties, students will complete an additional project each semester for the honors credit. Working with the teacher, the student will design and implement this independent project, which in addition to hours outside of class to research, will require a presentation.

0506201 Semester 1 **YEARBOOK PUBLICATION** **1 Unit**
0506202 Semester 2
Credit: 1 Unit of Practical Arts or elective credit
Prerequisite: Journalism, Digital Photojournalism and/or teacher recommendation

This class will be responsible for the production of the school yearbook. Students will be trained and work in the following areas: writing, photography, design, business and emerging media. This is a co-curricular course.

0506211 Semester 1 **YEARBOOK PUBLICATION HONORS** **1 Unit**
0506212 Semester 2
Credit: 1 Unit of Practical Art or Elective Credit
Prerequisite: Teacher Recommendation (Journalism or Digital Photojournalism highly encouraged)

This class will be responsible for the production of the school yearbook. Students will be trained and work in the following areas: writing, photography, business, design and emerging media. This is a co-curricular course. This course is designed for the student who wishes to take a more rigorous approach to the study of advanced Yearbook Production. In addition to normal production duties, students will complete an additional project each semester for the honors credit. Working with the teacher, the student will design and implement this independent project, which in addition to hours outside of class to research, will require a presentation.

0506503 **DIGITAL PHOTOJOURNALISM** **.5 Units**
Credit: ½ Unit of Practical Arts Credit or Elective Credit
Prerequisite: English I or concurrent enrollment with teacher recommendation

Students will explore all aspects of visual journalism using 35mm cameras, digital video cameras and computers. Topics covered will include visual composition, operation of equipment, computer editing programs and media law and ethics. Assignments will be geared toward publication in one of the school publications. Successful completion of this course meets the recommended prerequisite for Newspaper Production or Yearbook Production.

English Language Arts High School Course Offering Grid

9TH GRADE (Students may choose one of the following English Language Arts classes for one credit)	10TH GRADE (Students may choose one of the following English Language Arts classes for one credit)	11TH GRADE (Students may choose one of the following English Language Arts classes for one credit)	12TH GRADE (Students may choose *one* of the following courses OR *two* of the following English Language Arts Elective courses for one credit)
English I	English II	English III	Senior Literature and Composition
English I Pre AP	English II Pre AP	AP Language and Composition	AP Literature and Composition
English Language Arts Elective Courses (Students may choose to take one of the following for English Language Arts credit. The student *MUST be concurrently enrolled in English I to receive English Language Arts credit.* Each course listed may only be taken once throughout a student's high school career)	**English Language Arts Elective Courses** (Students may choose to take one of the following for English Language Arts credit. The student *MUST be concurrently enrolled in English II to receive English Language Arts credit.* Each course listed may only be taken once throughout a student's high school career)	**English Language Arts Elective Courses** (Students may choose to take one of the following for English Language Arts credit. The student *MUST be concurrently enrolled in English III to receive English Language Arts credit.* Each course listed may only be taken once throughout a student's high school career)	**English Language Arts Elective Courses** (Students may choose *two* of the following English Language Arts elective classes for one credit)
• Journalism • Broadcast Writing & Production • Speech I • Speech II	• Journalism • Broadcast Writing & Production • Speech I • Speech II • Debate	• Journalism • Broadcast Writing & Production • Creative Writing • The Novel • Sports Literature and Composition • Mythology • Speech I • Speech II • Debate	• Journalism • Broadcast Writing & Production • Creative Writing • The Novel • Sports Literature and Composition • Mythology • Speech I • Speech II • Debate
English Language Arts Special Elective Courses (Students may choose to take any of these courses but they *will not count* toward the required English Language Arts credits they will be a Practical Art Credit or an Elective Credit)	**English Language Arts Special Elective Courses** (Students may choose to take any of these courses but they *will not count* toward the required English Language Arts credits they will be a Practical Art Credit or an Elective Credit)	**English Language Arts Special Elective Courses** (Students may choose to take any of these courses but they *will not count* toward the required English Language Arts credits they will be a Practical Art Credit or an Elective Credit)	**English Language Arts Special Elective Courses** (Students may choose to take any of these courses but they *will not count* toward the required English Language Arts credits they will be a Practical Art Credit or an Elective Credit)
• Digital Photojournalism • Yearbook*^ • Newspaper*^	• Digital Photojournalism • Yearbook^ • Newspaper^	• Digital Photojournalism • Yearbook^ • Newspaper^	• Digital Photojournalism • Yearbook^ • Newspaper^

* This course may only be taken upon instructor approval. ^ These courses may be taken in multiple years with instructor approval.

ENGLISH FOR SPEAKERS OF OTHER LANGUAGES
Program offered only at Francis Howell North High School

2622851 Semester 1 **ESOL READING I** **1 Unit**
2622852 Semester 2 Prerequisite: ESOL Teacher Recommendation

This course will help beginning English Language Learners increase the essential reading and writing skills needed to complete high school class curricula. Reading strategies, comprehension skills, vocabulary improvement, information processing, and writing are stressed every day. Instruction is individualized or in small groups.

2622901 Semester 1 **ESOL READING II** **1 Unit**
2622902 Semester 2 Prerequisite: ESOL Teacher Recommendation

This course will help English Language Learners improve the reading and writing skills needed in core content area classes. This course may be taken in conjunction with ESOL supported content area classes that need additional reading skills for content mastery. Instruction is individualized or in small groups.

2622953 **ESOL STUDIES** **.5 Units**
Prerequisite: ESOL Teacher Recommendation (May be repeated)

This course is designed to help English Language Learners improve the study and communication skills necessary to complete required courses and prepare for college or employment. Instruction is individualized or in small groups and supports academic subjects that require homework completion. Instruction will include, but is not limited to, grammar practice, academic vocabulary, test taking strategies, class organizational skills, and classroom success strategies (note taking and summarization).

ESOL Supported Classes in English Language Arts, Math, Social Studies, Health, and Science **1 Unit**
Prerequisite: ESOL Teacher Recommendation
Course # same as mainstream class

ESOL support is offered in selected areas of English Language Arts, Math, Social Studies, Science and Ninth Grade Health. The purpose of this model is to assist the English Language Learners within the selected mainstreamed classes master the curriculum required for graduation.

FAMILY AND CONSUMER SCIENCES

0908951 Semester 1 **PATHWAY TO TEACHING CAREERS** **1 Unit**
0908952 Semester 2 Prerequisite: Child Development I and/or Human Relations recommended

Teaching is projected to be one of the fastest-growing occupations over the next several years and beyond. This course focuses on the general theory and practice of learning and teaching; the basic principles of educational psychology; the art of teaching; the planning and administration of educational activities; school safety and health issues; and the history of education. This pathway will be phased in over the next two years, with a Teaching Professions Internship offered in 2016-2017.

0908703 **CHILD DEVELOPMENT I** **.5 Units**
Prerequisite: None

Child Development I will provide students with the valuable knowledge and skills to prepare them for future parenting roles and child-related careers. Throughout the semester students will explore the various aspects of human development beginning with prenatal development and finishing with the third year of life. In addition, students will study the topics of childcare, parenting roles and styles, health and safety concerns and guidance techniques of children from infancy through the third year of life. Students will have the opportunity to participate in a parenting simulation using an infant simulator. This project helps students understand the implications of parenting in a modern society. An alternative project is available. Students interested in the human or health service career pathways are encouraged to enroll in this class. This would include, but not limited to, future teachers, social workers, and medical professionals.

0908753 **CHILD DEVELOPMENT II** **.5 Units**
Prerequisite: Child Development I

Child Development II starts off where Child Development I finishes. Throughout the semester the students will explore the various aspects of human development, beginning with three-year-olds and finishing with six-year-olds. Students will gain valuable knowledge and skills that will prepare them for future parenting roles and child-related careers. Additional topics will include child development theories, parenting roles, health concerns, safety, guidance, and the preschool child's stages of development. Students will gain the vital skills for stimulating, teaching, interacting with, and caring for children through a preschool environment. Students will be responsible for creating and implementing activities which facilitate learning and development of the pre-school aged child. ***NOTE: Student with a "B: average in Child Development I and Child Development II may receive college credit at St. Charles Community College through articulation into the Early Childhood Program.***

0908403 **HUMAN RELATIONS** **.5 Units**
Prerequisite: Grades 10-12

The Human Relations course will prepare students for future adult roles as well as provide them with information they can apply to their current stage in life. Topics of discussion and research will include effective communication and decision making skills, how to develop and maintain interpersonal relationships, human sexuality, conflict resolution techniques, strategies to balance the multiple roles and responsibilities in everyday life, how to create and maintain stable families, and effective parenting skills. Students will complete several independent and group projects throughout the semester. The information acquired in this class can enhance present and future personal relationships.

0908103 **CLOTHING AND TEXTILES I** **.5 Units**
Prerequisite: None

Clothing and Textiles I introduces students to the world of fashion through sewing construction. Studies will include clothing decisions, fabric & pattern selection, and sewing constructions techniques. Students will supply materials for required projects.

0908153 **CLOTHING AND TEXTILES II** **.5 Units**
Prerequisite: Clothing and Textiles I with "C" average recommended

Clothing and Textiles II provides students with strategies that build on construction skills learned in Clothing and Textiles I. Students construct several projects using a variety of fabrics, patterns, advanced techniques, and technology. Students will supply materials for several required projects.

0908203 **ADVANCED CLOTHING** **.5 Units**
Prerequisite: Clothing and Textiles II with teacher approval

Students will work with the teacher to develop an individualized plan of appropriate projects using a variety of specialty patterns, fabrics, and advanced technology. Students will explore the areas of entrepreneurship and career options. Students will supply materials for projects. This course may be repeated for further credit.

0908353 **FASHION DESIGN** **.5 Units**
Prerequisite: Grades 10-12

Fashion Design students will learn the dynamics of the fashion industry including a study of designers and historical clothing, design and apparel production, careers, and merchandising trends. Students will complete individual projects related to fashion design, construction, and marketing.

0908003 **FOODS AND NUTRITION I** **.5 Units**
Prerequisite: None

Foods and Nutrition I will evaluate individual eating habits and learn how to safely prepare nutritious foods. The primary focus will be preparation and storage of food items, safety and sanitation, equipment and measuring, and nutrition and food labels. Students will have lab experiences preparing fruits, vegetables, eggs, grains, dairy products, casseroles, cookies, and ground meat/poultry.

0908053 **FOODS AND NUTRITION II** **.5 Units**
Prerequisite: Foods and Nutrition I

Students in Foods and Nutrition II will evaluate their own eating habits as well as the eating habits of others. Labs in Foods and Nutrition II will build upon the prior knowledge and skills acquired in Foods and Nutrition I class. These lab experiences will include preparation of breads, sauces, soups, salads, appetizers, cakes and pastries, meat, seafood, poultry, candy, and special diets. Additionally, students will analyze if a career related to foods and nutrition would be a possible career path. Completion of Foods and Nutrition II can lead to accreditation in Nutrition, Food, and Wellness from the American Association of Family & Consumer Sciences (AAFCS).

0908803 **INTERNATIONAL CUISINE** **.5 Units**
Prerequisite: Foods and Nutrition I

Learn history and culture the fun way—through preparing the native foods of the world. International Cuisine builds and expands the knowledge and skills learned in Foods and Nutrition I. Students will develop an understanding of foods, traditions, and customs of other cultures and their own culture through projects and preparation of a variety of regional and cultural foods. Students will prepare foods from Latin America, South America, regions of the United States, various countries of Europe and the Mediterranean, Africa, Asia and the Middle East. Increase your culinary skills and try new and exciting foods from around the globe.

0908551 Semester 1 **CULINARY ARTS** **1 Unit**
0908552 Semester 2
Prerequisite: Foods and Nutrition I and II

Food prepared in this course will be from the perspective of a chef using professional techniques in the industry. The frequency and rigor of the lab experiences will be greatly increased. Culinary Arts is designed for students who wish to explore the areas of hospitality, culinary arts and food service management. Students will have ample opportunity to expand and practice food preparation techniques, knife skills, and acquire an extensive culinary vocabulary. This course is an introduction to all areas related to the hospitality & food service industry. Instructional areas include nutrition, safety and sanitation in the professional kitchen, purchasing and cost control, sales and service, job seeking skills, and food preparation and presentation. Students completing this course have

the opportunity to receive a certificate from the Missouri Restaurant Association that can be used to jumpstart a career in the field of culinary arts.

0908601 Semester 1 **CULINARY ARTS WORK EXPERIENCE** **1-2 Units**
0908602 Semester 2 Prerequisite: Grade 12; concurrent enrollment in Culinary Arts

Students receive on-the-job training in hospitality, food production or a food service related area of their choice. Jobs in these areas provide educational opportunities beyond the school environment by working on an approved job site during the afternoon or evening. One unit of credit is earned for working 10-19 hours each week. Two units of credit are earned for 20 or more hours worked each week. The amount of credit may be different each semester. This instructional program is planned, supervised, and evaluated by both the teacher-coordinator and employer. Students who use this opportunity to complete the work experience component of the Culinary Arts program will also receive a certificate qualifying them for college credit at various post-secondary culinary programs across the state of Missouri.

0908503 **HOUSING AND INTERIOR DESIGN** **.5 Units**
Prerequisite: None

This project-oriented course is designed to teach the basics of interior design, aesthetics of architectural and furniture styles, analysis of housing selection and floor plans, home furnishings and furniture arrangement, and the application of the elements and principles of design. The information learned in this class can be used for personal enhancement of present and future living environments. Housing and Interior Design students will learn to make responsible decisions to select, create, and maintain desirable living environments. Students will also be introduced to career pathways in interior design and related fields such as drafting and architectural design.

0908903 **FACS SENIOR LEADERSHIP** **.5 Units**
Prerequisite: Grade 12

Senior students acquire skills necessary for independent living after high school and a successful balance of career and family life. Topics will include: career planning and financial responsibility; interpersonal relationships; nutrition and wellness; meal preparation; clothing management and the student's future family and community involvement. Activities will focus on solving practical problems through various food labs, financial simulations, and use of available technology. Students will supply materials for required projects.

FINE ARTS

ART

0202001 Semester 1 **INTRODUCTION TO ART** **1 Unit**
0202002 Semester 2 This course satisfies the Fine Arts requirement for graduation.

Want to leave your mark in the 21st Century? Want to learn how to express yourself through art? Introduction to Art is a yearlong beginning course for all students that will inspire and empower you as a young artist. In this course, you will explore and experiment with multiple art forms using materials such as clay, paint, digital software and other media. You will take a leading role in your learning as you read visual texts, create artwork, connect to the world around you, respond to works of art, and present your creations. Growth will be measured through active participation, studio work, and portfolio production.

0202053 **CERAMICS I** **.5 Units**

Prerequisite: A passing grade in Introduction to Art

Ceramics I is an introductory three-dimensional studio course based entirely in the medium of clay. Students will develop and use ceramic hand-building methods, decorative surface techniques, and glazing and firing skills. Students will create original functional pieces and original fine art pieces. Students will analyze and critique artworks, discuss aesthetic issues, and understand how ceramic objects have been used in history across many cultures. Evaluation will be based on active class participation, written work, tests, and studio work.

0202103 **CERAMICS II** **.5 Units**

Prerequisite: A passing grade in Introduction to Art and Ceramics I
Note: A grade of C or better in Ceramics I is recommended.

Ceramics II is an upper level studio course that will build upon and extend skills developed in Ceramics I. Students will create original functional pieces and original non-functional pieces that will challenge their creativity. Students may develop hand-built, wheel-thrown and decorative surface techniques. Students will analyze and critique artworks, discuss aesthetic issues, and understand how ceramic objects have been used in history across many cultures. Evaluation will be based on active class participation, written work, tests, and studio work.

0202253 **DRAWING I** **.5 Units**

Prerequisite: A passing grade in Introduction to Art

Drawing I is an introductory studio course that develops technical skills in the use of different drawing media. Students will create original two-dimensional artworks based on drawing from observation, perspective, and personal communication of an idea. Students will analyze and critique artworks, discuss aesthetic issues, and understand how artworks have been used in history across many cultures. Evaluation will be based on active class participation, written work, tests, and studio work with an emphasis on student artwork.

0202303 **DRAWING II** **.5 Units**

Prerequisite: A passing grade in Introduction to Art and Drawing I
Note: A grade of C or better in Drawing I is recommended.

Drawing II is an upper level studio course that will build upon and extend skills developed in Drawing I. Students will experience a variety of media and subject matter in creating two-dimensional artworks. Students will be expected to apply drawing skills to achieve desired effects in chosen thematic and observational works. Students will analyze and critique artworks, discuss aesthetic issues, and understand how artworks have been used in history across many cultures. Evaluation will be based on active class participation, written work, tests, and studio work with an emphasis on student artwork.

0202153 **GRAPHIC DESIGN I** **.5 Units**

Prerequisite: A passing grade in Introduction to Art
Advanced Credit Program Possible

Graphic Design I is a course that explores visual communication through the use of digital media. Students will use the principles of design to develop technical and artistic skills using computer software such as Adobe Photoshop. Students will analyze and critique artworks, discuss aesthetic issues, and understand the origins of graphic design in the history of art. Evaluation will be based on active class participation, written work, tests, critiques and studio work with an emphasis on student artwork.

0202203 **GRAPHIC DESIGN II** **.5 Units**

Prerequisite: A passing grade in Introduction to Art and Graphic Design I
Note: A grade of C or better in Graphic Design I is recommended.
Advanced Credit Program Possible

Graphic Design II is an upper level studio course in which students will develop advance technical skill in the use of digital media, with software that may include Adobe Photoshop, Adobe Illustrator, InDesign or Flash. They will create original designs targeted for a mass audience and explore the communication of ideas. Students will analyze and critique design products, discuss aesthetic issues, and relate graphic works to current trends and past influences. Evaluation will be based on active class participation, written work, tests critiques and studio work with an emphasis on student artwork.

0202353 **PAINTING I** **.5 Units**

Prerequisite: A passing grade in Introduction to Art

Painting I is an introductory studio course that develops technical skills in the use of different painting media. Students will learn to express themselves through color theory and use a variety of painting techniques to create two-dimensional works. Work will focus on observational skills and be inspired by different historical periods. Students will analyze and critique artworks, discuss aesthetic issues, and understand how artworks have been used in history across many cultures. Evaluation will be based on active class participation, written work, tests, and studio work with an emphasis on student artwork.

0202403 **PAINTING II** **.5 Units**

Prerequisite: A passing grade in Introduction to Art and Painting I
Note: A grade of C or better in Painting I is recommended.

Painting II is an upper level studio course that builds upon experiences from Painting I that will enable students to paint compositions with a variety of media. Students will begin to develop their own personal painting style. Students will analyze and critique artworks, discuss aesthetic issues, and understand how artworks have been used in history across many cultures. Evaluation will be based on active class participation, written work, tests, and studio work with an emphasis on student artwork.

0202453 **PRINTMAKING I** **.5 Units**

Prerequisite: A passing grade in Introduction to Art

Printmaking I is an introductory studio course that develops technical skills in the use of different printmaking media and procedures. Students will explore monoprinting, relief, intaglio, and screen printing methods to produce prints on a variety of surfaces. Students will be expected to construct original and creative compositions utilizing drawing skills and design principles. Students will analyze and critique artworks, discuss aesthetic issues, and understand how artworks have been used in history across many cultures. Evaluation will be based on active class participation, written work, tests, critiques and studio work with an emphasis on student artwork.

0202503 **PRINTMAKING II** **.5 Units**

Prerequisite: A passing grade in Introduction to Art and Printmaking I
Note: A grade of C or better in Printmaking I is recommended.
Advanced Credit Program Possible

Printmaking II is an upper level studio course that builds upon skills from Printmaking I. Students will use different printmaking processes such as monoprinting, relief, intaglio, lithography and/or screen printing to create art works with various subjects. Students will create original and creative large scale compositions. They are expected to develop a body of work that is inventive and one that expresses a conceptual use of the printed image. Students will analyze and critique artworks, discuss aesthetic issues, relate prints to current trends in the field of printmaking, and understand how prints have been used in history across many cultures. Evaluation will be based on active class participation, written work, tests, critiques and studio work with an emphasis on student artwork.

0202553 **SCULPTURE I** **.5 Units**

Prerequisite: A passing grade in Introduction to Art

Sculpture I is an introductory studio course that develops technical skills in the use of different sculpture media such as plaster, clay, paper, wire, or found objects. Students will create original, three-dimensional artworks using modeling, carving, and assemblage. Students will explore historical influences on the evolution of sculpture. Students will analyze and critique artwork construction and discuss aesthetic issues. Evaluation will be based on active class participation, written work, tests, and studio work with an emphasis on student artwork.

0202603 **SCULPTURE II** **.5 Units**

Prerequisite: A passing grade in Introduction to Art and Sculpture I
Note: A grade of C or better in Sculpture I is recommended.

Sculpture II is an upper level studio course that builds upon skills from Sculpture I while allowing students to experience new sculptural techniques and media. Students will create three-dimensional art forms that express personal styles and/or themes. Students will explore historical influences on the evolution of sculpture. Students will analyze and critique artwork construction and discuss aesthetic issues. Evaluation will be based on active class participation, written work, tests, and studio work with an emphasis on student artwork.

0202711 Semester 1 **AP ART HISTORY** **1 Unit**
0202712 Semester 2

Prerequisite: Grades 11-12 strongly recommended /
Advanced Credit Program Possible.
Note: GPA 2.0+ recommended. Does not require Introduction to Art

Advanced Placement Art History is designed to give students the opportunity to discover, appreciate, and acquire knowledge of art history through the ages, from prehistory to contemporary times. This course enables highly motivated students to study college level art history by examining major forms of artistic expression from diverse cultures and understanding each of their contributions to the arts as a whole. Students are provided opportunities to critically analyze works of art in a variety of environments including actual and virtual. A variety of art media and styles will be studied as students look at architecture, manuscripts, painting, drawing, printmaking and sculpture, as a reflection of a given civilization and time period. Students will investigate how various art pieces connect to historical events, how artistic movements influence each other, what is aesthetically pleasing to the eye, and their contexts within social, political and religious themes. This class will give students the opportunity to use their prior knowledge of history, geography, politics, religion, languages, literature, and the visual arts. This course will prepare students to take the AP Art History exam. This course satisfies the fine arts requirement for graduation. Evaluation will be based on written work, research, class participation and tests.

0202801 Semester 1 **AP STUDIO ART** **1 Unit**
0202802 Semester 2

Prerequisite:

- Grades 11 – 12
- Passing grade of C or better in Introduction to Art
- Passing grade of C or better in Drawing I & II
- Enrollment by Invitation of the Art Department, approved by Department Chair;
- Additional Studio Courses strongly recommended

Note: Student must fill out application and fulfill requirements to be invited by Art Department

The AP Studio Art course is designed for the serious art student who is interested in intensive art production for the purpose of compiling an art portfolio in preparation for future art studies or college entrance. The portfolio may be used to present during portfolio reviews for admission and scholarship opportunities or to obtain AP credit.

The AP program in Studio Art enables highly motivated students to perform at the college level while still in high school. Students will be challenged to refine their artistic skills and develop mastery of composition. Emphasis will be placed on the production of a volume of quality pieces of artwork. AP Studio Art students will submit completed

portfolios at the end of the year with the opportunity to apply for AP credit.

The AP Studio Art Portfolio exam is a performance-based exam rather than a written exam and will require students to demonstrate quality, breadth, and an in-depth engagement in the process of making art. The AP Studio Art student will record portfolio work through a digital slide portfolio that will be submitted for AP review. Students will also be required to write short reflective statements to explain the thought process behind the artwork.

AP Studio Art requires a significant commitment of time and effort, both during class time and outside of the school day. Students interested in this course should be highly motivated and be willing to devote considerable time and effort to the study of art and the development of higher-level skills. Students will be placed in AP Studio Art I or II based on previous studio course experience and performance, personal goals, teacher recommendations, and portfolio review.

MUSIC

1211001 Semester 1 **CHORUS** **1 Unit**
1211002 Semester 2 Prerequisite: None

Chorus is an elective introductory performing class which is available to all students regardless of prior experience. Fundamental vocal techniques, music reading, unison, and part singing are emphasized by group rehearsal and written assignments. A variety of music styles are rehearsed. Students will be evaluated on singing ability, active class participation, written work, tests, and performances. Vocal grouping will be determined each year by the director according to class enrollment.

1211051 Semester 1 **TREBLE CHOIR/CHORALE (Honors available Course # 121106)** **1 Unit**
1211052 Semester 2 Prerequisite: Audition or recommendation of a former director
Teacher recommendation for honors: grade 10, 11 or 12

Treble Choir is a choral ensemble for female voices. Students are auditioned for membership or may be placed by recommendation of a former director. Members are expected to demonstrate both group and individual progress in tone production, music reading, and vocal independence. The class will have several performances which may involve school concerts, competitions, and/or festivals. Music selections represent a wide variety of styles and periods, mostly voiced in three parts. Music will include pieces which are a cappella and/or in a foreign language and selections comparable to state required listings. Students will be evaluated on singing ability, active class participation, written work, tests, and performances. Students will need to complete additional requirements for honors credit.

1211101 Semester 1 **CONCERT CHOIR (Honors available Course # 121111)** **1 Unit**
1211102 Semester 2 Prerequisite: Audition or recommendation of a former director
Teacher recommendation for honors: grade 10, 11 or 12

Concert Choir is the primary choral group, participating in four to six major performances each year. Students are auditioned and teacher's approval is required. Class enrollment must maintain proper vocal balance. Concert Choir performs music in standard parts which represent a variety of periods and styles. Selections will include some which are a cappella and in a foreign language and music comparable to state required listings. Students will further develop their abilities in tone production, independence of voice parts, and appropriate interpretation. As a part of public performances, Concert Choir participates in a festival and/or enters state choral contest. Student grades will be based on singing ability, active class participation, written work, tests, and performances. Vocal grouping will be determined each year by the director according to class enrollment. Students will need to complete additional requirements for honors credit.

1211151 Semester 1 **CHAMBER CHOIR (Honors available Course # 121116)** **1 Unit**
1211152 Semester 2
Prerequisite: Enrollment in an additional choir during junior or senior year and teacher recommendation through audition
Teacher recommendation for honors: grade 10, 11 or 12

This select ensemble is chosen from students who are accepted based on audition. The students should be enrolled in another choral ensemble either their junior or senior year in addition to Chamber Choir. Balanced voice parts must be maintained. Chamber Choir performs music in standard parts which represent a variety of periods and styles. Selections will include some which are *a cappella* and in a foreign language and music comparable to state required listings. This group performs challenging chamber ensemble repertoire for six to eight performance and contest related activities during the year. Additionally, the students are required to meet outside the normal class time to rehearse at the director's discretion. Grades will be based on singing ability, active class participation, written work, tests, and performances. Vocal grouping will be determined each year by the director according to class enrollment. Students will need to complete additional requirements for honors credit.

1211201 Semester 1 **INTRODUCTION TO MUSIC APPRECIATION** **1 Unit**
1211202 Semester 2
Prerequisite: None

This class surveys historical and current musical styles by studying the role of music in society, the influential composers who have shaped music throughout the world, the development of musical forms and how music is integrated into our daily lives. Students will also apply their knowledge of music notation, score reading and performance by learning the fundamentals of playing an instrument. Evaluation will be based on written assignments and tests, class participation, playing tests and assessment of listening skills which will be enhanced through guided group listening. This course satisfies the Fine Arts requirement for graduation.

1211261 Semester 1 **AP MUSIC THEORY** **1 Unit**
1211262 Semester 2
Prerequisite: Grade 10-12; music background in fundamentals (treble and bass clef notation, rhythmic notation, etc.) and teacher recommendation

Music Theory is a course that emphasizes the rules and practices of music theory, composition, ear training, sight singing and music analysis. While the main focus is placed on music of the Common Practice Period (1600-1750), music of other stylistic periods will also be studied. Music Theory highlights rhythmic and pitch notation, relation of staff notation to the keyboard, construction and analysis of chords and chord progressions, four-part writing, recognition of musical forms, sight singing, dictation, and aural training. Students will be evaluated on homework, tests, aural and reading skills.

Music Theory requires effort on the part of the student both in and out of class. Students should be self-motivated and willing to dedicate the focus necessary for personal advancement. This course will prepare students to take the AP Music Theory exam.

1211301 Semester 1 **CONCERT BAND** **1 Unit**
1211302 Semester 2

The Concert Band will present two public concerts a year and usually competes in the state instrumental music contest. The Concert Band will rehearse a variety of music styles and play selections comparable to state high school lists of required pieces. Concert Band will be divided into two groups creating the Basketball Pep Bands, and each band will perform at half of the games.

1211351 Semester 1
1211352 Semester 2

SYMPHONIC BAND/WIND ENSEMBLE **1 Unit**
(Honors available Course # 121136)
Prerequisite: Selection by audition; for honors: grade 10-12; conference with department chair

Students selected for the Symphonic Band/Wind Ensemble will need to demonstrate a high degree of proficiency on a selected instrument, be able to perform concert scales from memory, demonstrate competent mastery of range, tone, and sight reading, and perform a prepared solo. The Symphonic Band/Wind Ensemble members will rehearse a variety of musical styles and play music comparable to selections on the state high school lists of required pieces. Symphonic Band will be divided into two groups creating the Basketball Pep Bands, and each band will perform at half of the games. Students will need to complete additional requirements for honors credit.

1211401 Semester 1
1211402 Semester 2

JAZZ ENSEMBLE (Honors available Course # 121141) **1 Unit**
Prerequisite: Selection by audition; for honors: grade 10-12; conference with department chair

This auditioned *ensemble* performs standard and contemporary jazz literature and exposes students to improvisation. Students enrolled are expected to participate in concert band with the exception of instruments such as guitar and keyboard. Class size will be limited to balance the instrumentation required for jazz arrangements. Jazz Ensemble will present at least two public performances a year. It may also enter competitions, play for school and/or district activities, and perform at community functions. Students will need to complete additional requirements for honors credit.

1211451 Semester 1
1211452 Semester 2

PERCUSSION CLASS **1 Unit**
Prerequisite: Proficiency on instrument and teacher recommendation

This class is available for all types of percussionists: mallet, cymbals, tympani, snare and bass drum. The group will rehearse music arranged specifically for percussion, perform for the public with concert groups and may enter solo and ensemble competition. Students should be able to demonstrate proficiency on percussion instruments to earn teacher approval to enroll. The percussionists will be divided into two groups creating the Basketball Pep Band and each band will perform at half of the games.

THEATRE

0505613

ACTOR'S STUDIO I **.5 Units**
Prerequisite: None

This is a great class for students wanting to get involved in or learn more about drama and acting. Students will be introduced to acting through physical and vocal exercises. Students will explore character development through improvisation, monologues and duet scenes. The course emphasis is on activities that require the students to actively apply good acting techniques. This course is designed to develop actors' self-awareness and self-confidence as they develop their performances. All improvisations, monologues and scenes are presented in class.

0505663

ACTOR'S STUDIO II **.5 Units**
Prerequisite: Actor's Studio I

Students will further develop their knowledge of basic dramatic scene structure and characterization by exploring improvisations, monologues, duet scenes and ensemble performances. Some of the major units include advanced scene study, advanced character study and script analysis, student written scenes, and directing. Students will focus on specific acting techniques and individual growth through self-reflection and goal setting. All improvisations, monologues and scenes are presented in class.

0505813 **TECHNICAL THEATRE I** **.5 Units**
Prerequisite: None

This is an excellent course for students to earn their fine art credit in a hands-on and fun environment. Students will study the skills associated with set construction, scene shop maintenance, and painting–through hands on activities in class. The basics of technical rigging, stage lighting and sound are also introduced. Students will be required to participate in safety training for all areas of technical theatre. Students will also learn the basics of make-up application and costume development. This is a hands-on course and students will participate in practical applications of the methods used in all of these technical areas.

0505713 **TECHNICAL THEATRE II** **.5 Units**
Prerequisite: Technical Theatre I

Students will study the skills associated with design in technical theatre. Students will learn set design, lighting design, audio design, and costume / make-up design and implement their designs through building of mini-models and hands on application techniques. Students will study several plays as context for their designs and will create designs in all of these technical areas for at least one play. Students will also produce a technical theatre portfolio as part of this course. This is an excellent course for students who want more hands-on learning activities or advanced designing experience.

0505763 **INTENSIFIED THEATRE** **.5 Units**
Prerequisite: Actor's Studio I and II or Technical Theatre I and II; teacher approval

This course is designed to be an advanced independent study of theatrical concepts. Each student will declare an individual focus area and learning goals within that focus area. Based on their goals, and with guidance from the teacher, students will design their course of study for their focus area. Focus areas include: Playwriting, Stage Management, Directing, Theatre History, Advanced Acting, and Production Design. Students will research advanced concepts within their focus area. Students will present a portfolio for assessment.

GIFTED AND TALENTED

2095101 Semester 1 **GIFTED-SELF DIRECTED LEARNING-MASTERY HONORS** **1 Unit**
2095102 Semester 2
Prerequisite: Meet state guidelines for and admission into the Gifted Program and approval of the gifted facilitator

Mastery Honors provides the opportunity for students to explore or expand their skills and learning interests such as independent AP study or online college dual enrollment. Students are expected to select, pursue, and complete an in depth study of professional quality. Students will develop an comprehensive proposal for this study and acquire a mentor to guide them through the area of study. In addition to preparing the study, students are expected to participate in group and individual activities focused on communication, critical thinking, personal growth, and creativity. Students may repeat this course. Students may take Gifted-Self Directed Learning concurrently with this Mastery Honors. This course is designed to meet the unique and diverse intellectual, emotional, and social needs of gifted students.

2095001 Semester 1 **GIFTED-SELF DIRECTED LEARNING** **.5 per sem.**
2095002 Semester 2
Prerequisite: Meet state guidelines for admission into the Gifted program

Self-Directed Learning provides the opportunity for students to explore or expand their skills and learning interests. –This course may be taken for more than one semester since the project and skills are updated each semester with the student choices of topics. Students are expected to select, pursue, and complete an in depth study of professional quality in an area of interest. In addition to preparing the study, students are expected to participate in group and individual activities focused on research skills, communication, critical thinking, personal

growth, and creativity. Mastery Honors may be taken concurrently with this course. This course is designed to meet the unique and diverse intellectual, emotional, and social needs of gifted students.

INDUSTRIAL TECHNOLOGY

1009101 Semester 1 **RESIDENTIAL ARCHITECTURE** **1 Unit**
1009102 Semester 2 Prerequisite: None

Residential Architecture provides the student with a unique opportunity to learn how to properly develop house plans which can be used for college portfolio use. Hand sketching, manual drafting and automated drafting will be taught. Some of the areas covered include: building and site selection, interior and exterior styling, individual room planning, and fundamental construction methods. Emphasis is also placed on career exploration and new technological developments in architecture. This course is especially beneficial to students interested in becoming an architect, design engineer, builder, decorator, draftsman, construction worker, or homeowner. *Qualifies for articulated Associate of Applied Science (A.A.S.) credit at St. Charles Community College (**not** A.A. transfer credit).*

1009001 Semester 1 **COMPUTER AIDED DRAFTING I (CAD)** **1 Unit**
1009002 Semester 2 Prerequisite: None

CAD I is a beginning course which provides students with an opportunity to develop skills in making and using technical drawings. Students begin with the basics of equipment and material usage and proceed through fundamental drawing techniques and procedures. Drawing emphasis will focus on CAD (computer aided drafting) with many of the student drawings being produced using CAD equipment. The student should have a good background in basic mathematics. This course is especially beneficial to students interested in enrolling in the Project Lead the Way Engineering courses, or careers in designing, engineering, drafting, commercial art, graphic arts, production, and construction careers. *Qualifies for articulated Associate of Applied Science (A.A.S.) credit at St. Charles Community College (**not** A.A. transfer credit).*

1009051 Semester 1 **COMPUTER AIDED DRAFTING II (CAD)** **1 Unit**
1009052 Semester 2 Prerequisite: Successful completion of CAD I or Introduction to Engineering Design with a grade of "C" or better recommended

CAD II combines a continuation of the fundamental concepts developed in CAD I with additional concentrated areas of engineering drawing, reverse engineering, and 3D design projects. CAD Auto Desk Inventor will be used throughout the course for the development of student drawings. Provisions are made for individual specialization in selected areas as time permits. This course is especially beneficial to those students interested in engineering, designing, drafting, and computer drawing.

1009151 Semester 1 **WOODWORKING I** **1 Unit**
1009152 Semester 2 Prerequisite: None

Woodworking I will provide students safe exposure to household equipment such as hand tools, power tools and machines, such as table saws, routers, planers and radial arm saws. Students will also study related information which will include: project planning, properties of wood, wood joints, fasteners, wood finishes, and career opportunities. This course is especially beneficial to students interested in building trades, wood products industries, and furniture construction careers or becoming a do-it-yourself homeowner. Woodworking I is an introductory course, no prior knowledge of woodworking is necessary. This course fulfills one credit in the practical arts category.

1009201 Semester 1 **WOODWORKING II** **1 Unit**
1009202 Semester 2 Prerequisite: Successful completion of Woodworking I with a grade of "C" or better required

Woodworking II is designed to provide the student with an opportunity for studying wood technology, furniture design, and furniture construction as they build an individualized project. Emphasis will be on the development of skills in machine operations, wood fastening, assembly, and finishing procedures. This course is especially beneficial to students interested in furniture and cabinet making, design, engineering, construction, and production careers.

MATH

1110181 Semester 1 **ALGEBRA IA – NCAA-approved** **1 Unit**
1110182 Semester 2 Prerequisite: Refer to Algebra I

This course develops an understanding of algebraic concepts. Students will learn to think logically and symbolically. Using experimentation and reasoning, students will develop the knowledge necessary to create and manipulate symbolic rules. Topics covered will include, but are not limited to: patterns, ratios and proportions and linear equations and inequalities. This course is equivalent to the first semester of Algebra I.

1110201 Semester 1 **ALGEBRA IB – NCAA-approved** **1 Unit**
1110202 Semester 2 Prerequisite: Algebra IA

This course develops an understanding of algebraic concepts. Students will learn to think logically and symbolically. Using experimentation and reasoning, students will develop the knowledge necessary to create and manipulate symbolic rules. Topics covered will include, but are not limited to: patterns, ratios and proportions, linear equations and inequalities and quadratic and exponential models. This course is equivalent to the second semester of Algebra I.

1110251 Semester 1 **ALGEBRA I – NCAA-approved** **1 Unit**
1110252 Semester 2 Prerequisite:
Students that meet any 2 of the 3 following criteria are placed in Algebra I while those that do not are placed in Algebra IA. Completion of 8th Grade Math with a grade of 70% or higher; Math MAP Scale Score 685 or higher; teacher recommendation.

This course develops an understanding of algebraic concepts. Students will learn to think logically and symbolically. Using experimentation and reasoning, students will develop the knowledge necessary to create and manipulate symbolic rules. Topics covered will include, but are not limited to: patterns, ratios and proportions, linear equations and inequalities and quadratic and exponential models.

1110301 Semester 1 **GEOMETRY – NCAA-approved** **1 Unit**
1110302 Semester 2 Prerequisite: Algebra I or equivalent

This course is designed for the student who wishes to continue the study of mathematics beyond the beginning algebra level. Logical reasoning and real-world applications will be examined throughout the course.

1110351 Semester 1 **GEOMETRY HONORS – NCAA-approved** **1 Unit**
1110352 Semester 2 Prerequisite: Algebra I, must meet 9th grade Honors criteria

This course is designed for the advanced student who wishes to continue the study of mathematics beyond the Algebra level. Honors Geometry includes critical thinking, formal logic, exploration exercises, and real-life applications.

1110651 Semester 1 **INTERMEDIATE ALGEBRA** **1 Unit**
1110652 Semester 2 Prerequisite: Teacher recommendation

This course is designed to reinforce basic algebraic concepts and enhance the students' understanding of mathematical applications. An introduction of Algebra 2 concepts will ready the student for Algebra 2 or for a post-secondary Intermediate Algebra course. Technology will be integrated throughout the course.

1110401 Semester 1 **ALGEBRA II – NCAA-approved** **1 Unit**
1110402 Semester 2 Prerequisite: Geometry

This course is designed for the student who wishes to continue the study of mathematics beyond geometry and is essential for students planning to attend college. Investigation of real-world applications will be incorporated throughout the course.

1110451 Semester 1 **ALGEBRA II HONORS – NCAA-approved** **1 Unit**
1110452 Semester 2 Prerequisite: Geometry, meets Honors criteria (Completion of Algebra with a grade of 80% or higher; Standardized test score plus Geometry Semester average is 175 minimum)

This course is designed for the student who wishes to take a more rigorous approach to the study of advanced Algebra. Technology and investigation of real-world applications will be incorporated throughout the course.

1110431 Semester 1 **ALGEBRA III – NCAA-approved** **1 Unit**
1110432 Semester 2 Prerequisite: Teacher recommendation following passing grade in Algebra II.

This course will enhance the higher level thinking skills developed in Algebra II through a more in-depth study of those concepts and exploration of some pre-calculus concepts. Students will be challenged to increase their understanding of algebraic, graphical and numerical methods to analyze, translate and solve quadratic, polynomial, rational, exponential and logarithmic functions and/or relations. Modeling real world situations is an important part of the course.

1110553 **STATISTICS – NCAA-approved** **.5 Units**
Prerequisite: Concurrent enrollment or completion of Algebra II or Senior who has successfully completed Intermediate Algebra.

This course is an introduction to elementary statistics including a wide variety of applications. It is appropriate for many disciplines such as: medicine, psychology, business, computer science, education, agriculture, and engineering**. TI-84 or higher Graphing Calculator is required.**

1110561 Semester 1 **AP STATISTICS – NCAA-approved** **1 Unit**
1110562 Semester 2 Prerequisite: Algebra II or concurrent with Honors Algebra II and teacher recommendation.

Students will study the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The four broad conceptual themes are: exploring data, planning study, anticipating patterns, and statistical inference.

TI-84 or higher Graphing Calculator is required. This is an Advanced Placement course that prepares the student to take the AP Statistics exam. Advanced credit, when available.

1110753 **TRIGONOMETRY HONORS – NCAA-approved** **.5 Units**
Prerequisite: Algebra II and teacher recommendation

The study of Trigonometry and its applications prepares students for a wide variety of career choices. This course combined with Math Analysis builds a strong foundation for future study in Calculus.

1110503 **MATH ANALYSIS HONORS – NCAA-approved** **.5 Units**
Prerequisite: Algebra II and teacher recommendation

This course focuses on functional analysis through the integration of algebraic and geometric concepts. Math Analysis combined with Trigonometry builds a strong foundation for future study in Calculus.

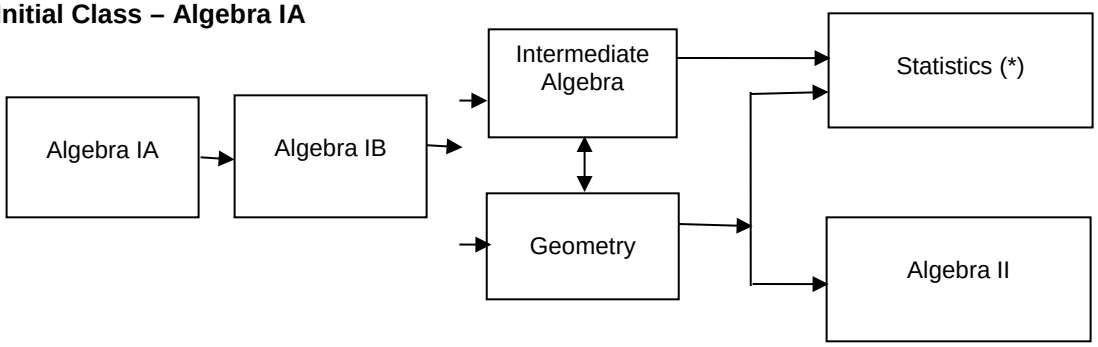
1110601 Semester 1 **AP CALCULUS AB – NCAA-approved** **1 Unit**
1110602 Semester 2
Prerequisite: Trigonometry Honors and Math Analysis Honors

This course is a college-level course with many applications in engineering and the sciences. TI-84 or higher graphing calculator is required. Topics include: limits, derivatives and integration of a wide variety of functions, and applications of differentiation and integration. This is an Advanced Placement course that prepares the student to take the AP Calculus AB exam. Advanced credit, when available. Most universities consider this essentially equivalent to Calculus 1.

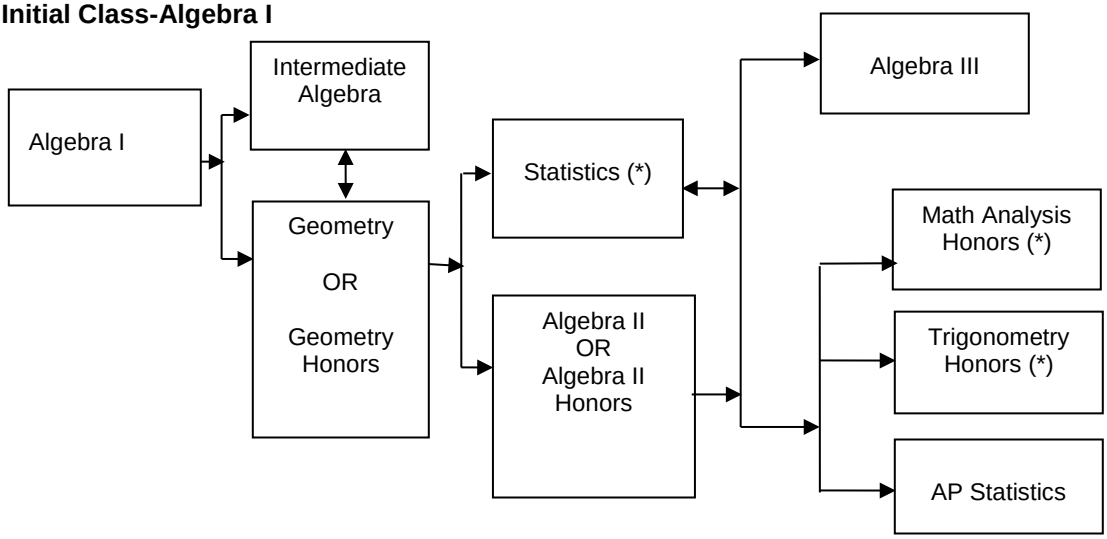
1110611 Semester 1 **AP CALCULUS BC – NCAA-approved** **1 Unit**
1110612 Semester 2
Prerequisite: Trigonometry Honors and Math Analysis Honors
(Grade of "A" or "B" recommended)

This course is an extension of AP Calculus AB and addresses the same topics at an accelerated (nearly college-paced) rate along with additional topics such as indeterminate forms, advanced techniques of integration, and a detailed study of sequences and series. TI-84 or higher graphing calculator is required. This is an Advanced Placement course that prepares the student to take the AP Calculus BC exam. Advanced credit, when available. Most universities consider this essentially equivalent to Calculus 1 and Calculus 2.

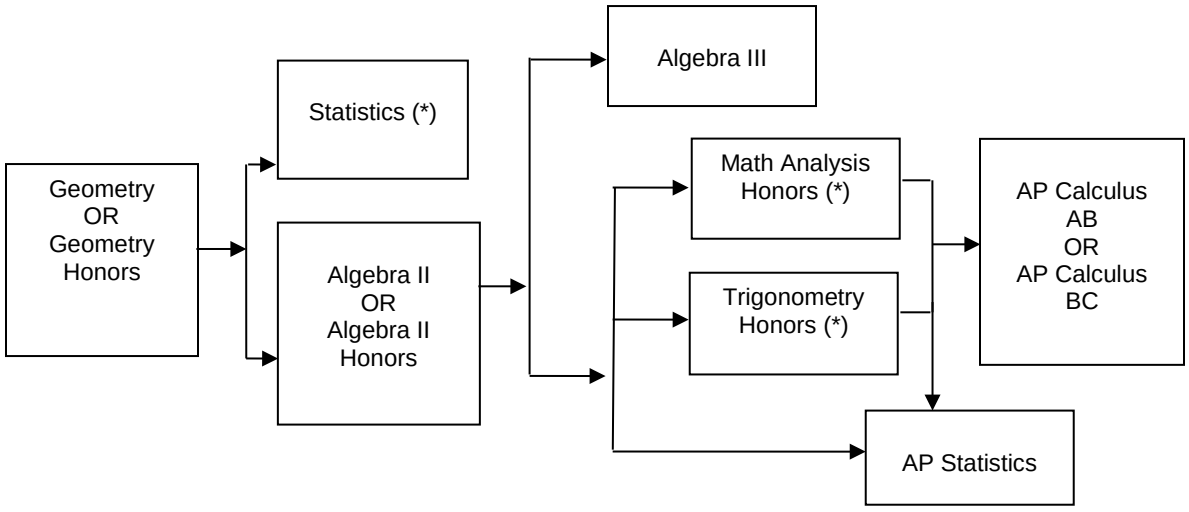
Initial Class – Algebra IA



Initial Class-Algebra I



Initial Class-Geometry or Honors Geometry



(*) Semester Course

NOTE: Students must progress forward according to the arrows.

PHYSICAL EDUCATION

0807003 **PERSONAL LIFETIME FITNESS (Grade 9 Physical Education)** **.5 Units**
(meets ½ the Physical Education requirement for graduation)
Prerequisite: Required for Grade 9

This course will provide the opportunity to develop and maintain fitness for a lifetime of wellness. Fitness concepts and components will be emphasized as the student participates in a wide variety of physical activities (fitness assessment and evaluation, individual sports, team sports, and other activities). *This is a required class for graduation, and students may not enroll in elective P.E. classes without successful completion.*

0807803 **NINTH GRADE HEALTH** **.5 Units**
Prerequisite: Required for Grade 9

This course is designed to engage students in activities that foster the development of each individual's physical, mental, and emotional well-being leading to the adoption of effective health behaviors. A student-centered approach used in this course provides students the opportunity for accepting personal responsibility for a healthy, active lifestyle throughout their lifetime. This course fulfills the 0.5 Health requirement for graduation. *NOTE: This course contains* a *unit on human sexuality. Missouri State statute (07.015) gives parents the right to remove their student from this portion of the course. Parents should contact the student's teacher if this option is chosen.*

0807053 **FITNESS FOR LIFE** **.5 Units**
(Meets second ½ credit for physical education requirement for graduation)
Prerequisite: Pass Personal Lifetime Fitness, Grade 10-12

Fit for Life is designed to provide students with the knowledge and skills that are essential for creating a healthy lifestyle. In this class, students will participate in various low-impact resistance exercises designed to tone, stretch, strengthen, and sculpt muscles to improve body composition and fitness. Areas may include but are not limited to fitness testing, goal setting, circuit training, weight training, walking, jogging, yoga, interval training, stretching, various low-impact competitions, nutrition analysis and planning, and current event research.

0807153 **BASKETBALL/SOFTBALL/ FIELD SPORTS** **.5 Units**
(meets second ½ credit for physical education requirement for graduation)
Prerequisite: Pass Personal Lifetime Fitness, Grade 10-12

Through the participation in several sports, students will gain the knowledge necessary to become an educated participant and spectator. The involvement in specific sports will provide an atmosphere that is enjoyable for the participants, promotes cooperation among peers and develops an appreciation for the degree of fitness necessary to participate. Games and skill activities will be designed in a manner that students can achieve success in individual and team play.

0807203 **VOLLEYBALL/TENNIS/ BADMINTON** **.5 Units**
(meets second ½ credit for physical education requirement for graduation)
Prerequisite: Pass Personal Lifetime Fitness, Grade 10-12

Through the participation in several sports, students will gain the knowledge necessary to become an educated participant and spectator. The involvement in specific sports will provide an atmosphere that is enjoyable to the participants, promotes cooperation among peers and develops an appreciation for the degree of fitness necessary to participate. Games and skill activities will be designed in a manner that students can achieve success in individual and team play.

0807253 **WEIGHT TRAINING AND CONDITIONING I** **.5 Units**
(meets second ½ credit for physical education requirement for graduation)
Prerequisite: Pass Personal Lifetime Fitness, Grade 10-12

This course will provide an introduction to weight training with an emphasis on student participation. The student will be presented with the proper technique for a variety of weight training movements with an emphasis on learning proper movement rather than strength development. Grades will be determined through participation, written tests, and the completion of a workout journal/notebook.

0807303 **WEIGHT TRAINING AND CONDITIONING II** **.5 Units**
Prerequisite: Weight Training and Conditioning I with a grade of "C" or better, with Department approval, Grade 10-12

This course has two main objectives: development of an understanding of weight training as a lifetime physical activity and development of the skills necessary for the proper performance of strength training movements. The student will learn to design and implement their own individual work-out and keep track of their progress by keeping a required workout journal/ notebook. Grades are determined through participation in class, written tests, and completion of their workout journal/notebook.

0807333 **WEIGHT TRAINING AND CONDITIONING III** **.5 Units**
Prerequisite: Weight Training and Conditioning II with a grade of "C" or better, with Department approval, Grade 11-12

This course has the following objectives: to continue the development of the individual workout plan designed in Weight Training II and to continue the progress toward the individual's strength and fitness goals. Students will identify the different muscles and muscle groups that are trained by the various exercises that are performed during the class. Grades are to be determined through participation, written tests, and their individual work-out journal/log.

0807343 **WEIGHT TRAINING AND CONDITIONING IV** **.5 Units**
Prerequisite: Weight Training and Conditioning III with a grade of "C" or better, with Department approval, Grade 11-12

This course has the following objectives: to continue the development of the individual's knowledge, strength, and cardiovascular endurance developed in the previous weight training courses. Students will develop knowledge, understanding and utilization of body composition, strength production, cardiovascular fitness, sport/activity specificity, and injury prevention and rehabilitation. Discussions will be held concerning current trends in strength and conditioning and the use of ergonomic aids as they apply to weight training. Grades will be determined through participation, written tests, and a completed workout journal/notebook.

0807353 **DRIVER'S EDUCATION/FIRST AID SAFETY** **.5 Units**
This course cannot be used for a required physical education credit; elective credit only
Prerequisite: Must turn 15 prior to end of semester enrolled

This class provides familiarization with state driving laws, rules, and regulations by using the Missouri Driver's Guide. Students will learn basic defensive driver concepts, the responsibilities of being a vehicle owner/ operator (including maintenance and insurance information), and safe versus unsafe driving conditions as well as the effects of alcohol/drugs on driving. Knowledge and practice of basic first aid procedures, including CPR, will be addressed through this course. *Students have the option of participating for a fee in an instructional driving experience.*

0807453 **OUTDOOR EDUCATION I** **.5 Units**

This course cannot be used for a required physical education credit; elective credit only
Prerequisite: Pass Personal Lifetime Fitness, Grade 10-12

This course will provide basic information on hunter ethics and tradition, hunting seasons, regulations, strategies, hunter safety course, proper gun handling, firearms and safety, outdoor emergencies and survival skills, and an awareness of Missouri's outdoors. Students will be participating in some outdoor activities.

0807503 **OUTDOOR EDUCATION II** **.5 Units**

This course cannot be used for a required physical education credit; elective credit only
Prerequisite: Pass Personal Lifetime Fitness, Grade 10-12

This course will provide basic information about different types of fishing, fishing equipment, skills of casting, fish identification, camping and hiking, regulations and responsibilities of the fisherman, map and compass, archery, boating/safety, water sports, outdoor emergencies and survival skills, and an awareness of Missouri's outdoors. Students will be participating in some outdoor activities.

0807703 **SPORTS ENHANCEMENT** **.5 Units**

Prerequisite: Pass Personal Lifetime Fitness, Grade 10-12

This course is designed to *increase athletic performance* on the playing field by improving linear speed, acceleration and deceleration, quickness, multi-directional speed and agility, strength, explosive power, and flexibility, along with mental and leadership skills and proper sports nutrition—all essential components of peak athletic performance. This course will also look at the NCAA rules, recruiting guidelines, and college selection based on the needs of the student-athlete. Careers in the fitness area will also be considered.

0807853 **TEEN HEALTH AND WELLNESS** **.5 Units**

This course cannot be used for a required physical education credit; elective credit only
Prerequisite: Pass 9th Grade Health, Grade 11-12

This class focuses on researching specific health issues and/or emerging trends in health and wellness, and is offered as an elective for juniors and seniors. It will explore current health careers and trends as related to the teenage student. Students will gain awareness that health is not just the absence of disease but the positive state of physical, mental, and social well-being that promotes wellness. Topics will include adolescent mental health, communicable diseases, prevention behaviors, substance abuse and other current issues that affect every day teen living.

Project Lead the Way (PLTW)
PRE-ENGINEERING, BIOMEDICAL SCIENCES AND COMPUTER SCIENCE PROGRAMS

1009501 Semester 1
1009502 Semester 2

INTRODUCTION TO ENGINEERING DESIGN **1 Unit**

Prerequisite: Successful completion of pre-algebra/algebra or enrolled in algebra or higher course, or teacher recommendation.
Qualifies for Honors credit when a 6 or higher (9 maximum) is earned on the PLTW final exam. Grades 9-12

This is a foundation course in the pre-engineering Project Lead the Way (PLTW) curriculum sequence that offers a dynamic high school program providing students with real-world learning and hands-on experience. Students interested in engineering, biomechanics, aeronautics, and other applied math and science arenas will discover PLTW is an exciting portal into these industries. The major focus of the course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation. Students use 3D solid modeling software to help them design solutions to solve proposed problems and learn how to document their work and communicate solutions to peers and members of the professional community.

1009551 Semester 1
1009552 Semester 2

PRINCIPLES OF ENGINEERING **1 Unit**

Prerequisite: Successful completion of Introduction to Engineering Design
Note: A grade of "C" or better in Introduction to Engineering Design recommended or teacher recommendation;
Qualifies for Honors credit when a 6 or higher (9 maximum) is earned on the PLTW final exam. Grades 10-12

This is a foundation course in the pre-engineering Project Lead the Way (PLTW) curriculum sequence that offers a dynamic high school program providing students with real-world learning and hands-on experience. Students interested in engineering, biomechanics, aeronautics, and other applied math and science arenas will discover PLTW is an exciting portal into these industries. This survey course of engineering exposes students to major concepts they will encounter in a postsecondary engineering course of study. Students employ engineering and scientific concepts in the solution of engineering design problems. They develop problem solving skills and apply their knowledge of research and design to create solutions to various challenges, documenting their work and communicating solutions to peers and members of the professional community.

1009601 Semester 1
1009602 Semester 2

DIGITAL ELECTRONICS **1 Unit**

Prerequisite: Successful completion of Introduction to Engineering Design and Principles of Engineering
Note: A grade of "C" or better in prerequisites recommended or teacher recommendation
Qualifies for Honors credit when a 6 or higher (9 maximum) is earned on the PLTW final exam. Grades 11-12

This is a specialized course in the pre-engineering PLTW curriculum sequence that offers a dynamic high school program providing students with real-world learning and hands-on experience. Students interested in engineering, biomechanics, aeronautics, and other applied math and science arenas will discover PLTW is an exciting portal into these industries. Digital electronics is the foundation of all modern electronic devices such as cellular phones, MP3 players, laptop computers, digital cameras and high-definition televisions. The major focus of the digital electronics course is to expose students to the process of combinational and sequential logic design, teamwork, communication methods, engineering standards and technical documentation. This course is designed for 10th, 11th and 12th grade students.

1009651 Semester 1
1009652 Semester 2

ENGINEERING DESIGN AND DEVELOPMENT **1 Unit**

Prerequisite: Successful completions of Introduction to Engineering Design, Principles of Engineering and Digital Electronics
Note: A grade of "C" or better in prerequisites recommended or teacher recommendation
Qualifies for Honors credit when a 6 or higher (9 maximum) is earned on the PLTW final exam.

In this capstone course, students work in teams to design and develop an original solution to a valid open-ended technical problem by applying the engineering design process. Students perform research to choose, validate, and justify a technical problem. After carefully defining the problem, teams design, build, and test their solutions while working closely with industry professionals who provide mentoring opportunities. Finally, student teams present and defend their original solution to an outside panel. This course is appropriate for 12th grade students.

1312321 Semester 1
1312322 Semester 2

PRINCIPLES OF BIOMEDICAL SCIENCES – NCAA-approved **1 Unit**

Prerequisite: Concurrent enrollment in or successful completion of Biology or Biology Pre-AP and successful completion of Pre-Algebra/Algebra or enrolled in Algebra or higher.
Note: Successful completion of this course earns a science credit.
Qualifies for Honors credit when a 6 or higher (9 maximum) is earned on the PLTW final exam. Grades 9-12.

The PLTW Biomedical Sciences Program is a Project Lead the Way (PLTW) curriculum sequence which follows a proven hands-on, real-world problem-solving approach to learning. Students explore the concepts of human medicine and are introduced to topics such as physiology, genetics, microbiology and public health. Through activities, like dissecting a heart, students examine the processes, structures and interactions of the human body – often playing the role of biomedical professionals. They also explore the prevention, diagnosis and treatment of disease, working collaboratively to investigate and design innovative solutions to the health challenges of the 21st century such as fighting cancer with nanotechnology. Students also acquire strong teamwork and communication practices, and develop organizational, critical-thinking, and problem-solving skills. Along the way students investigate a variety of careers in biomedical sciences. The program is designed to prepare students to pursue a post-secondary education and careers in the biomedical sciences.

Principles of Biomedical Sciences is the first of 4 courses in the biomedical sciences sequence that are planned to be phased-in over the next four years (see below for the phase-in process). Students investigate various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They determine the factors that led to the death of a fictional person, and investigate lifestyle choices and medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, medicine, and research processes. This course provides an overview of all the courses in the Biomedical Sciences program and lays the scientific foundation for subsequent courses. This course is designed for 9th, 10th, 11th and 12th grade students.

1312331 Semester 1
1312332 Semester 2

HUMAN BODY SYSTEMS – NCAA-approved **1 Unit**

Prerequisite: Successful completion of Principles of Biomedical Sciences
Note: A grade of "C" or better in prerequisites recommended or teacher recommendation
Qualifies for Honors credit when a 6 or higher (9 maximum) is earned on the PLTW final exam. Grades 10-12

The PLTW Biomedical Sciences Program is a Project Lead the Way (PLTW) curriculum sequence which follows a proven hands-on, real-world problem-solving approach to learning. In the Human Body System course, students examine the interactions of body systems as they explore identity, communication, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through interesting real world cases and often play the role of biomedical professionals to solve medical mysteries.

Anticipated Phase-in Process and Sequence for the PLTW Biomedical Sciences Program

2016-17 **Medical Interventions**
Students investigate a variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the life of a fictitious family.

2017-18 **Biomedical Innovations**
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 with a mentor or advisor from a university, hospital, research institution, or the biomedical industry.

0303851 Semester 1 **COMPUTER SCIENCE & SOFTWARE ENGINEERING** **1 Unit**
0303852 Semester 2
Prerequisite: None
Qualifies for Honors credit when a 6 or higher (9 maximum) is earned on the PLTW final exam. Grade 9-12

Computer Science & Software Engineering is the first of four computer science course offerings that are planned to be phased in over the next four years (see below for phase-in process) and are part of a curriculum known as Project Lead the Way (PLTW). This is a foundation course in the computer science curriculum sequence that offers a dynamic high school program providing students with real-world learning and hands-on experience. Students will create apps for mobile devices, automate tasks in a variety of languages, find patterns in data, and interpret simulations. Students collaborate to create and present solutions that can improve people's lives. This course meets the third course requirement of the PLTW Engineering sequence. After completing this course, students are eligible to sit for AP Computer Science test.

Proposed Phase-in Process and Sequence for PLTW Computer Science Courses:

2016-17 **Computer Science Applications**
Students collaborate to produce programs that integrate mobile devices and leverage those devices for distributed collection and data processing. Students analyze, adapt, and improve each other's programs while working primarily in Java™ and other industry-standard tools.

2017-18 **Simulation and Modeling**
Students create models and simulate social, physical, and biological systems. Students apply statistics and data analysis to understand systems and predict behavior, and they compare models to complex, real data. Students create simulations to communicate central ideas in the physical, biological, and social sciences and deepen their understanding of concepts in discrete math and computer science. This course emphasizes collaboration, professional writing, and the scientific method.

2018-19 **Artificial Intelligence**
Students will develop artificially intelligent systems that create solutions to real problems found in science and industry. Students analyze problems for computational difficulty and analyze solutions for computational efficiency. Students engage in a wide array of applications, including automated vehicles and computer vision.

SCIENCE

1312001 Semester 1 **PHYSICAL SCIENCE– NCAA-approved** **1 Unit**
1312002 Semester 2
Required of all Grade 9 students

Physical Science is an introductory course to the concepts of chemistry and physics. It covers atomic theory, physical and chemical properties of matter, Conservation of Matter, energy transformations, thermodynamics, linear motion, forces, Newton's laws, energy, and nuclear properties. Lab experiences, scientific inquiry, and problem-solving are used to emphasize scientific concepts. This course serves as a foundation for the study of other sciences.

1312101 Semester 1 **PHYSICAL SCIENCE HONORS – NCAA-approved** **1 Unit**
1312102 Semester 2 Prerequisite: Must be in Grade 9; meet honors criteria

Physical Science Honors is for the advanced science student. Physical Science Honors is an introductory course to the study of chemistry and physics. It covers atomic theory, physical and chemical properties of matter, Conservation of Matter, energy transformations, thermodynamics, linear motion, forces, Newton's laws, energy, and nuclear properties. Lab experiences, scientific inquiry, advanced thinking and problem-solving skills are used to emphasize scientific concepts. This class will provide a foundation for advanced science courses. This course requires a high degree of independent initiative.

1312151 Semester 1 **BIOLOGY – NCAA-approved** **1 Unit**
1312152 Semester 2 Required for all Grade 10 students; students who have not earned credit in Physical Science will be enrolled in both Biology and Physical Science

In this course the student will engage in scientific inquiry, explore biochemistry, the cell, bio-energy, mechanisms of genetics, and biotechnology. Students will also study change in organisms over time, classification, and ecosystems. Lab experiences are an integral part of the course.

1312251 Semester 1 **PRE-AP BIOLOGY– NCAA-approved** **1 Unit**
1312252 Semester 2 Prerequisite: Completion of Physical Science or equivalent; meet honors criteria

In this course the student will engage in scientific inquiry, biochemistry, the cell, bio-energy, mechanisms of genetics, biotechnology, change in organisms over time, classification, and ecosystems. Lab experiences are an integral part of the course. This course will emphasize critical thinking as well as advanced reading, writing, and problem solving skills. This class will provide a foundation for advanced science courses. This course requires a high degree of independent initiative.

1312201 Semester 1 **AP BIOLOGY – NCAA-approved** **1 Unit**
1312202 Semester 2 Prerequisite: Completion of Biology and Chemistry with a grade of "B" or better or teacher recommendation

This course is designed for the advanced and committed biology student (Honors Biology and Honors Chemistry are recommended.) Topics include biochemistry, cellular energy, heredity, molecular genetics, evolution, diversity of organisms, and ecology. Lab experiences are an integral part of the course. This course will emphasize critical thinking as well as advanced reading, writing, and problem-solving skills. This course requires a high degree of independent initiative and is a preparatory course for the AP Biology exam. Advanced credit, when available.

1312451 Semester 1 **CHEMISTRY I – NCAA-approved** **1 Unit**
1312452 Semester 2 Prerequisite: Physical Science (C or better recommended); concurrent enrollment in or completion of Algebra II

This course is highly recommended for students planning on enrolling in college or technical school. General Chemistry is the fundamental course in the study of matter and energy. Topics include: experiment design, measurement skills, atomic theory, classification of matter, nomenclature, stoichiometry, gas laws, periodic table, chemical bonding, solutions, and acids and bases. Lab experiences are an integral part of the course.

1312501 Semester 1 **PRE-AP CHEMISTRY I – NCAA-approved** **1 Unit**
1312502 Semester 2 Prerequisite: Physical Science (C or better); concurrent enrollment in or completion of Algebra II; meet honors criteria

This course is highly recommended for college-bound students. In this course, students will be introduced to the study of the composition and properties of matter. Topics include measurement skills, atomic theory, classification of matter, nomenclature, stoichiometry, gas laws, periodic table, chemical bonding, solutions, and acids and bases.

Lab experiences are an integral part of this course. This course will emphasize critical thinking as well as advanced reading, writing, and problem-solving skills. This course requires a high degree of independent initiative. This course also requires a TI graphing Calculator.

1312551 Semester 1 **AP CHEMISTRY II – NCAA-approved** **1 Unit**
1312552 Semester 2
Prerequisite: Completion of Chemistry I Pre-AP and Algebra II, with a grade of B or better. Chemistry I may be substituted for Chemistry I Pre-AP with approval of the AP Chemistry instructor.

This course is designed for the advanced and committed chemistry student. Topics include: solutions, physical behaviors of gases, thermochemistry, electrochemistry, Kinetic Theory, and chemical equilibria. Lab experiences are an integral part of course. This course will emphasize critical thinking as well as advance reading, writing, and problem-solving skills. This is an Advanced Placement course that prepares the student to take the AP Chemistry exam. Advanced credit, when available. This course requires a high degree of independent initiative

1312601 Semester 1 **PHYSICS I – NCAA-approved** **1 Unit**
1312602 Semester 2
Prerequisite: Concurrent enrollment in or completion of Algebra II or teacher recommendation

This course is designed for the intermediate to advanced student that has solid algebra skills. The course will cover standard topics of entry level physics including: linear motion, circular motion, two dimensional motion, forces, Newton's Laws, energy, electricity, magnetism and introductory atomic and nuclear structures. Students will develop problem-solving skills through lab activities, interactive software, problem sets and classroom discussions.

1312661 Semester 1 **AP PHYSICS I– NCAA-approved** **1 Unit**
1312662 Semester 2
Prerequisite: Completion of Algebra II with a grade of "B" or better; concurrent enrollment in Trigonometry recommended; meet honors criteria

AP Physics 1 is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Through inquiry- based learning, students will develop scientific critical thinking and reasoning skills. The student should have solid algebra skills and have been introduced to trigonometry. This course requires a high degree of independent initiative. This is a preparatory course for the AP Physics 1 exam. Advanced credit, when available.

1312851 Semester 1 **AP PHYSICS II – NCAA-approved** **1 Unit**
1312852 Semester 2
Prerequisite: Pre-AP Physics I with a grade of "B" or better or teacher recommendation; concurrent enrollment in Calculus recommended

This is a laboratory and mathematical intensive course. This course will build on the problem-solving skills developed and concepts learned in Physics I. Topics include: Newtonian mechanics, electricity and magnetism. Students should have extensive algebra and trigonometric skills. This course requires a high degree of independent initiative. This is a preparatory course for the AP Physics exam. Advanced credit, when available.

1312701 Semester 1 **ENVIRONMENTAL STUDIES – NCAA-approved** **1 Unit**
1312702 Semester 2
Prerequisite: Completion of Biology

The student will explore various fundamental and advanced ecological concepts. Topics include: Foundations of Environmental Studies, water quality, solid waste management, air quality, human population, energy ecosystems,

and biodiversity. Environmental responsibility will be emphasized through class discussions, lab situations, and real world applications.

1312411 Semester 1 **EARTH SCIENCE – NCAA-approved** **1 Unit**
1312412 Semester 2 Prerequisite: Completion of Biology

Students will study the universality of change from the rock cycle through plate tectonics, as well as weather and the Earth's position in space. Topics include: physical properties of matter, rocks and minerals, weathering and erosion, historical geology, plate tectonics, volcanism and earthquakes, weather, natural disasters, and astronomy. Lab experiences are an integral part of this course.

1312311 Semester 1 **ANATOMY & PHYSIOLOGY – NCAA-approved** **1 Unit**
1312312 Semester 2 Prerequisite: Completion of Biology with a "C" or better recommended or teacher recommendation

This is a rigorous course where students will study medical terminology, eleven body systems and their associated organs, and diseases associated with each human system. Students will learn through inquiry based lessons and laboratory experiences including dissections. This course requires a high degree of independent initiative.

1312801 Semester 1 **BIOLOGY II (Zoology/Botany) – NCAA-approved** **1 Unit**
1312802 Semester 2 Prerequisite: Completion of Biology with a "C" or better recommended or teacher recommendation

This is a rigorous course where students will study the classification, structures and functions, and the life cycles (reproduction) of plants and animals with emphasis on local flora and fauna. Students will learn through inquiry based lessons, specimen collections, specimen dissection, live specimen lab work and research. This course requires a high degree of independent initiative.

1312751 Semester 1 **BIOLOGY III HONORS (Human Genetics) – NCAA-approved** **1 Unit**
1312752 Semester 2 Prerequisite: Completion of Biology with a grade of "C" or better recommended or teacher recommendation **(Biology II is not required)**

This is a rigorous course where students will study the science of genetics. Topics will include: human cellular processes, DNA and the processes associated with it, genetic inheritance with an emphasis on genetic abnormalities, immunity and cancer, human biotechnology, gene therapy, and microbiology. Students will learn through inquiry based lessons, research, and laboratory experiences. This course requires a high degree of independent initiative.

1312321 Semester 1 **PRINCIPLES OF BIOMEDICAL SCIENCES – NCAA-approved** **1 Unit**
1312322 Semester 2 Prerequisite: Concurrent enrollment in or successful completion of Biology or Biology Pre-AP and successful completion of pre-algebra/algebra or enrolled in algebra or higher.
Note: Successful completion of this course earns a science credit.
Qualifies for Honors credit when a 6 or higher (9 maximum) is earned on the PLTW final exam. Grades 9-12.

The PLTW Biomedical Sciences Program is a Project Lead the Way (PLTW) curriculum sequence which follows a proven hands-on, real-world problem-solving approach to learning Students explore the concepts of human medicine and are introduced to topics such as physiology, genetics, microbiology and public health. Through activities, like dissecting a heart, students examine the processes, structures and interactions of the human body – often playing the role of biomedical professionals. They also explore the prevention, diagnosis and treatment of disease, working collaboratively to investigate and design innovative solutions to the health challenges of the 21st

century such as fighting cancer with nanotechnology. Students also acquire strong teamwork and communication practices, and develop organizational, critical-thinking, and problem-solving skills. Along the way students investigate a variety of careers in biomedical sciences. The program is designed to prepare students to pursue a post-secondary education and careers in the biomedical sciences. Therefore, strong reading, writing, and science skills are essential to success in this course.

Principles of the Biomedical Sciences is the first of 4 courses in the biomedical sciences sequence that are planned to be phased-in over the next four years (see below for the phase-in process). Students investigate various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They determine the factors that led to the death of a fictional person, and investigate lifestyle choices and medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, medicine, and research processes. This course provides an overview of all the courses in the Biomedical Sciences program and lays the scientific foundation for subsequent courses. This course is designed for 9th, 10th, 11th and 12th grade students.

1312331 Semester 1 **HUMAN BODY SYSTEMS – NCAA-approved** **1 Unit**
1312332 Semester 2
Prerequisite: Successful completion of Principles of Biomedical Sciences
Note: A grade of "C" or better in prerequisites recommended or teacher recommendation
Qualifies for Honors credit when a 6 or higher (9 maximum) is earned on the PLTW final exam. . Grades 10-12

The PLTW Biomedical Sciences Program is a Project Lead the Way (PLTW) curriculum sequence which follows a proven hands-on, real-world problem-solving approach to learning. In the Human Body System course, students examine the interactions of body systems as they explore identity, communication, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through interesting real world cases and often play the role of biomedical professionals to solve medical mysteries.

Anticipated Phase-in Process and Sequence for the PLTW Biomedical Sciences Program

2016-17 **Medical Interventions**
Students investigate a variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the life of a fictitious family.

2017-18 **Biomedical Innovations**
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 with a mentor or advisor from a university, hospital, research institution, or the biomedical industry.

1312721 Semester 1 **AP ENVIRONMENTAL SCIENCE A (Online) – NCAA-approved** **1 Unit**
1312722 Semester 2
Prerequisite: A grade of "C" or better in two years of laboratory sciences is recommended. Algebra I and Algebra II are required, although Algebra II can be taken concurrently.

AP Environmental Science is a yearlong examination of the interrelationships of the natural world. Students identify and analyze environmental problems and their effects, and evaluate the effectiveness of proposed solutions. Students learn to think like environmental scientists: making predictions based on observations, writing hypothesis, designing and completing field studies and experiments, and reaching conclusions based on the analysis of data derived from these experiments. Students apply the concepts of environmental science to their everyday experiences and current events and issues in science, politics, and society. The course provides opportunities for guided inquiry and student-centered learning to foster critical thinking skills. This course is presented online and the student will be required to complete coursework to the established timeline provided by the virtual instructor. Successful completion of this course is dependent on the student's ability to meet the criteria outlined by the virtual instructor's syllabus. This online course is considered an 8th hour course offering. Students will be responsible for their pacing in the course.

Francis Howell School District
High School Science Courses

Graduation Requirements:
3.0 units of science credit

College Preparatory Recommendations:
4.0 (or more) units of science credit

GRADE	9th	10th	11th / 12th
Required Courses	Physical Science Or Physical Science Honors *For student who successfully completed Challenge Science 8 (Physical Science):* Biology Or Pre-AP Biology	Biology Or Pre-AP Biology *No courses are required for students who successfully completed Biology or Biology Honors in 9th grade.*	
Elective Courses	• Principles of Biomedical Sciences	• Students may enroll simultaneously in Chemistry I, Pre-AP Chemistry I, Physics I or Pre-AP Physics I if they meet the math prerequisite (see course descriptions). • Principles of Biomedical Sciences • Human Body Systems	• Chemistry I • Pre-AP Chemistry I • AP Chemistry II • Physics I • AP Physics I • AP Physics II • Environmental Studies • Earth Science • Anatomy and Physiology • Biology II (Zoology & Botany) • Biology III Honors (Human Genetics) • AP Biology • Principles of Biomedical Sciences • AP Environmental Science A (online) • Human Body Systems

SOCIAL STUDIES

1513301 Semester 1 **UNITED STATES HISTORY 9– NCAA-approved** **1 Unit**
1513302 Semester 2 Prerequisite: Grade 9 and transfer students only

This course will focus on domestic policy including the post-Civil War era, the role of the United States as a world power, the post-Cold War era, and modern United States history. Students will also examine the traditions, attitudes, and values that reflect our national heritage and which have been shaped by our nation's history.

1513401 Semester 1 **UNITED STATES HISTORY 9 PRE-AP – NCAA-approved** **1 Unit**
1513402 Semester 2 Prerequisite: Grade 9 and meet honors criteria

This course will focus on domestic policy including the post-Civil War era, the role of the United States as a world power, the post-Cold War era, and modern United States history. Students will also examine the traditions, attitudes, and values that reflect our national heritage and which have been shaped by our nation's history. Emphasis will be placed on the advanced development of reading, writing, and critical thinking skills, particularly in the analysis of historical data and primary sources.

1514001 Semester 1 **MODERN WORLD HISTORY – NCAA-approved** **1 Unit**
1514002 Semester 2 Prerequisite: Grade 10 and transfer students

This course will explore the heritage of the Renaissance in Europe, the rise and fall of monarchies and the ensuing political and industrial revolutions, imperialism, the world wars of the twentieth century, and the sociopolitical realities of the modern world. Students will explore the interaction and mutual influence occurring between civilizations as well as the technological and intellectual developments that have had a major impact on world civilizations.

1514101 Semester 1 **MODERN WORLD HISTORY PRE-AP – NCAA-approved** **1 Unit**
1514102 Semester 2 Prerequisite: Grade 10 and meet honors criteria

This course will explore the heritage of the Renaissance in Europe, the rise and fall of monarchies and the ensuing political and industrial revolutions, imperialism, the world wars of the twentieth century, and the sociopolitical realities of the modern world. Students will explore the interaction and mutual influence occurring between civilizations as well as the technological and intellectual developments that have had a major impact on world civilizations. Emphasis will be placed on the advanced development of reading, writing, and critical thinking skills, particularly in the analysis of historical data and primary sources.

1513051 **AMERICAN GOVERNMENT – NCAA-approved** **1 Unit**
1513052 Prerequisite: Grade 11

This course will develop student understanding and competence in American citizenship. During the first semester students will focus on the heritage of American government, the U.S. Constitution, and the branches of government. During the second semester students will focus on politics and elections, civil liberties and civil rights, citizenship, foreign policy, and state and local government. This course will fulfill Missouri state graduation requirements. Students will be required to pass the Missouri Constitution Test and the United States Constitution Test with at least a 70%. Students are also required to enroll in American Government-Semester 2.

1513151 Semester 1 **AP GOVERNMENT AND POLITICS – NCAA-approved** **1 Unit**
1513152 Semester 2 Prerequisite: Grade 11 or 12 or transfer

This course is an introductory college course in United States government and politics. This course includes both the study of general concepts used to interpret U.S. government and politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. government and politics. Objectives for the course include knowing important facts, concepts, and theories pertaining to U.S. government and politics; understanding typical patterns of political processes and behavior and their consequences (including the components of political behavior, the principles used to explain or justify various government structures and procedures, and the political effects of these structures and procedures); being able to analyze and interpret basic data relevant to U.S. government and politics (including data presented in charts, tables, and other formats); and being able to critically analyze relevant theories and concepts, apply them appropriately, and develop their connections across the curriculum. Emphasis will be placed on the advanced development of reading, writing, and critical thinking skills, particularly in the analysis of data and sources. Students may earn up to 6 hours of credit through the Advanced Credit Program, when available, or may choose to take the Advanced Placement U.S. Government and Politics exam. This course will fulfill Missouri state graduation requirements. Students will be required to pass the Missouri Constitution Test and the United States Constitution Test with at least a 70%.

1513551 Semester 1 **AP EUROPEAN HISTORY – NCAA-approved** **1 Unit**
1513552 Semester 2 Prerequisite: Grade 11 or 12 or transfer

This course will begin with the foundations of western civilization and follow its development in Europe through modern times. The study of European history since 1450 introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. Without this knowledge, we would lack the context for understanding the development of contemporary institutions, the role of continuity and change in present-day society and politics, the evolution of current forms of artistic expression and intellectual discourse. In addition to providing a basic narrative of events and movements, the goals of this course are to develop (a) an understanding of some of the principle themes in modern European history, (b) an ability to analyze historical evidence and historical interpretations, and (c) an ability to express historical understanding in writing. Emphasis will be placed on the advanced development of reading, writing, and critical thinking skills, particularly in the analysis of historical data and sources. Students may earn up to 6 hours of credit through the Advanced Credit Program, when available, or may choose to take the Advanced Placement European History exam.

1513753 **PSYCHOLOGY – NCAA-approved** **.5 Units**
Prerequisite: Grade 11-12

This course is an introduction to the study of human behavior. Topics include a brief introduction to the history and development of psychology as a science, methods of psychological research, processes of sensation and perception, intelligence and creativity, principles of learning, process of remembering and forgetting, thinking, biological influences on behavior, motivation and emotions, understanding and measuring personality, and the identification and treatment of various psychological disturbances. Students will continue to develop skills in organizing materials, note-taking, communications, researching, and critical thinking.

1513803 **SOCIOLOGY – NCAA-approved** **.5 Units**
Prerequisite: Grade 11-12

Sociology is the study of group dynamics. The student will explore subjects such as socialization, culture and group interaction, social structure, communal change and societal problems. Students will learn basic skills in sociological research, will be able to define key sociology terms, and will be encouraged to relate sociological concepts to their own lives. Finally, students will identify the contributions sociology has made to improve the

human condition. Students will continue to develop skills in organizing materials, note-taking, communicating, research, and critical thinking.

1513603 **CONTEMPORARY ISSUES – NCAA-approved** **.5 Units**
Prerequisite: Grade 11-12

This course will involve students with the issues, problems, and events in our world today. State, local, national, and international issues will be highlighted on a continuing basis. Emphasis will be placed on the inter-relationship of concepts from the various social sciences - psychology, sociology, economics, and political science - and how they relate to the issues and events mentioned above. A national news magazine will serve as the primary text for the course, with other sources used for historical background and additional data. Students will continue to develop skills in organizing materials, note-taking, communicating, research, and critical thinking.

1513901 Semester 1 **AP UNITED STATES HISTORY – NCAA-approved** **1 Unit**
1513902 Semester 2
Prerequisite: Grade 11 or 12 or transfer

This course will focus on our nation's history from discovery and colonization to the present. The AP U.S. History course is designed to deal critically with the problems and materials in U.S. history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students will learn to assess historical materials-their relevance to a given interpretive problem, reliability, and importance-and to weigh the evidence and interpretations presented in historical scholarship. This course will develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format. Emphasis will be placed on the advanced development of reading, writing, and critical thinking skills, particularly in the analysis of historical data and primary sources. Students may earn up to 6 hours of credit through the Advanced Credit Program, when available, or may choose to take the Advanced Placement United States History exam.

1514151 Semester 1 **AP WORLD HISTORY – NCAA-approved** **1 Unit**
1514152 Semester 2
Prerequisite: Grade 11 or 12; Grade 10 upon recommendation of AP Committee

This course invites students to take a global view of historical processes and contacts between people in different societies, with an emphasis on the past thousand years. Students will be expected to learn selective factual knowledge in addition to certain analytical skills. Major interpretive issues among historians will be explored, as well as techniques used in interpreting both primary historical evidence and secondary sources. Themes will be employed throughout the course, though the basic approach will be chronological. Students will pay particular attention to change and continuity over time, to the characteristic institutions and values of societies, and to the way such institutions and values are affected as a result of cultural contacts among peoples. Emphasis will be placed on the advanced development of reading, writing, and critical thinking skills, particularly in the analysis of historical data and primary sources. Students may earn up to 6 hours of credit through the Advanced Credit Program, when available, or may choose to take the Advanced Placement World History exam.

1513771 Semester 1 **AP PSYCHOLOGY – NCAA-approved** **1 Unit**
1513772 Semester 2
Prerequisite: Grade 11 or 12 or transfer

This course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings, and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. Emphasis will be placed on the advanced development of reading, writing, and critical thinking skills. Students may earn up to 6 hours of credit through the Advanced Credit Program, when available, or may choose to take the Advanced Placement Psychology exam.

1513721 Semester 1 **AP HUMAN GEOGRAPHY (Online) - NCAA-approved** **1 Unit**
1513722 Semester 2 Prerequisite: None, but strong reading and writing skills are highly recommended.

The AP Human Geography course is designed to provide college level instruction on the patterns and processes that impact the way humans understand, use, and change Earth's surface. Students use geographic models, methods, and tools to examine human social organization and its effect on the world in which we live. Students are challenged to use maps and geographical data to examine spatial patterns and analyze the changing interconnections among people and places. This course is presented online and the student will be required to complete coursework to the established timeline provided by the virtual instructor. Successful completion of this course is dependent on the student's ability to meet the criteria outlined by the virtual instructor's syllabus and in being able to work in an online environment. Support to students in an online class will be provided to ensure course issues or technical problems are resolved, but completion of the course is heavily dependent on the student diligently working through the sequence of lessons.

Francis Howell School District
High School Social Studies Courses

All Pre-AP and AP Courses are weighted.

GRADE	9th	10th	11th	12th
Required	United States History 9 OR United States History 9 Pre-AP	Modern World History OR Modern World History Pre-AP	American Government OR AP Government and Politics	
Electives		AP World History (with approval)	Psychology Sociology AP U.S. History Contemporary Issues AP European History AP World History AP Government and Politics AP Psychology AP Human Geography (online)	Psychology Sociology AP U.S. History Contemporary Issues AP European History AP World History AP Government and Politics AP Psychology AP Human Geography (online)

TEST PREP

8000003 **ACT PREP SKILLS** **.5 Units**

Prerequisite: Priority enrollment to juniors and seniors
Recommended
- Jr - successful completion of Geometry
- Sr - concurrent with Geometry or higher

ACT Prep skills is an elective course designed to prepare students for the ACT test. Students will learn test-taking strategies in addition to a review of skills and knowledge associated with the tested content areas of English, Math, Reading, Science and Writing. This course is designed to increase scores of students that are in the range of 16 – 26. Students enrolled in the course will be expected to sign up and take the ACT test.

WORLD LANGUAGE

LEVEL I - WORLD LANGUAGE – NCAA-approved **1 Unit**

SPECIFY LANGUAGE:

FRENCH	**Semester 1: 0616001**	**Semester 2: 0616002**
GERMAN	**Semester 1: 0616251**	**Semester 2: 0616252**
SPANISH	**Semester 1: 0616501**	**Semester 2: 0616502**
MANDARIN CHINESE	**Semester 1: 0617001**	**Semester 2: 0617002**

Prerequisite: "C" average or above in other course work is recommended
This course is not designed for native speakers of the language.

World Language Level I is designed to introduce students to the fundamentals of the target language. Emphasis will be placed on acquisition of vocabulary and basic grammar through reading, writing, speaking, and listening. The study of people, culture, customs, and geography of the target-language countries will be integrated throughout the course. This course is a prerequisite for the AP World Language class.

LEVEL II - WORLD LANGUAGE – NCAA-approved **1 Unit**

SPECIFY LANGUAGE:

FRENCH	**Semester 1: 0616051**	**Semester 2: 0616052**
GERMAN	**Semester 1: 0616301**	**Semester 2: 0616302**
SPANISH	**Semester 1: 0616551**	**Semester 2: 0616552**

Prerequisite: "C" average or above in Level I, or equivalent, is recommended
This course is not designed for native speakers of the language.

This course is designed for students who have already completed Level I, or equivalent, in middle school or high school. In this course, students will increase their knowledge of target-language vocabulary and grammar. Emphasis will continue to be placed on development of reading, writing, speaking, and listening skills. Students will apply these concepts in original verbal and written communication. This course is a prerequisite for the AP World Language class.

PRE-AP WORLD LANGUAGE III – NCAA-approved 1 Unit

SPECIFY LANGUAGE:

FRENCH Semester 1: 0616101 Semester 2: 0616102
GERMAN Semester 1: 0616351 Semester 2: 0616352
SPANISH Semester 1: 0616601 Semester 2: 0616602

Qualifies for the honors program
Prerequisite: "C" average or above in Level II, or equivalent, is required
It is recommended that native speakers of the language begin at this level.

In this honors class, students will continue to develop mastery of grammar, vocabulary, listening, reading skills, creative writing, and spontaneous speaking. Students will be provided with opportunities to explore the cultures and geography of the various target-language speaking regions. Students may elect to receive 5 credit hours through the Advanced Credit program at the University of Missouri - St. Louis, when available. This course is a prerequisite for the AP World Language class.

PRE-AP WORLD LANGUAGE IV – NCAA-approved 1 Unit

SPECIFY LANGUAGE:

FRENCH Semester 1: 0616151 Semester 2: 0616152
GERMAN Semester 1: 0616401 Semester 2: 0616402
SPANISH Semester 1: 0616651 Semester 2: 0616652

Qualifies for the honors program
Prerequisite: "C" average or above in Level III is required

In this honors class, students will continue to develop and perfect their ability to express themselves in original oral and written communication. Listening and reading selections will be implemented to enhance understanding, appreciation and respect for target language speaking people and their cultures. Students may elect to receive 5 credit hours through the Advanced Credit program at the University of Missouri - St. Louis, when available. This course is a prerequisite for the AP World Language class.

AP WORLD LANGUAGE & CULTURE – NCAA-approved 1 Unit

SPECIFY LANGUAGE:

FRENCH Semester 1: 0616751 Semester 2: 0616752
GERMAN Semester 1: 0616801 Semester 2: 0616802
SPANISH Semester 1: 0616851 Semester 2: 0616852

Qualifies for the honors program
Prerequisite: "C" average or above in Level IV is required

In this Advanced Placement class, students will continue to develop and perfect listening comprehension, speaking, reading, and writing skills as well as continue acquisition of cultural awareness and appreciation. Previous and new grammar concepts will be presented through units of study, which may include immersion activities, readings in contemporary and classical literature, history, art, music, geography, and essay writing. Focus will be placed on preparing students to take the Advanced Placement exam in the Spring if they choose to do so. Students may also elect to receive 3 credit hours through the Advanced Credit program at the University of Missouri - St. Louis, when available.

SPECIAL EDUCATION

TRANSITION SKILLS **.5-1 Units**

3022601 Semester 1 / 3022602 Semester 2
2622601 Semester 1 / 2622602 Semester 2
2822601 Semester 1 / 2822602 Semester 2

Prerequisite: Special Education placement

This course is designed to aid special education students in grades 9-12 in achieving successful post-secondary outcomes and create lifelong learners. Students will develop an awareness of career, educational and independent living skills to assist them in employment, education and personal goals. Students will be taught self-awareness, career research, and exploration of post-secondary educational/training options, rights and responsibilities, test taking strategies, basic living skills and financial responsibility.

S.T.U.D.I.E.S I (Strategies and Techniques for Understanding, Developing Independent, and Effective Students) **.5-1 Units**

2622211 Semester 1 / 2622212 Semester 2
2822211 Semester 1 / 2822212 Semester 2
2922211 Semester 1 / 2922212 Semester 2

Prerequisite: Special Education placement

This course is designed to teach students with disabilities in 9th grade to adjust to the new high school environment and to become independent learners as well as teach students skills needed to succeed in the general education setting. Areas of emphasis include: transition to high school, study skills and personal skills.

S.T.U.D.I.E.S II (Strategies and Techniques for Understanding, Developing Independent, and Effective Students) **.5-1 Units**

2622221 Semester 1 / 2622222 Semester 2
2822221 Semester 1 / 2822222 Semester 2
2922221 Semester 1 / 2922222 Semester 2

Prerequisite: Special Education placement

This course is designed to teach students with disabilities in 10th grade students to adjust to more demands as a young adult and to become more independent learners. This course also teaches students the skills needed to succeed in the general education and community setting, such as employment/dating. Areas of emphasis include: transition to high school and the community, study skills, and personal skills.

S.T.U.D.I.E.S III (Strategies and Techniques for Understanding, Developing Independent, and Effective Students) **.5-1 Units**

2622231 Semester 1 / 2622232 Semester 2
2822231 Semester 1 / 2822232 Semester 2
2922231 Semester 1 / 2922232 Semester 2

Prerequisite: Special Education placement

This course is designed to teach students with disabilities in 11th or 12th grade to self-advocate and to become independent learners as well as teach students skills needed to succeed in the post-secondary setting. Areas of emphasis include: transition to post-secondary, study skills and personal skills, such as setting long and short term goals, self-advocacy, and self-determination.

WORK EXPERIENCE FIELD WORK **.5-1 Units**

2628001 Semester 1 / 2628002 Semester 2
2822201 Semester 1 / 2822202 Semester 2

Prerequisite: Special Education Placement and Vocational Rehabilitation acceptance

This course works in conjunction with all special education programs. The course is intended to allow students involved in special services programs to receive academic credit while actively participating in work experience. The program will encourage students to gain vocational experience while offering each participant direction in the development of realistic vocational goals that will result in successful integration into the working community upon graduation. Students may earn up to 2 credits per academic school year.

2628303 **COLLEGE 101 – ORIENTATION TO COLLEGE** **.5 Units**

Prerequisite: Special Education Placement, Grade 12 and teacher recommendation

Orientation to College has been designed to assist students with transition to college life. Specifically, the class will examine the transitions that take place and develop the strategies to cope with them. This course will focus upon group building and creating a "belonging place" for new students. Through a variety of in class and home exercises, students will be encouraged to explore values, goals, and self-determination skills. Students will be directed to key support services and college resources to enhance the quality of the college experience.

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 home 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. Students who complete the technical program with a minimum of 90% attendance and 75% average over the length of the program will receive a silver certificate of completion. A gold certificate will be awarded to students who maintain 95% attendance and 95% academic average over the length of the program, no discipline resulting in loss of class time, and leadership as determined by the instructor.

Students who attend Lewis & Clark Career Center follow the St. Charles District Code of Conduct and Grading Scale.

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 will concentrate on 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. Mechanical, electrical and glass installation will also be covered.

One year of the two year program will concentrate on painting and refinishing. Students will learn proper paint preparation procedures, masking techniques and detailing cars. Primer, sealer and basecoat/clear coat 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.

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 the student have credit in general shop, a general metals course, and basic computer skills.

Automotive instruction at Lewis and Clark consists of a two-year program, which 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, and 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. Areas of instruction include: engine repair, brakes, steering and suspension, heating/air conditioning, electrical/electronics, engine performance, and basic manual/automatic transmission.

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

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 wythe 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 instructions and accomplish all tasks in an accurate and safe manner.

BUILDING TRADES – CARPENTRY

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.

It is recommended that students have one year of industrial arts.

COMPUTER INFORMATION SYSTEMS

1 year program; 3 units of credit

Prerequisite: 10th grade reading and 8th grade or higher math

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

Students will learn beginning and intermediate business programming and business communication concepts. They will learn the basics of the C++ and C# programming languages and database administration and design skills. The students will complete a final project that will incorporate all facets of the class.

Students who successfully complete this program will be able to develop business and other forms of software application or serve as an entry-level database administrator. Graduates may be employed by software development or consulting firms, or may continue on to a college level degree program.

COMPUTER INFORMATION SYSTEMS-2ND YEAR

1 year program; 3 units of credit

Prerequisites: 10th grade reading and 8th grade or higher math, CIS 1st year with 85% or higher after 1st semester, no disciplinary issues, and have instructor approval.

This program is open to seniors and post-secondary students who have an interest in more advanced computer programming or web design as a wage earning occupation or post-secondary degree.

Students will choose between three paths: business programming, graphics programming and development, or web design. If they choose the business programming path, they will learn advanced database design concepts and how to work with databases in the C++ and C# language using Microsoft SQL Server. If they choose the graphics programming/development path, they will learn advanced techniques for programming utilizing DirectX and Open GL. If they choose the web design path, they will learn advanced HTML including DHTML, CSS, and advanced Flash. They will be asked to complete large scale projects and assist in instruction in their chosen pathway.

Students who successfully complete this program will be able to develop advanced applications in their chosen path. Graduates may be employed by software development or consulting firms, or continue on to a college level degree programs.

COMPUTER MAINTENANCE AND NETWORKING

1 year program; 3 units of credit

This program is open to juniors and seniors who have an interest in the Information Technology field and want to earn their first certification as an IT technician.

Students who successfully complete this program will be able to work as an entry level help desk technician, a computer repair technician, or a computer support technician in all types of business and industry.

An interest in technology, keyboarding skills and familiarity with Word & PowerPoint are essential.

ARCHITECTURAL DESIGN

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

Architectural Design is a one or two year course designed for students intending to enter the architectural or engineering design fields. The program is structured so that upon completion, the student will be qualified to enter a wide variety of architectural or engineering careers at an entry level. The student will also be very well prepared to further their education at post-high school training facilities and and/or colleges and universities.

Year one focuses on basic drafting skills utilizing AutoCAD, with an emphasis on residential architecture. The students will learn architectural design as well as basic structural and civil engineering requirements for residential construction, including drawing techniques and materials. The students will learn about building codes and how they apply to residential construction. The students will be able to design their own home and produce a detailed set of construction documents (capable of obtaining a building permit) for that home.

Year two focuses on basic drafting skills utilizing AutoCAD, with an emphasis on commercial architecture. The students will learn architectural design as well as basic structural and civil engineering requirements for commercial construction, including drawing techniques and materials. The students will learn about building codes and how they apply to commercial construction. The students will be able to design a commercial building…retail center, etc. and produce a detailed set of construction documents for that building.

It is highly recommended that students have minimum two units of mathematics with an emphasis on Algebra, Geometry and/or Trigonometry. Good math skills are essential.

EARLY CHILDHOOD CAREERS

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

Prerequisite: prior Child Development course recommended

This course will prepare students for employment in early childhood education and related services while providing the foundations for study in higher education that lead to early childhood education and other child-related careers.

Students will evaluate leadership, citizenship, and teamwork skills required for success in early childhood industry. During the program students will analyze career opportunities and identify personal traits needed within early childhood careers. They will examine types of early childhood programs, be able to describe areas of child development, and demonstrate a safe and healthy learning environment. They will practice appropriate child guidance and behavior management techniques. The students will be taught CPR techniques for infants and small children, other basic first-aid methods, nutritional planning, and proper meal preparation in the childcare setting. Students will meet content knowledge requirements for the CDA (Child Development Associate) credential. Students will have the opportunity to earn a CDA by completing the full two years of the program.

Students must have a TB test and a criminal background check to be placed on rotations the second half of the year.

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 on 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.

HEALTH OCCUPATIONS & HEALTH RELATED OCCUPATIONS

The Health/Health Related Occupations courses offer 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 experiences. Students must have an up to date immunization record, a TB test, a urine drug screen, a criminal background check, a flu vaccine, 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.

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.

The course will cover tool selection and use, tubing, piping, brazing, soldering and basics of compression, refrigeration and 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.

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.

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 pre-requisite for the course is potential ability to work in competitive employment.

This is an active, hands-on, multimedia approach that emphasizes instructional strategies that are successful with special needs populations. The program has three phases: operating a fully functional store on the Lewis & Clark campus, paired with classroom instruction, community-based transition (job shadowing) and a possible independent internship experience for those that meet the challenges of the first two phases

The students in the Applied Retail and Business program rotate through the following stations in the school store: cashier, inventory control, maintenance, bookkeeper, food preparation, and food manager. The classroom instruction includes lessons on self-awareness, social skills, communication skills, and employability skills.

Skills learned in the classroom are reinforced through the community-based transition phase. During this time, the student job shadows at participating stores. Those 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 within the Lewis & Clark Store with continued supervision; with the emphasis on job readiness and work hardening skills, along with a heavier workload and increased responsibilities.

COMBINATION WELDING **2 year program; 3 units of credit per year**

Prerequisite: Asthma Free

Combination welding is open to students interested in welding and metal working 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 fabricating techniques and weld symbols

are included in the program.

The lab is set up 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, manual dexterity, freedom from asthma, allergies and physical disabilities which prevent bending, stooping, lifting and working in awkward positions.