

**ST. FRANCIS BORGIA
REGIONAL HIGH SCHOOL**



COURSE DESCRIPTION GUIDE

2011 - 2012

Dear Borgia Parents and Students,

This booklet is designed to help guide you through your course choices knowledgeably. The administration, counselors, advisors, and class teachers are all committed to helping you find the best “fit” of courses during your years here. As a college-prep school committed to open enrollment, we are dedicated to ensuring all of our students are as well-prepared to continue their education as they can possibly be, regardless of academic entry level as a freshman. Such academic growth requires a careful and studious balancing of rigorous course selection, personal interests, sports and other extra-curricular participation. While we make it a point to offer many challenging and rigorous course possibilities, no one can participate in everything. Choose carefully. Do not succumb to the temptation to attempt to eat the whole cake just because it is there for the taking! Such gluttony is an invitation to overwhelming stress, and less than positive experiences. Working hard and being busy are commendable, but piling up debilitating levels of stress is not. Maximize your SFBRRHS experience with wise choices.

While all of us in the Borgia family are justly proud of our outstanding academic, sports, and extra-curricular traditions, we stand first and foremost as a faith community. Our Catholic faith and the Christian well-being of our students every day are integral to the SFBRRHS experience. Our faith, along with a healthy balance of academic, social, physical and educational excellence, is the mark of a successful St. Francis Borgia Regional High School graduate. May this booklet help you and your student detail a Four Year Plan toward a happy and successful career at SFBRRHS, and into a future of great hope and promise.

May God bless!

Dr. Brad Heger
Principal

SAINT FRANCIS BORGINA REGIONAL HIGH SCHOOL GRADUATION REQUIREMENTS

Subject	Credits
Theology	4
English	4
Math	3
American History	2
Social Studies	2
Science	3 (must include 1 credit Biology & 1 credit Chemistry/Practical Chemistry)
Foreign Language or Resource Skills	2
P.E.	1
Practical Art	1 (½ credit Principles of Technology and ½ Personal Finance)
Fine Art	1 (½ credit Speech)
<u>Electives</u>	<u>7</u>
Required	30
<u>Optional</u>	<u>2</u>
Possible	32

Recommended sequence of courses:

Freshman	Sophomore	Junior	Senior
1. Theology	Theology	Theology	Theology
2. English	English	English	English
3. Global Studies	Global Studies	Am. History	Am. History
4. Math	Math	Math	Elective (Math)
5. Science	Science	Science	Elective (Science)
6. Foreign Language/ Resource Skills	Foreign Language/ Resource Skills	Elective	Elective
7. ½ PE/Health ½ Principles of Tech	½ PE/Health *Elective	Elective	Elective
8. *Elective	*Elective	*Elective	*Elective

Note: A fine art must be taken to fulfill graduation requirements. One half credit of this requirement must be Speech. If a student intends to enroll in the vocational program junior/senior year a credit in a fine art must be taken freshman or sophomore year.

A practical art must be taken to fulfill graduation requirements. Principles of Technology and Personal Finance are required. Personal Finance must be taken at the sophomore or higher level.

COURSE PLACEMENT FOR INCOMING 9th GRADERS

Suggested course placement is based on test scores from 7th and 8th grade Iowa Test of Basic Skills and Cognitive Abilities Test and grades received in core courses. High school counselors will meet with or contact the 8th grade teachers of English, math, and science to ask for their recommendations.

ENGLISH

All ninth grade students are expected to take an English I course: Advanced English I, English I, or Fundamentals of English I. Students who score in the 85th Percentile or higher in Total Reading / Language Achievement and Verbal Ability and who have received an A / B in English will be eligible for Advanced English I.

MATHEMATICS

Students entering ninth grade will be registered in the mathematics course for which they are recommended: Advanced Algebra I; Algebra I; or Introduction to Algebra I. Students who score in the 85th Percentile or higher in Total Math Achievement and Quantitative Ability and who have received an A / B in math will be eligible for Advanced Algebra I. Note: Introduction to Algebra I may not be an accepted math credit for admission to some 4 year colleges.

SCIENCE

All ninth grade students will be enrolled in Biology or Advanced Biology I. The prerequisites for ninth grade Advanced Biology I are an A / B in eighth grade science and math, and score in the 85th Percentile on math and science in the ITBS and Cognitive Abilities Test.

FOREIGN LANGUAGE

All ninth grade students will be enrolled in Spanish or German, or a Resource Skills course.

SOCIAL STUDIES

All ninth graders will take Global Studies I.

FINE ARTS

Speech is required for graduation. The ninth grade electives available besides speech are: Band (1 credit), Introduction to Music (½ credit), Mixed Chorus (½ credit), Band Color Guard (½ credit), Introduction to Art (½ credit), Drawing I (½ credit), Woodcarving I (½ credit), Theatre Appreciation (½ credit), Acting I (½ credit) and Video Productions I. (A student who intends to take Marching Band all 4 years of high school may receive ¼ PE credit for each year to fulfill the PE requirement.)

PRACTICAL ARTS

All ninth graders will be enrolled in Principles of Technology I. One elective is available for freshmen in practical arts: Foods I (½ credit). Personal Finance is required for graduation and must be taken as a sophomore, junior, or senior.

PHYSICAL EDUCATION

Ninth graders will be enrolled in ½ credit of PE/Health. (Note: Students enrolled in Band may receive ¼ credit PE credit for Marching Band each year.)

COLLEGE CREDIT IN HIGH SCHOOL

There are two main ways SFBRHS students may earn college credit during their junior & senior year. Students should consult with their counselors and parents about obtaining college credit in subject areas before high school graduation.

The courses are taught at a college level. Extensive reading, writing, research, and homework are expected in these courses. Students and parents must make the decision about the number of courses that the student will take. We want students to find the balance between college level courses, extra-curricular activities and their physical, emotional and spiritual well-being.

I. DUAL ENROLLMENT THROUGH EAST CENTRAL COLLEGE at SFBRHS

Juniors or seniors may supplement their high school courses with one or more courses taken through East Central College at SFBRHS. Credits must be approved by the student's counselor and principal. Students must have a 2.5 GPA and teacher recommendation to take an ECC course at SFBRHS. Students enrolled in College Psychology and College Sociology at the SFBRHS site must pay the additional ECC fee.

II. 1-8-1-8 PROGRAM (St. Louis University)

The St. Louis University 1-8-1-8 Program offers qualified high school juniors and seniors the opportunity to earn college credit for select advanced level high school courses. Students must have a 3.0 GPA and teacher recommendation to take a course for 1-8-1-8 credit.

SLU will not accept more than three 1818 courses per semester.

Saint Louis University sets the tuition for the credits they award. Last year 1-8-1-8 tuition was \$65 a credit hour (e.g., a three-hour class such as Honors American History I was \$195). Tuition in the SLU 1-8-1-8 program is at a much reduced rate compared to regular SLU rates. Payment goes directly to the university.

While there is no official list of colleges that accept 1-8-1-8 credit, SFBRHS students attending most Missouri colleges (not Washington University) report that the college credit they earned in high school through the 1-8-1-8 program was accepted. Students report that some colleges limit the number of credits they accept, and/or will accept some course credits and not others. Many selective universities will not accept 1-8-1-8 credit.

It is the responsibility of the student to find out what courses are accepted at different colleges.

An additional option is Advanced Placement:

Students considering a highly competitive college might consider this option. Advanced Placement (AP) is a rigorous academic program developed by the College Board. It provides academically prepared high school students the opportunity to study and learn at the college level. Each AP course uses an AP approved syllabus that meets or exceeds college level curriculum requirements. AP courses are assessed by taking an end of course exam which is scored through the College Board. AP exams are available in several subject areas.

If you have any questions regarding the best fit for you, contact your counselor.

ST. LOUIS UNIVERSITY 1-8-1-8 COURSE CREDITS OFFERED AT SFBRHS

ENGLISH:	JR.	ENGX150 Process of Composition (3)
		ENGX190 Advanced Strategies of Rhetoric & Research (3)
	SR.	ENGX202 Introduction to Literary Studies (3)
		ENGX240 Introduction to Drama (3)
HISTORY:	JR.	HSX260 History to the U.S. to 1865 (3)
	SR.	HSX261 History of the U.S. since 1865 (3)
BIOLOGY	JR./SR.	BLX104 Principles of Biology (4)
MATH	SR.	MTX142 Calculus (4)
SPANISH	JR.	SPX110 Communicating in Spanish (3)
	SR.	SPX115 Communicating in Spanish (3)
	SR.	SPX210 Intermediate Spanish: Language & Culture (3)

OR

GERMAN	JR.	GRX110 Communicating in German (3)
	SR.	GRX115 Communicating in German (3)
	SR.	GRX210 Intermediate German: Language & Culture (3)

TOTAL OFFERINGS: 35 credits

EAST CENTRAL COLLEGE DUAL ENROLLMENT CREDIT OFFERED AT SFBRHS SITE

MATH	JR./SR.	MT1403 College Algebra (3)
PSYCH	SR.	PY1103 General Psychology (3) **
SOC	SR.	SO1103 General Sociology (3) **
COMM	JR./SR.	CT1103 College Speech (3)

TOTAL OFFERINGS: 12 credits

**** Students MUST pay the ECC fee for these classes.**

OPTIONS AFTER HIGH SCHOOL

FOUR-YEAR COLLEGE or UNIVERSITY

COMMUNITY COLLEGE

TECHNICAL COLLEGE

MILITARY

WORK

Students will meet individually with their counselor each year to discuss different career options after high school. Counselors will assist students in examining their academic strengths and interests to help them plan high school courses that match their interest. Advisors meet with students once a week to offer additional assistance.

FOUR-YEAR COLLEGE or UNIVERSITY The high school Guidance Office offers valuable information about the various college and university programs which are available to high school graduates. Juniors and seniors are given opportunities to meet with visiting college representatives.

COMMUNITY COLLEGE

East Central College offers students four degree options: the Associate of Arts, the Associate of Science, the Associate of Arts in Teaching, and the Associate of Applied Science. Each degree choice affords students a variety of options based on their academic interest and career choices.

An **Associate Degree of Arts (AA)** degree is the institutional transfer degree. Students completing the AA degree who transfer to a public baccalaureate institution in Missouri will enter the transfer institution at the junior level.

The **Associate of Science (AS)** degree is the institutional pre-engineering degree. A specifically articulated degree with the Missouri University of Science and Technology (formerly the University of Missouri- Rolla), the AS degree is comprised of a general education core and the necessary coursework to prepare students for a program of study in engineering.

The **Associate of Arts in Teaching (AAT)** degree is the institutional transfer degree for students preparing to study in teacher education programs. Students completing the AAT degree who transfer to a public baccalaureate institution in Missouri offering teacher preparation programs will enter the transfer institution at the junior level.

The **Associate of Applied Science (AAS)** degree is the career and workforce preparation degree. While the AAS is a career preparation degree, some institutions may consider the degree in transfer.

Additional Option at ECC: A **Certificate of Proficiency** is designed primarily for the person whose intended job does not require an associate degree. A Certificate of Proficiency can be earned in one or two semesters.

TECHNICAL COLLEGE

Technical institutions also provide Associate Degrees in Science, Associate Degrees in Applied Science and Certificates of Proficiency in many areas. Some of these areas are listed below. This is NOT a comprehensive listing:

- Architectural Technology Industrial Electricity-Electronics Technology
- Automotive Collision Repair Industrial Maintenance Technology
- Automotive Repair Technology Instrumentation & Process Control Technology
- Aviation Technology Machine Shop Technology
- Avionics Technology Plumbing Technology
- Carpentry and Building Construction Refrigerating, Air Conditioning, and Heating
- Communications Electronics Technology Welding Technology
- Computer Networking Technology

MILITARY

Students and parents should meet with the recruiter to discuss military options.

PLANNING YOUR HIGH SCHOOL PROGRAM IN PREPARATION FOR COLLEGE

Regardless of your plans following graduation, you should plan your high school program according to your own abilities and background. Keep your options open. Students who plan to go directly to college should plan a high school program that includes:

English.....	4 credits
Social Studies	4 credits (SFBRHS requires 4 for graduation)
Mathematics.....	4 credits (SFBRHS requires 3 for graduation)
	A four-year sequence of mathematics is most desirable.
Science.....	3 credits
Foreign Language	2-4 credits
	Many universities have a foreign language requirement for graduation. Some colleges will waive their requirement if you have completed 4 years of one language in high school.

OTHER CONSIDERATIONS:

- 1 One of the first considerations of a college admission counselor is the strength of a student's schedule.
- 2 In addition, grade point average and ACT/SAT test scores play an important role at many colleges.
- 3 Less intensive courses (Fundamentals of English I; Fundamentals of English II; Introduction to Algebra I; Introduction to Geometry; and Introduction to Algebra II) may not be accepted at many 4 year colleges.
- 4 Students who are seeking entrance to an out-of-state public university may find entrance requirements more competitive and should anticipate higher tuition rates.

CURRICULUM EXPECTATIONS FOR COLLEGE

I. UNIVERSITY OF MISSOURI: COLUMBIA, MO UNIV. SCIENCE AND TECHNOLOGY, ST. LOUIS, KANSAS CITY

- 4 English
- 4 Mathematics (Algebra I and higher)
- 3 Social Studies (SFBRHS requires 4 for graduation)
- 3 Science ; one must be a lab
- 2 Foreign Language (2 years of the same foreign language)
- 1 Fine Art

II. OTHER MISSOURI PUBLIC UNIVERSITIES: UNIVERSITY OF CENTRAL MISSOURI, SOUTHEAST MISSOURI STATE, MISSOURI STATE, NORTHWEST MISSOURI STATE, TRUMAN STATE UNIVERSITY

- 4 English
- 3 Mathematics (Algebra I and higher)
- 3 Social Studies (SFBRHS requires 4 for graduation)
- 3 Science
- 1 Fine Arts

III. HIGHLY COMPETITIVE COLLEGES

EXAMPLES: Ivy League Schools, Washington University, University of Notre Dame

- 4 English
- 4 Mathematics (Algebra I and higher)
- 4 Social Studies
- 4 Science
- 4 Foreign Language

IV. COMPETITIVE COLLEGES

EXAMPLES: Saint Louis University, Loyola University of Chicago, University of Illinois, Creighton University

- 4 English
- 3 or 4 Mathematics (Algebra I and higher)
- 3 Social Studies (SFBRHS requires 4 for graduation)
- 3 Science
- 2-3 Foreign Language

V. LESS COMPETITIVE COLLEGES

EXAMPLES: Columbia College, Maryville University, Webster University, Fontbonne University, Westminster College, Rockhurst University

- 4 English
- 3 Mathematics (Algebra I and higher)
- 3 Social Studies (SFBRHS requires 4 for graduation)
- 3 Science
- 3 additional core (2 Foreign Language recommended)

VI. COMMUNITY COLLEGES: East Central College, St. Louis Community College

High School Diploma

PROSPECTIVE COLLEGE ATHLETES

Two major associations govern college athletes. Universities belong to either NAIA (National Association of Intercollegiate Athletics) or NCAA (National Collegiate Athletic Association). If a student is are interested in participation in athletics at a 4 year university, he/she will be required to meet requirements for eligibility as outlined by either the NAIA or the NCAA. Students must register with the NCAA and/or the NAIA to be eligible to participate. See the counselor for details.

NCAA Regulations

If a student wishes to participate in NCAA Division I or Division II athletic programs as a college freshman, he/she must be certified by the **NCAA Initial-Eligibility Clearinghouse**. The Clearinghouse analyzes high school students' grades in core courses and college admission test scores. The Clearinghouse will determine a student's eligibility to participate in Division I or Division II athletics.

The NCAA determines which academic courses will meet eligibility criteria. Check with the counselor to determine whether or not course selections are acceptable for the NCAA Core Curriculum.

If a student plans to participate in athletics he/she must:

Division I –

- Graduate from high school
- Complete these 16 core courses:
 - 4 years of English
 - 3 years of mathematics (Algebra I or higher)
 - 2 years of natural/physical science (one must be a lab science)
 - 1 year of additional English, math or science
 - 2 years of social studies
 - 4 years of additional core courses (from any area listed above, or from foreign language, non-doctrinal religion or philosophy)
- Earn a minimum required grade-point average in core courses; and
- Earn a combined SAT or ACT sum score that matches core-course grade point average and test score.

Division II – 14 core courses

3 years of English
2 years of math (Algebra I or higher)
2 years of natural/physical science
2 years additional English, math of science
2 years social science
3 years of additional courses (from any area listed above, or from foreign language, non-doctrinal religion or philosophy)

This applies to prospective college athletes at Division I and Division II colleges only.

The student/athlete has the responsibility to confirm with his/her counselor as to whether or not course selections meet NCAA regulations.

NAIA Regulations

To be eligible to participate in an NAIA college athletic program, a student must register with the NAIA Clearinghouse and graduate from high school and meet two of the following requirements:

1. A minimum score of 18 on the ACT or 860 on the SAT.
2. An overall high school grade point average of 2.0 on a 4.0 scale.
3. Graduate in the upper half of the high school graduation class. Because we do not rank, a letter from the principal written on school letterhead and with the school seal, stating that the student meets the class rank requirement may be accepted.

SOCIAL STUDIES

Freshman Courses:

118 Global Studies I **2 semesters** **1 credit**

Required for freshmen

Global Studies includes an introduction to world geography and a comprehensive study of world history from prehistoric times to the emergence of modern nations. A study of ancient river valley civilizations and the civilizations of ancient Greece and Rome is included. The second half credit includes a study of the medieval world. Attention is given to balancing political and economic developments with the growth of ideas, religions, education, and the arts. Students discuss current events and study political and physical geography.

Sophomore Courses:

120 Global Studies II **2 semesters** **1 credit**

Prerequisite: 118 Global Studies I

Required for sophomores

This course is an evaluation of the major political movements in Europe between the 1600's and the present and their influence on the development of the modern world. This political reshaping of Europe established the conditions that eventually led to World War I, World War II, and, consequently, our present world. The course will aid the student in understanding the underpinnings of the unrest in the world today. Current events and map skills are also covered.

Junior Courses:

128 American History I **2 semesters** **1 credit**

Prerequisite: None

Open to juniors

American History I is a survey course from the 15th century through the Civil War. This course begins with the foundations of American government, including a detailed study of the development and implementation of the federal constitution. The first half credit will trace U.S. history through exploration and U.S. independence. The second half credit will include U.S. history from independence through the Civil War. Discussion of current events is also included. **The federal constitution and the Missouri constitution exams must be passed to meet graduation requirements.** Successful completion of this course is required for graduation.

129SS Honors American History I **2 semesters** **1 credit** **(With 1-8-1-8 option)**

Prerequisite: Note that to qualify for the 1-8-1-8 option through Saint Louis University, a student must have a cumulative grade point average (GPA) of at least 3.0. This course may be taken for college credit.

Open to juniors of above average ability who are willing and able to perform at an accelerated level.

Honors American History I is an intense survey course of American history from the 15th century through the Civil War. Students will be introduced to a selection of themes and topics and will be required to complete self-directed work outside the classroom. This includes term papers, research papers, book reviews, and includes higher critical thinking testing. Special emphasis will be given to current events. Supplemental readings from "American Spirit" Volume I, Bailey and Kennedy, are on reserve in the media center. Students will purchase one or two paperbacks. **The federal constitution and the Missouri constitution exams must be passed to meet graduation requirements.** Successful completion of this course is required for graduation.

If students elect to take this course for college credit, (St. Louis University course HS 260, 3 credits) an additional fee will apply.

Senior Courses:

131 American History II **2 semesters** **1 credit**

Prerequisite: None

Open to seniors

American History II is a survey course that explores the development of the U.S. as a world power from the Reconstruction era to the present day. U.S. history is traced through the study of American overseas expansion, involvement in World War I, the isolationism of the 1920's and 1930's, World War II and the postwar world, to the present day. Special emphasis is given to current events and the post World War II era.

Successful completion of this course is required for graduation.

133SS Honors American History II **2 semesters** **1 credit** **(With 1-8-1-8 option)**

Prerequisite: Note that to qualify for the 1-8-1-8 option through Saint Louis University, a student must have a cumulative grade point average (GPA) of at least 3.0. This course may be taken for college credit.
Open to seniors of above average ability.

Honors American History II is an intense survey course of American history, exploring the development of the U.S. as a world power from post civil war to the present day. U.S. history is traced through the study of American overseas expansion, involvement in World War I, the isolationism of the 1920's and 1930's, World War II and the postwar world, to the present day. Special emphasis is given to current events. Students will be required to purchase a total of two books (1 per semester) to read for this class. The books are not expensive. Successful completion of this course is required for graduation.

If students elect to take this course for college credit, (St. Louis University course HS 261, 3 credits) an additional fee will apply.

Social Studies Electives:

143 Psychology **1 semester** **½ credit**

Prerequisite: None

Open to juniors and seniors

Psychology is a semester course that is an overview of human behavior. Going back through the theories of Freud, Jung, Erickson, Maslow, and other theorists, the course takes into consideration the methods of studying, measuring, and treating human behaviors. Disorders, physiology, and social problems are likewise studied. This includes applications, essays, term papers, supplemental readings, films and other forms of testing.

144 Sociology **1 semester** **½ credit**

Prerequisite: None

Open to juniors and seniors

This course studies social behavior and human groups in a systematic method. This course will focus primarily on the influence of social relationships upon people's attitudes and behavior, on how societies are established, and on how they change. Identification of recurring patterns and the influence on social behavior will be major goals of this course.

145SS Honors College Psychology **1 semester** **½ credit** **(With ECC option)**

Prerequisite: Advisor's signature is required. Note that to qualify for this course a student must have a cumulative grade point average (GPA) of 2.5. This course may be taken for college credit.

Open to seniors

This course will be offered in our building but will be taught by Dr. Bill Cunningham from East Central College. East Central College provides a transcript of these credits. (It is the student's responsibility to check with the college of their choice to verify acceptance of the credits.) Students will need to purchase textbooks for this course. **A maximum of 50 students may enroll in this class.** Psychology is designed to provide the student with a broad, general introduction to the field of psychology. It is a study of behavior designed to present an account of the significant concepts and findings in contemporary psychology. The course should provide a clear description of the bodies of knowledge in the core areas of psychology. (ECC course PY 1103, 3 credits)

Student enrolled in this college class must pay an additional fee for the class.

146SS Honors College Sociology **1 semester** **½ credit** **(With ECC option)**

Prerequisite: Advisor's signature is required. Note that to qualify for this course a student must have a cumulative grade point average (GPA) of 2.5. This course may be taken for college credit.

Open to seniors

This course will be offered in our building but will be taught by Dr. Bill Cunningham from East Central College. East Central College provides a transcript of these credits. (It is the student's responsibility to check with the college of their choice to verify acceptance of the credits.) Students will need to purchase textbooks for this course. This is an introductory course in the field of sociology with special emphasis on the scientific study of social relations, social organizations, and social dynamics. (ECC course SO 1103, 3 credits)

Student enrolled in this college class must pay an additional fee for the class.

150 Contemporary Issues**1 semester****½ credit**

Prerequisite: None

Open to juniors and seniors

This course will survey the developments of current events on the local, state, national and international level. It will employ Newsweek, newspapers, internet, T.V. and films to investigate the current state of affairs. The course will use geography when applicable student performance will be evaluated through testing, papers, presentations and projects. **This class may be taken more than once with teacher approval.**

RESOURCE SKILLS**201 Resource Skills I****2 semesters****1 credit**

Prerequisite: Based on teacher/guidance recommendation and test scores

Open to 1st year resource students only

Students will apply academic skills to increase school success. The students will participate in learning style surveys and multiple intelligence surveys to discover the student's area of best potential for success. Students will apply organizational skills, time management techniques, test taking strategies, memorization techniques, reading comprehension skills, and other skills to improve academic success. Content area teachers will coordinate with the Learning Consultant to aid in improving student achievement. Students will utilize alternative testing methods, when deemed appropriate. Students may also be given the opportunity to receive academic assistance with assignments from other classes. Additional levels of this class may be taken based on the Learning Consultant//guidance/principal recommendation. Prerequisite to Resource II

202 Resource Skills II**2 semesters****1 credit**

Prerequisite: Recommendation of Learning Consultant/guidance/principal is required. Typically the class is limited to students who have a current Individual Service Plan or 504 Plan.

Students will apply advocacy skills to increase and maintain self-learning. Students will apply study skills, organization skills, test taking strategies, memorization techniques, reading comprehension strategies, and other skills to improve academic success. Content area teachers will coordinate with the Learning Consultant to aid in improving student achievement. Students will utilize alternative testing methods, when deemed appropriate. Students involved in special services will also do many activities to increase college research abilities in order to locate schools that will best accommodate their needs. Students may also be given the opportunity to receive academic assistance with assignments from other classes.

ENGLISH**Required English Credits:****Freshman****210 Fundamentals of English I****2 semesters****1 credit**

Prerequisite: Recommendation of the guidance counselor based on elementary school and standardized test scores.

Students will focus on applying writing skills to practical, daily situations. Students will practice oral and written communication skills as appropriate to all disciplines. Students will participate in learning projects that combine appropriate classic and contemporary literature lessons. Students must be concurrently enrolled in Resource Skills or have departmental approval. Some 4 year colleges may not accept this course as a required English class for admission. This class does not meet the requirements for the NCAA core courses.

212 English I**2 semesters****1 credit**

Prerequisite: None

This course focuses on reading and analyzing the four literary types – fiction, nonfiction, poetry, and drama. Several literary works are discussed and studied. Furthermore, there will be a focus on written expression in the form of paragraphs. Grammar is thus reviewed and limited research is introduced.

215 Advanced English I**2 semesters****1 credit**

Prerequisite: Recommendation of counselors

This course focuses in-depth on the major literary types—fiction, nonfiction, poetry, drama, and novel. Grammar is reviewed, and paragraph and essay writing are developed. Several classic literary works are studied, as well as mythology. More extensive research is introduced. This class is a prerequisite for 225 Advanced English II.

Sophomore**220 Fundamentals of English II****2 semesters****1 credit**

Prerequisite: None

This course builds on 210 Fundamentals of English I with advanced learning modules and literature. Students should be concurrently enrolled in 202 Resource Skills or have departmental approval. Some 4 year colleges may not accept this class as a required English class for admission. This class does not meet the requirements for the NCAA core courses.

222 English II**2 semesters****1 credit**

Prerequisite: None

This course presents a survey of various literary genres including drama, short stories, poetry, novels, and nonfiction. Writing assignments and projects stem from the literature and vary in length and focus. Grammar is reviewed and proofreading skills are taught.

225 Advanced English II**2 semesters****1 credit**

Prerequisite: Minimum grade of B in 215 Advanced English I, and approval of teacher.

This course presents a survey of various literary genres including drama, short stories, poetry, novels, and non-fiction as well as the study of American literature. It is designed to combine the sophomore and junior literature courses into a single year of study. Writing assignments and projects stem from the literature and vary in length and focus. The 5 paragraph essay will be an important focus of the writing instruction. This class is a prerequisite to move into the college credit courses junior and senior year.

Junior**236 English III****2 semesters****1 credit**

Prerequisite: None

This course is required for all juniors unless enrolled in the 1-8-1-8 sequence.

American Literature includes a study of American authors from past to present. It takes a comprehensive look at the most notable American authors in the fields of short fiction, novels, nonfiction, poetry, and drama. Critical study includes class discussion, critical reading, and exploring different forms of written expression.

238EN Honors Process of Composition**1 semester****½ credit****(With 1-8-1-8 option)**

Prerequisite: Minimum grade of B- in 225 Advanced English II, and/or teacher approval. Note that to qualify for the 1-8-1-8 option through Saint Louis University, a student must have a cumulative grade point average (GPA) of at least 3.0. This course may be taken for college credit.

Students focus on writing as a process and write sustainable, coherent, comprehensive papers using various methods of development, using literature as a springboard for their writing and following MLA documentation style, using in-text (parenthetical) citation. Students should gain sufficient knowledge to deal with matters such as diction, style, originality, logic, mechanics, and usage. Various methods of development will be taught within the study of a novel. The topics for the various styles of writing will be based on the novel or related study. It is possible that at least one novel will be studied in depth. This class is a prerequisite for the Honors Strategies of Rhetoric and Research class.

If students elect to take this course for college credit, (St. Louis University course ENGL 150, 3 credits) an additional fee will apply.

251EN Honors Strategies of Rhetoric and Research 1 semester ½ credit (With 1-8-1-8 option)

Prerequisite: Minimum grade of B- in 238EN Honors Process of Composition and/or teacher approval. Note that to qualify for the 1-8-1-8 option through Saint Louis University, a student must have a cumulative grade point average (GPA) of at least 3.0. This course may be taken for college credit.

The primary purpose of this composition course is to develop the student's ability to write extensive argumentative essays and research papers of varying lengths. The student is required to research several different subject areas and to write fully-documented research papers on narrowed topics. The student practices the tasks of topic selection, gathering materials, note taking, outlining, and documentation. In addition, the student applies all the techniques of effective writing, including transition, parallelism, writing patterns, and vocabulary. It is possible that at least one novel will be studied as a springboard for argumentation. This class is a prerequisite for Honors Intro to Literary Studies.

If students elect to take this course for college credit, (St. Louis University course ENGL 190, 3 credits) an additional fee will apply.

Senior

246 English IV 2 semesters 1 credit

Prerequisite: None

This course is required for all seniors unless enrolled in the 1-8-1-8 sequence.

English IV attempts to give the student a broad background in the origins and evolution of the English language and its literature from 500 A.D. to the present. Classic British authors and their works are studied and used as the stimulus for various writing assignments and projects. Of particular importance will be the research paper in terms of researching skills, citation methods and techniques, and the ability to put those skills together in order to create an original document.

252EN Honors Intro to Literary Studies 1 semester ½ credit (With 1-8-1-8 option)

Prerequisite: Minimum grade of B- in 251EN Honors Strategies of Rhetoric and Research, and/or teacher approval. Note that to qualify for the 1-8-1-8 option through Saint Louis University, a student must have a cumulative grade point average (GPA) of at least 3.0. This course may be taken for college credit.

The student will be introduced to some of the major terms, methods, and concepts used by literary scholars and practitioners, such as the elements, forms, and genres of literature. The readings may include literature representing a wide variety of forms, authors, and time periods. Critical reading skills will be developed through extensive instruction in the close reading of texts and numerous writing projects. Six book-length major works will be studied. Several essays, oral presentations, and research projects are required. This class is a prerequisite for the Honors Intro to Drama class.

If students elect to take this course for college credit, (St. Louis University course ENGL 202, 3 credits) an additional fee will apply.

253EN Honors Intro to Drama (A literary study of drama) 1 semester ½ credit (With 1-8-1-8 option)

Prerequisite: Minimum grade of B- in 252EN Honors Intro to Literary Studies, and/or teacher approval. Note that to qualify for the 1-8-1-8 option through Saint Louis University, a student must have a cumulative grade point average (GPA) of at least 3.0. This course may be taken for college credit.

The student will develop stronger writing abilities and critical reading skills, centered on the study of drama. The readings will represent a wide variety of dramatists, time periods, and nationalities. The student will demonstrate these critical skills in essays, tests and presentations. Students will be required to participate in a group dramatization of a section of a play.

If students elect to take this course for college credit, (St. Louis University course ENGL 240, 3 credits) an additional fee will apply.

Elective Credits Offered by the English Department:

----The following courses satisfy ELECTIVE credits. They do not satisfy English requirements for graduation.

232 Journalism News Writing & Editing 1 semester ½ credit

Prerequisite: None

Open to all grade levels

This is a **one semester course** that focuses thoroughly on writing news, interviewing, journalism ethics and libel, journalism history, and news journalism. Students' writings will be used in the student publication, The Outlet and students are encouraged to take Newspaper Journalism I the following semester.

233 Reading Strategies**1 semester****½ credit**

Prerequisite: None

Open to juniors and seniors

This is a reading enrichment class utilizing critical reading skills texts, vocabulary building texts, ACT reading test preparation materials, and online resources. The course promotes critical reading techniques, builds vocabulary, and provides repetition of the skills needed for fluent reading.

235 Creative Writing**1 semester****½ credit**

Prerequisite: None

Creative Writing is open to juniors and seniors. Through numerous writing exercises, the student will work to develop creative methods for self expression.

239 Newspaper Journalism I**2 semesters****1 credit**

Prerequisite: 232 Journalism News Writing & Editing and application/writing sample to the publication moderator.

This elective course focuses on the skills necessary to publish the student newspaper, The Outlet. These skills include news writing and revision, photojournalism, layout and design using Adobe Photoshop Elements and Adobe InDesign. In this course, students will continue to use their writing skills, maturing in their abilities. Students will be required to sell advertising and attend one work night per month along with mandatory staff meetings. Students also show an appreciation for the First Amendment and media ethics. Students in Newspaper Journalism I are encouraged to take Newspaper Journalism II the following year.

256 Newspaper Journalism II**2 semesters****1 credit**

Prerequisite: 239 Newspaper Journalism I and application/writing sample to the publication moderator.

Advanced journalism skills are demonstrated through editing, laying out and writing for the student newspaper, The Outlet. This course may be taken more than once. Students will be required to sell advertising and attend one work night per month along with mandatory staff meetings. Students will show an appreciation for the First Amendment and media ethics. These students will have final say over newspaper layout and design.

254 Yearbook Journalism**2 semesters****1 credit**

Prerequisite: Application to the yearbook advisor

Open to juniors and seniors

This elective course focuses on digital photography, page layout and design, copy writing, organization, and deadline skills. The class produces the Borgian yearbook. Students will be required to meet after school dismisses in May to complete the yearbook. This course may be taken more than once for students who would like to apply to be editor.

FOREIGN LANGUAGE

311 German I**2 semesters****1 credit**

Prerequisite: Recommendation of guidance counselor based on Achievement Test

Open to freshmen, sophomores, juniors and seniors

This course provides a basic introduction to the language, culture, and customs of German-speaking peoples. Emphasis is placed on oral and written communication of common everyday life experiences. Students who do not maintain a "C" average at the end of the second semester of German I may not take the next level course without teacher approval. If the student wants to move to the next level course of the language and does not wish to repeat the initial level, he or she will need to take a summer course to raise his/her grade to a "C" in German I, before advancing to German II. Adequate completion of assigned summer study may be required to advance to the next level. (German II)

312 German II**2 semesters****1 credit**

Prerequisite: Minimum grade of "C" in 311 German I and teacher approval

Open to sophomores, juniors, and seniors

In this course, vocabulary and sentence patterns expand. Emphasis is placed on oral and written communications of everyday life experiences and cultural aspects of Austria and Switzerland.

313FL Honors German III **2 semesters** **1 credit** **(With 1-8-1-8 option)**

Prerequisite: A minimum grade of “B” in 312 German II and teacher approval. This course may be taken for college credit. Note that to qualify for the 1-8-1-8 option through Saint Louis University, a student must have a cumulative grade point average (GPA) of at least 3.0.

This honors class will focus on various applications of the German language and culture, thereby improving the students’ conversation, reading and writing skills in the target language. College credit can be earned in the Spring Semester.

If students elect to take this course for college credit (St. Louis University course GR 110, 3 credits), an additional fee will apply.

314FL Honors German IV **2 semesters** **1 credit** **(With 1-8-1-8 option)**

Prerequisite: A minimum grade of “B” in 313 German III and teacher approval. This course may be taken for college credit. Note that to qualify for the 1-8-1-8 option through Saint Louis University, a student must have a cumulative grade point average (GPA) of at least 3.0.

This college-level honors course offers students the platform to expand their knowledge of the German language and culture through oral and written communication. Active participation and contribution in the target language are expected. Understanding and discussing a variety of German texts (fictional and non-fictional) at an intermediate level are the focal points in this class.

If students elect to take this course for college credit (St. Louis University course GR 115, 3 credits and GR 210, 3 credits), an additional fee will apply.

331 Spanish I **2 semesters** **1 credit**

Prerequisite: Recommendation of Guidance Counselor based on Achievement Test

Open to freshmen, sophomores, juniors, and seniors

Spanish I is an introduction to the language, culture, and customs of Spanish-speaking peoples. Emphasis is placed on listening, speaking, reading and writing Spanish. Access to a computer and the internet after school will be necessary. A computer will not be required during class. Students who do not maintain a “C” grade at the end of the second semester of Spanish I may not take the next level course without teacher approval. They may take Spanish I again to improve their grade to move on to the next level course, but they will receive credit for the course only once. If the student wants to move to the next level course of the language and does not wish to repeat the initial level, he or she will need to take a summer course to raise his/her grade to a “C” in Spanish I, before advancing to Spanish II. Adequate completion of assigned summer study may be required to advance to the next level. (Spanish II)

332 Spanish II **2 semesters** **1 credit**

Prerequisite: Minimum grade of “C” in 331 Spanish I and approval of teacher

Open to sophomores, juniors, and seniors

Spanish II is a continuation of immersion in the Spanish language with the TPRS (Teaching Proficiency through Reading and Storytelling). Students acquire a second language much like they acquire their first – by hearing speech in context. The stories acted out in class include various verb tenses and complex grammatical structures. Students will also read and discuss easy novels in Spanish.

333FL Honors Spanish III **2 semesters** **1 credit** **(With 1-8-1-8 option)**

Prerequisite: 332 Spanish II and teacher approval. Note that to qualify for the 1-8-1-8 option through Saint Louis University, a student must have a minimum grade of B in 332 Spanish II. This course may be taken for college credit.

Open to juniors and seniors

Through the TPRS method, Spanish 3 students will be expected to communicate with a higher quality of fluency and oral proficiency. Emphasis is placed on refining grammar, improving pronunciation, building a richer vocabulary, writing creatively, giving oral presentations and examining in greater depth the everyday life of Spanish speaking peoples. Students will also read and discuss novels in Spanish.

If students elect to take this course for college credit (St. Louis University course SO110, 3 credits) an additional fee will apply.

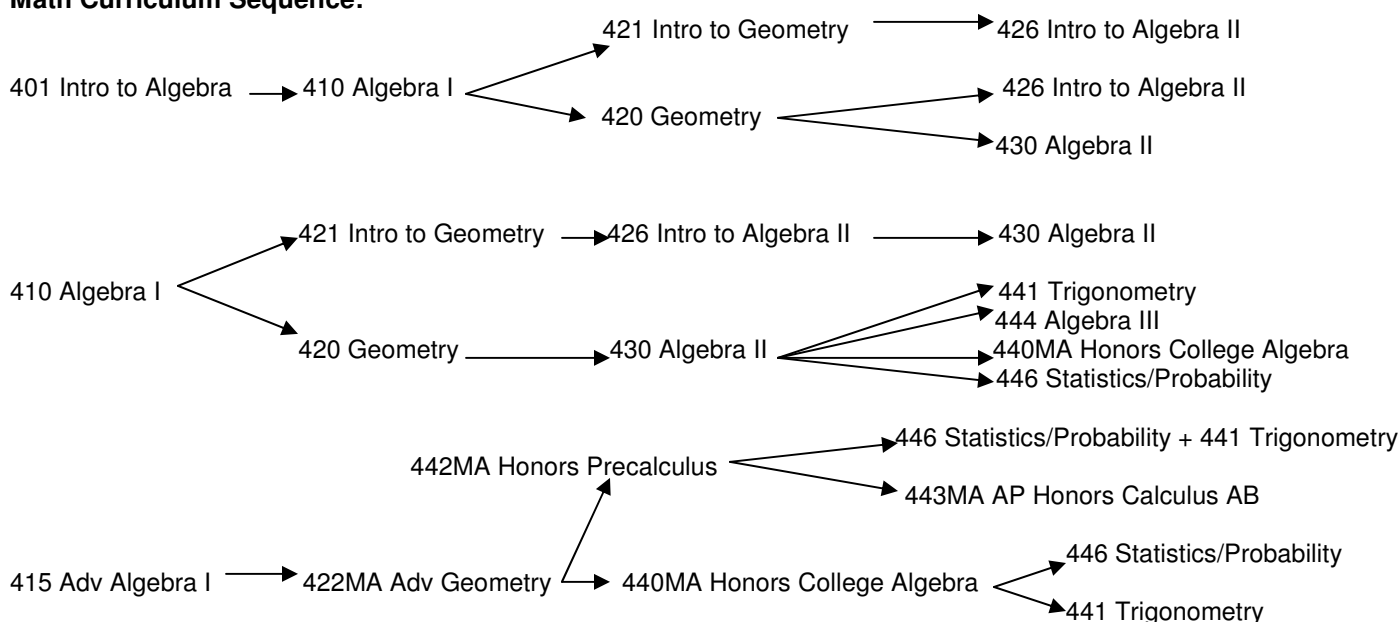
334FL Honors Spanish IV**2 semesters****1 credit****(With 1-8-1-8 option)**

Prerequisite: 333FL Spanish III and teacher approval. Note that to qualify for the 1-8-1-8 option through Saint Louis University, a student must have a minimum grade of B in 333 Hn. Spanish III. This course may be taken for college credit.

Open to seniors

Spanish 4 students will acquire advanced grammatical concepts contextually via comprehensible input activities within the target language in order to achieve a higher quality of fluency and oral proficiency in Spanish. Emphasis is placed on refining grammar, improving pronunciation, building a richer vocabulary, writing creatively, giving oral presentations and examining in greater depth the everyday life of Spanish speaking peoples. Students will also read and discuss novels, including authentic novels in Spanish.

If students elect to take this course for college credit (St. Louis University course SP115, 3 credits) and additional fee will apply.

MATH**Math Curriculum Sequence:****Freshman Courses:****401 Introduction to Algebra I****2 semesters****1 credit**

Prerequisite: None

This course covers many of the same topics as first semester 410 Algebra I, but at an introductory level. Less emphasis is placed on word problems and applications, and more emphasis is placed on basic principles. This course will not meet the mathematics requirement for four year colleges. This class does not meet the requirements for the NCAA core courses.

410 Algebra I**2 semesters****1 credit**

Prerequisite: None

This course emphasizes the following algebra principles: order of operations, factoring, operations of polynomials, exponents, solving equations, and simplifying radicals. A TI-84 graphing calculator is required for this class.

415 Advanced Algebra I**2 semesters****1 credit**

Prerequisite: Recommendation of guidance counselor based on achievement tests.

This course will cover the same topics as 410 Algebra I, but in more depth and at a faster pace. Additional topics include functions, systems of three equations, systems of inequalities, factoring cubes, and a great emphasis on word problems. A TI-84 graphing calculator is required for this class. This is a prerequisite for 422 Advanced Geometry.

Sophomore Courses:

410 Algebra I

2 semesters

1 credit

Prerequisite: None

This course emphasizes the following algebra principles: order of operations, factoring, operations of polynomials, exponents, solving equations, and simplifying radicals. A TI-84 graphing calculator is required for this class.

420 Geometry

2 semesters

1 credit

Prerequisite: Minimum grade of C in 410 Algebra I and/or teacher approval

First semester, students will study congruent and similar triangles and properties of parallel lines, and writing 2-column proofs. Second semester topics include areas, surface areas, volumes, and basic triangle trigonometry.

A TI-84 graphing calculator is required for this class.

421 Introduction to Geometry

2 semesters

1 credit

Prerequisite: 410 Algebra I and/or teacher approval.

This course introduces students to basic geometric principles. Topics include polygons and their properties, areas, perimeters, volume, surface areas and Pythagorean Theorem.

This course may not meet the mathematics requirement for admission to some four year colleges. This class does not meet the requirements for the NCAA core courses.

422 Advanced Geometry

2 semesters

1 credit

Prerequisite: Minimum grade of C+ in 415 Advanced Algebra I and cumulative grade point average (GPA) of at least 3.0 and/or teacher approval.

This course covers the same topics as geometry, but in greater depth and at a faster pace. Additional topics include circles, and coordinate geometry. A TI-84 graphing calculator is required for this class.

430 Algebra II

2 semesters

1 credit

Prerequisite: Minimum grade of C in 410 Algebra I and 1 credit in 420 Geometry or a minimum grade of C in 426 Introduction to Algebra II and/or teacher approval.

This course is an expansion of Algebra I topics. Additional topics include systems of equations, functions, graphing, complex numbers, logarithms, and conic sections. Students must maintain a minimum C+ average to enroll in College Algebra. A TI-84 graphing calculator is required for this class.

440MA Honors College Algebra

2 semesters

1 credit

(With ECC option)

Prerequisite: Minimum grade of C+ in 415 Advanced Algebra I or 430 Algebra II class and 1 credit in 420 Geometry or 422 Advanced Geometry and/or teacher approval. Note that to qualify for this course, a student must have a cumulative grade point average (GPA) of 2.5. This course may be taken for college credit if score is high enough on ECC placement test.

Topics include: complex numbers, logs and exponents, polynomials, rational expressions, radicals, solving equations and inequalities, graphing equations and inequalities, matrices, permutations and combinations, theory of equations and the binomial theorem. The use of the graphing calculator and its application to the topics of College Algebra will be emphasized. A TI-84 graphing calculator is required for this class.

If students elect to take this course for college credit, (ECC course MT 1403, 3 credits) an additional fee will apply.

442 Honors Precalculus

2 semesters

1 credit

(With ECC option)

Prerequisite: Minimum grade of B in 415 Advanced Algebra I or 430 Algebra II class and 1 credit in 420 Geometry or 422 Advanced Geometry and teacher approval. Note: to qualify for this course, a student must have a cumulative grade point average (GPA) of 2.5. This course may be taken for college credit if score is high enough on ECC placement test.

This class is a unified study of College Algebra and Trigonometry, with particular emphasis given to preparation of the student for the study of Calculus. Topics include: sets, complex numbers, logs and exponents, polynomials, rational expressions, radicals, solving equations and inequalities, graphing equations and inequalities, matrices and determinants, permutations and combinations, theory of equations, the binomial theorem and the study of the trigonometric functions. The use of a graphing calculator and its application to the topics of Precalculus will be emphasized. A TI-84 graphing calculator is required for this course.

If students elect to take this course for college credit, (ECC course MT1505, 5 credits) an additional fee will apply. This course must be taken as a prerequisite for 443MA AP Honors Calculus AB.

Junior Course:

420 Geometry **2 semesters** **1 credit**

Prerequisite: Minimum grade of C in 410 Algebra I and/or teacher approval

First semester, students will study congruent and similar triangles and properties of parallel lines, and writing 2-column proofs. Second semester topics include areas, surface areas, volumes, and basic triangle trigonometry.

A TI-84 graphing calculator is required for this class.

421 Introduction to Geometry **2 semesters** **1 credit**

Prerequisite: 410 Algebra I and/or teacher approval.

This course introduces students to basic geometric principles. Topics include polygons and their properties, areas, perimeters, volume, surface areas and Pythagorean Theorem.

This course may not meet the mathematics requirement for admission to some four year colleges. This class does not meet the requirements for the NCAA core courses.

Junior/Senior Courses:

426 Introduction to Algebra II **2 semesters** **1 credit**

Prerequisite: 1 credit in 410 Algebra I and 1 credit in 421 Introduction to Geometry and/or teacher approval.

This course covers 430 Algebra II topics, but at an introductory level. A TI-84 graphing calculator is required for this class.

This class does not meet the requirements for the NCAA core courses.

430 Algebra II **2 semesters** **1 credit**

Prerequisite: Minimum grade of C in 410 Algebra I and 1 credit in 420 Geometry or a minimum grade of C in 426 Introduction to Algebra II and/or teacher approval.

This course is an expansion of Algebra I topics. Additional topics include systems of equations, functions, graphing, complex numbers, logarithms, and conic sections. Students must maintain a minimum C+ average to enroll in College Algebra. A TI-84 graphing calculator is required for this class.

440MA Honors College Algebra **2 semesters** **1 credit** **(With ECC option)**

Prerequisite: Minimum grade of C+ in 415 Advanced Algebra I or 430 Algebra II class and 1 credit in 420 Geometry or 422 Advanced Geometry and/or teacher approval. Note that to qualify for this course, a student must have a cumulative grade point average (GPA) of 2.5. This course may be taken for college credit if score is high enough on ECC placement test.

Topics include: complex numbers, logs and exponents, polynomials, rational expressions, radicals, solving equations and inequalities, graphing equations and inequalities, matrices, permutations and combinations, theory of equations and the binomial theorem. The use of the graphing calculator and its application to the topics of College Algebra will be emphasized. A TI-84 graphing calculator is required for this class.

If students elect to take this course for college credit, (ECC course MT 1403, 3 credits) an additional fee will apply.

441 Trigonometry **1 semester** **½ credit**

Prerequisite: Minimum grade of C+ in 430 Algebra II and/or teacher approval for seniors and minimum grade of C+ in 415 Advanced Algebra I and 1 credit in 422 Advanced Geometry and/or teacher approval.

This course introduces students to the unit circle, basic identities, linear and angular velocities, graphs of trigonometry functions, and Laws of Sines and Cosines and their applications. A TI-84 graphing calculator is required for this class.

442 Honors Precalculus **2 semesters** **1 credit** **(With ECC option)**

Prerequisite: Minimum grade of B in 415 Advanced Algebra I or 430 Algebra II class and 1 credit in 420 Geometry or 422 Advanced Geometry and teacher approval. Note: to qualify for this course, a student must have a cumulative grade point average (GPA) of 2.5. This course may be taken for college credit if score is high enough on ECC placement test.

This class is a unified study of College Algebra and Trigonometry, with particular emphasis given to preparation of the student for the study of Calculus. Topics include: sets, complex numbers, logs and exponents, polynomials, rational expressions, radicals, solving equations and inequalities, graphing equations and inequalities, matrices and determinants, permutations and combinations, theory of equations, the binomial theorem and the study of the trigonometric functions. The use of a graphing calculator and its application to the topics of Precalculus will be emphasized. A TI-84 graphing calculator is required for this course.

If students elect to take this course for college credit, (ECC course MT1505, 5 credits) an additional fee will apply. This course must be taken as a prerequisite for 443MA AP Honors Calculus AB.

446 Probability and Statistics**1 semester****½ credit**

Prerequisite: Minimum grade of C in 415 Advanced Algebra 1 or minimum grade of C in 430 Algebra II and /or teacher approval.

Probability and Statistics is an introduction to modern statistics. Students will research and use data in order to illustrate statistical methods and procedures. This course allows the student to develop an understanding for statistics by taking a look at organized data, applying various formulas and calculations. Topics covered include binomial, geometric, Poisson, normal and sampling distributions. A TI-84 graphing calculator is required for this class.

Senior Courses:**443MA AP Honors Calculus AB****2 semesters****1 credit****(With 1-8-1-8 option)**

Prerequisite: Minimum grade of B in 440MA College Algebra **AND** minimum grade of C in 441 Trigonometry, a cumulative GPA of 3.0 or higher, and/or teacher approval. Note that to qualify for the 1-8-1-8 option through Saint Louis University, a student must have a cumulative grade point average (GPA) of at least 3.0. This course may be taken for college credit.

Topics include limits, derivatives, integrals, and their applications. A TI-84 graphing calculator is required for this class. (St. Louis University course MT 142, 4 credits)

If students elect to take this course for college credit, an additional fee will apply.

444 Algebra III**2 semesters****1 credit**

Prerequisite: 430 Algebra II and/or teacher approval

This course is an extension and reinforcement of 430 Algebra II topics. Students will also study matrices, graphing, exponents and logarithms, and factoring with synthetic division. This course is designed for students who found Algebra II challenging. A TI-84 graphing calculator is required for this class.

Elective Credits Offered by the Math Department:

----The following courses satisfy ELECTIVE credits. They do not satisfy Math requirements for graduation.

450 Computer Program Design**1 semester****½ credit**

Prerequisite: 410 Algebra I

Open to sophomores, juniors, and seniors

Students need to have strong math and problem solving skills. This introductory computer science course focuses on teaching students to effectively apply computer design techniques. Using a "Design Recipe", students begin with a problem statement and then systematically design a computer program that solves the problem. DrRacket, an interactive programming environment is used to enhance the student's ability to write and test computer programs. Programs include simple animation, text editing and use of input/output files. Topics covered include processing fixed sized data, such as intervals, enumerations, itemizations and structures.

451 Computer Program Design II**1 semester****½ credit**

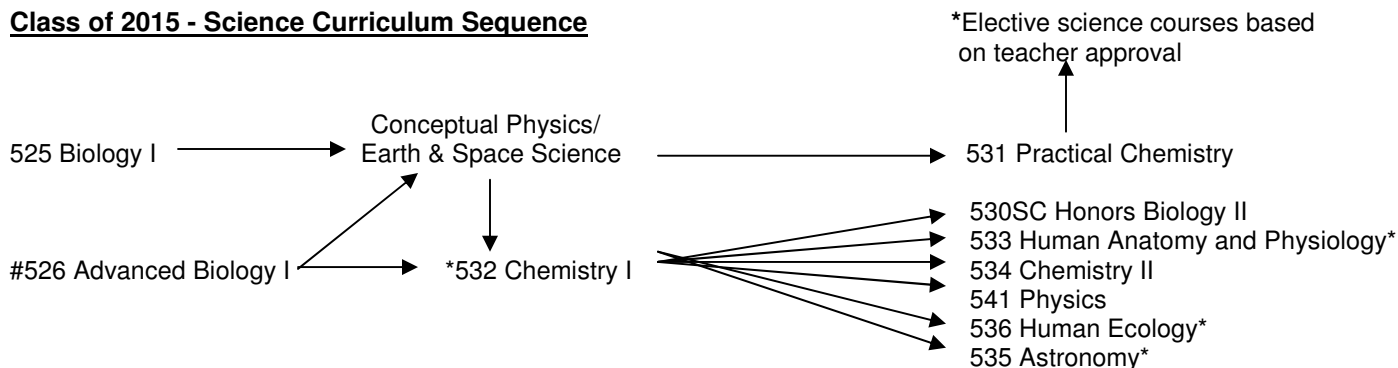
Prerequisite: Minimum grade of B in the 450 Computer Program Design I class and/or teacher approval.

Open to sophomores, juniors, and seniors

This intermediate computer science course continues the pursuit of effective computer program design techniques using DrRacket and "The World" interactive programming environment. In this course, students will learn intermediate computer design techniques while they design, develop and test interactive programs. Topics covered include processing arbitrarily large sized data such as lists, binary search trees, natural numbers, as well as recursion and referential data.

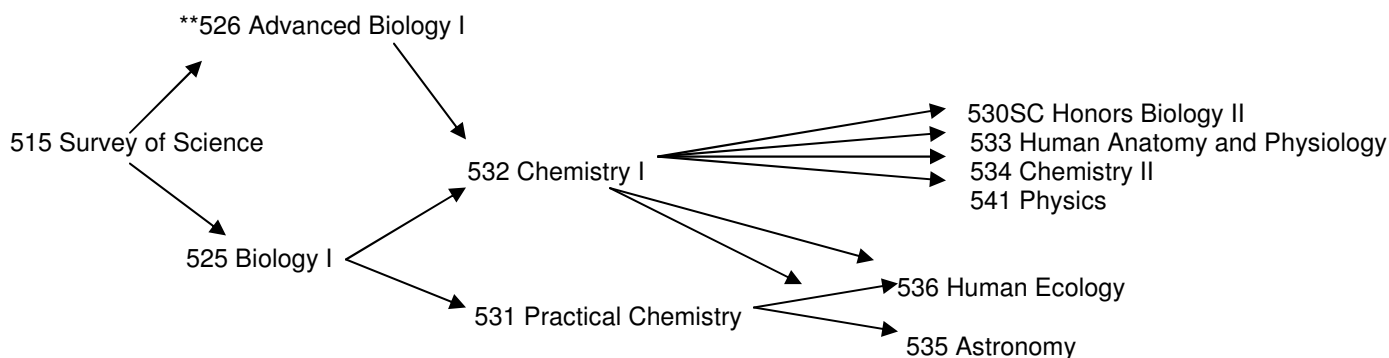
SCIENCE

Class of 2015 - Science Curriculum Sequence



#Prerequisites in science are dependent on math placement.

Classes of 2014, 2013, 2012 - Science Curriculum Sequence



**May start in 526 Advanced Biology I as a freshman.

Freshman/Sophomore Courses:

525 Biology I

2 semesters

1 credit

Prerequisite: None

Open to freshman and sophomores

The course provides a thorough survey of life. The general goals of the course are to understand the common patterns of organization of all living things, to understand the basic life processes of all living organisms, to understand the main principles of the science of biology, and to understand ourselves as living Christian beings.

526 Advanced Biology I

2 semesters

1 credit

Prerequisite: Outstanding math and science scores on standardized tests and minimum grade of A in science and math from grade school is necessary.

Freshmen taking this course must be enrolled in 415 Advanced Algebra I. This course is similar to 525 Biology I, but the pace is accelerated and topics may be covered in more depth. Genetics, cell biology, and biotechnology will be emphasized. More outside reading and research reports will be required.

Sophomore Courses:

527 Conceptual Physics

1 semester

½ credit

This course has the following objectives: provide the student with the essential tools necessary to conduct scientific queries and analyze results, the necessary underpinnings for more advanced science courses, and a desire to develop a life-long interest in science. The major topics will be Metric System and Scientific Notation, Dependent and Independent variables, Atomic Structure, Periodic Table, waves, Light and Atom interactions, and basic electricity. The course will utilize computer simulations and laboratories to supplement classroom lectures.

528 Earth and Space Science

1 semester

½ credit

This course has the following objectives: provide the student with the essential tools necessary to conduct scientific queries and analyze results, the necessary underpinnings for more advanced science courses, an understanding of Earth and Space Science, and a desire to develop a life-long interest in science. The major topics will be Gravity, Formation of the Solar System, Plate Tectonics, Weather/Atmosphere, and Volcanoes. This course will utilize computer simulations and laboratories to supplement classroom lectures.

532 Chemistry I

2 semesters

1 credit

Prerequisite for sophomores: 526SC Advanced Biology I and teacher recommendation.

Modern theories on atomic structure, the periodic table, the various types of chemical changes, and the energy exchanges in these chemical changes are the topics of this course.

Junior/Senior Courses:

530SC Honors Biology II

2 semesters

1 credit

(With 1-8-1-8 option)

Prerequisite for juniors: Must have taken 526 Advanced Biology I as a freshman and 532 Chemistry I as a sophomore.

Prerequisite for seniors: Recommendation of 525 Biology I and 532 Chemistry I teachers. Note that to qualify for the 1-8-1-8 option through Saint Louis University, a student must have a cumulative grade point average (GPA) of 3.0.

This will be a college level survey of biology. Topics covered in-depth will include molecular biology, genetics, evolutionary patterns, and ecology. Research papers and projects will be required.

If a student elects to take this course for college credit (St. Louis University course BL 104, 4 credits), an additional fee will apply.

531 Practical Chemistry

2 semesters

1 credit

Prerequisite: None

Open to juniors and seniors

This class is designed for students who do not meet the prerequisites for 532 Chemistry I. Topics will include fundamental measurements, elements and compounds, chemical reactions, and more. The everyday uses of chemistry will be emphasized. This course may not meet the science requirements for admission to some four year colleges. This class does not meet the requirements for the NCAA core courses.

532 Chemistry I

2 semesters

1 credit

Prerequisite: Student must be taking or have taken 430 Algebra II or permission of instructor of present science class.

Open to juniors and seniors

Modern theories on atomic structure, the periodic table, the various types of chemical changes and the energy exchanges in these chemical changes are the topics of this course.

533 Human Anatomy and Physiology

2 semesters

1 credit

Prerequisite: Minimum grade of C in 525 Biology I/526 Advanced Biology I also 532 Chemistry I completed or taken at the same time or teacher approval.

Open to juniors and seniors

This course is recommended for students interested in health careers. This course will be a comprehensive study of human anatomy and physiology related topics.

534 Chemistry II**2 semesters****1 credit**

Prerequisite: Minimum grade of B in 532 Chemistry I and/or teacher approval.

Topics covered in this class include acids and bases, oxidation-reduction reactions, electrochemistry, nuclear chemistry and organic chemistry. This course is strongly recommended for those going into medical or other science-related fields.

535 Astronomy**1 semester****½ credit**

Prerequisite: Minimum grade of C in 525 Biology I/526 Advanced Biology I and 532 Chemistry I/531 Practical Chemistry completed or taken at the same time and/or teacher approval.

Open to juniors and seniors

This course will acquaint the student with the science of astronomy; specific topics include constellations, stars, nebulae, the solar system, and galaxies. This course will familiarize the student with the operation of a telescope. A survey of the history of astronomy will also be covered, as well as recent discoveries. An emphasis will be placed upon the basics of astronomical nomenclature.

536 Human Ecology**1 semester****½ credit**

Prerequisite: Minimum grade of C in 525 Biology I/526 Advanced Biology I and 532 Chemistry I/531 Practical Chemistry completed or taken at the same time and/or teacher approval.

Open to juniors and seniors

Humans play a major role in the global environment. Ecological principles help us understand why the natural environment is currently changing and how it will change in the future. This course will consider human adaptation, population growth, energy consumption, and resource usage. We will use these and related principles to understand the interactions between the human species and the global environment.

Senior Courses:**541 Physics****2 semesters****1 credit**

Prerequisite: Minimum GPA of 3.0 and have completed 442MA Honors Precalculus or is concurrently enrolled in 440MA Honors College Algebra and 441 Trigonometry with teacher approval.

This course is a study of matter and energy and their transformations. It includes mechanics, waves, light, sound, electricity, and magnetism. Labs are an integral part of the course. TI graphing calculators are required.

Students enrolling in Physics who have not completed Trigonometry will be expected to complete summer work in basic trigonometry skills.

FINE ARTS: MUSIC**600 Band Prep****2 semesters****1 credit**

Prerequisite: None

Open to all grade levels

This course is for any student interested in learning how to play a woodwind, brass, or percussion instrument. As the student progresses in the course, the student will advance to the regular band class. Any student who needs further progress will be advised to remain in Band Prep for a second semester. Active parental involvement in the Music Association is needed.

NOTE: There are a few school owned instruments available for student use.

610 Band (Marching and Concert Band)**2 semesters****1 credit**

Prerequisite: At least 2 years of elementary or junior high school band or instructor consent.

Open to all grade levels

The Band is the Marching Knights for the first quarter. The rest of the year it is Concert Band. The Marching Band performs at all home football games, marching contests, parades, and pep assemblies. The Concert Band participates in the Archdiocesan Band Festival, and competes in district competitions and festivals. Performances also include a Christmas Concert and a Spring Concert. Attendance is required at all scheduled events. Students will be required to attend before-school practice during marching season. Active parental involvement in the Music Association is helpful. Students who wish to receive PE/HL credit for marching should enroll in 610MB instead of 610 Band.

610CB Band (Concert Band) **3 quarters** **¾ credit**
{Students enrolled in Concert Band receive ¼ credit in PE/Health by successfully completing 701 PE/Health during the first quarter of each year; ¼ credit is earned each year. Four years of participating in this option earns 3.0 FA credits, as well as the 1.0 PE/HL credit required for graduation.}
Prerequisite: At least 2 years of elementary or junior high school band or instructor consent.
Open to all grade levels
This course begins second quarter and is Concert Band. During the first quarter, students are enrolled in 701 Physical Education/Health. They participate in the Archdiocesan Band Festival, and compete in district competitions and festivals. Performances also include a Christmas Concert and a Spring Concert. Attendance at all scheduled events is required. Active parental involvement in the Music Association is helpful.

610MB Band (Marching & Concert Band) **2 semesters** **1 credit**
{Students successfully completing four years of Marching Band choose to receive a total of 1 credit in PE/Health with the successful completion of independent study packets; ¼ credit is awarded each year. Four years of participating in this option earns 4.0 FA credits, as well as the 1.0 PE/HL credit required for graduation.}
Prerequisite: At least 2 years of elementary or junior high school band or instructor consent.
Open to all grade levels
The students in this course will participate in Marching Band during the first quarter and in Concert Band for the remainder of the school year. Students in this course are required to complete a Health packet through the Physical Education department in course 700H and may receive ¼ credit in PE. Performances also include a Christmas Concert and a Spring Concert. Attendance at all scheduled events is required. Active parental involvement in the Music Association is helpful. (Students in Marching Band may choose to receive an additional ¼ credit of PE/HL for each year of participation, so long as they complete 6 Health packets each year. Four years of participation in this option earns the PE/HL credit required for graduation.)

611 Jazz Band **1 semester** **½ credit**
Prerequisite: This course is open to all students by audition that play trumpet, trombone, saxophone, keyboard, guitar, or percussion. The students will meet on Monday, Tuesday, and Thursday at 7:10 - 7:55 a.m. from middle to early November to mid-May. The student will participate in the Christmas concert, a winter tour, the St. Louis Archdiocesan Jazz Festival and other opportunities that lend it self to jazz playing. In class, they will learn jazz scales, improvisation, and jazz styles of music.

612 Introduction to Music **1 semester** **½ credit**
Prerequisite: None
Open to freshman, sophomores, and juniors
This is a non-performer class designed to teach the fundamentals of music to students who do not sing or play an instrument but are interested in learning about music. The goal of the course is to produce well-informed musical consumers. (Note: If you have significant experience in music, this course is not recommended.) The course will include musical notation, the history of Western music, various performance media (e.g. symphony orchestra, rock and roll band, opera, etc.), music theory and composition, conducting, and more.

614 Music Theory **1 semester** **½ credit**
Prerequisite: Instructor consent
Open to sophomores, juniors, and seniors
This course explores the elements of musical grammar and how they are used in the composition of music. The goal of the course is to give a more complete understanding of the theoretical aspects of music and is designed for students with a strong background in music.

616 Mixed Chorus **1 semester** **½ credit**
Prerequisite: None
Open to all grade levels
This course is an introductory-level choir for students with little or no singing experience. (Note: This course is a prerequisite for Chamber Choir.) The course includes an introduction to choral concepts, good singing technique, and music reading skills. Participation in the school Christmas concert is required. Active parent involvement in the Music Association is helpful. This course may be taken more than one year for credit.

617 Chamber Choir **2 semesters** **1 credit**

Prerequisite: 616 Mixed Chorus and/or audition

Open to all grade levels

This performance group encompasses more advanced choral singing of varied styles. It participates in the school Christmas and spring concerts as well as other performances. Students in this course have the opportunity to audition for the East Central All-District Choir and participate in solos and ensembles at District Festival. Attendance is required at all performances. Active parental involvement in the Music Association is helpful.

655 Musical Theatre **1 semester** **½ credit**

Prerequisite: None

Open to all grade levels

This course will give students a background in many aspects of Musical Theatre. Units will include vocal techniques, stage terminology, dance, auditioning for musical theatre, scene work, and technical work. Students will perform scenes from musical theatre, complete with technical aspects, as part of their final for the class.

Students may be required to attend work sessions during seminar or after school as part of this course.

702 Band Color Guard (includes an option for an additional ¼ credit of PE/Health) **1 semester** **½ credit**

Prerequisite: Audition in spring

Open to all grade levels

Band color guard is an alternative course for non-band members who enjoy marching and dancing. Students have the opportunity to enroll in 700H to complete the PE requirement. Color guard marches with band during football season and then works on other projects the rest of the semester including Mass presentations, special parades, and Christmas Concert participation. Modern dance, creativity, and sense of rhythm are helpful. Summer camp is recommended. Extra practices after school or in the evening are required. (Students in Band Color Guard may choose to receive an additional ¼ credit of PE/HL for each year of participation, so long as they complete 6 Health packets each year. Four years of participation in this option earns the PE/HL credit required for graduation.)

FINE ARTS: ART

ALL STUDENTS MUST TAKE INTRODUCTION TO ART BEFORE ADVANCING IN THE ART PROGRAM.

620 Introduction to Art **1 semester** **½ credit**

Prerequisite: None

Open to all grade levels

This is a basic art orientation course utilizing the elements and principles of art and artistic awareness. All art experiences are based on the art elements of line, shape, form, value, texture, and color, and the related principles of harmony, dominance, balance, contrast, movement, and unity. Students apply a number of different media and demonstrate use of materials. The specific program content includes 2-D design experiences (drawing, color study, painting, art appreciation, and art vocabulary). Students should furnish #2 pencils, scissors, 12 inch ruler, eraser, a compass, a 10-color marker set, notebook and a brown portfolio folder. Students may be asked to buy some materials used for various projects.

621 Drawing I **1 semester** **½ credit**

Prerequisite: 620 Introduction to Art and/or teacher approval.

Open to all grade levels

This course is designed to teach the basic techniques of drawing using line, shading, and perspective. A wide variety of drawing experiences will be used including gesture, contour, perspective, several types of shading techniques, and the human form. The mediums to be used are pencil, charcoal, ink, and flair pens. Students are expected to furnish a sketchbook, erasers, drawing pencils, charcoal pencils, fine line black markers, and a portfolio folder. A final portfolio will be due for the exam.

622 Drawing II **1 semester** **½ credit**

Prerequisite: 621 Drawing I and/or teacher approval

Open to sophomores, juniors, and seniors.

This course is a continuation of Drawing I, but allows for independent use of drawing materials. The major emphasis will be on developing a total composition, using the elements and principles of design effectively. Students are expected to furnish a sketchbook, eraser, pencils, charcoal pencils, 12 inch ruler, and a fine line black marker. A final portfolio will be due for the exam. Artwork should include Drawing I and Drawing II work.

623 Pottery I **1 semester** **½ credit**

Prerequisite: 620 Introduction to Art and/or teacher approval.

Open to sophomores, juniors, and seniors

This course has an additional \$20.00 fee for supplies, due the first week of class.

This course will include the basic techniques and understanding of clay as an art medium. Experiences will be provided in coil, slab and other hand building techniques, and glazing.

624 Pottery II **1 semester** **½ credit**

Prerequisite: 623 Pottery I and/or teacher approval.

Open to juniors and seniors

This course has an additional \$20.00 fee for supplies, due the first week of class.

This course offers the opportunity for students to further develop the techniques and understanding of clay as an art medium. Emphasis will be on wheel work and hand-building to create projects using more than one technique. Students will be expected to create original designs

625 Woodcarving I **1 semester** **½ credit**

Prerequisite: 620 Introduction to Art and/or teacher approval.

Open to all grade levels

This course will include the basic techniques and understanding of relief wood carving. Students will complete one relief carving during the first half of the class and a sample carving block. Students are expected to purchase their own wood for relief carving and block printing. The first half of the course will be used to develop student understanding in basic techniques of printmaking using wood block work. The second half of the course will be focused on relief carving and chip carving.

626 Woodcarving II **1 semester** **½ credit**

Prerequisite: 625 Woodcarving I and/or teacher approval.

Open to sophomores, juniors, and seniors

Woodcarving II is an extension of Woodcarving I. Students taking Woodcarving II will complete three projects. Students must supply the wood used for the projects. The wood must be suitable for each technique. The projects must be a combination of relief, chip, and woodprint. The degree of difficulty and design must be developed by students to show an advancement of skills in woodcarving.

627 Painting I **1 semester** **½ credit**

Prerequisite: 621 Drawing I and/or teacher approval.

Open to sophomores, juniors, and seniors

The student should come into this course with some drawing ability. This course offers a wide variety of painting experiences. The medium used will be acrylic on canvas. Students will be expected to purchase their own paints, brushes, and canvas. Exam – 1 painting.

628 Painting II **1 semester** **½ credit**

Prerequisite: 627 Painting I and/or teacher approval.

Open to juniors and seniors

This course offers the opportunity for the advanced painting student to work more independently and, hopefully, more creatively. It will offer the student the opportunity to experiment and choose his/her own directions in painting with special emphasis on creating original designs. Students will be expected to purchase their own paints, brushes, and canvas. Exam – 1 painting.

645 Photographic Design **1 semester** **½ credit**

Prerequisite: Access to a digital camera is required.

Open to juniors and seniors

This course in Digital Photography is designed to develop students' skills in pixel-based photographic design and printing. Students will become familiar with photo technology including a scanner, printer, Adobe Photoshop, Lightroom, and InDesign. Students will learn photographic composition as well as graphic design, parts of a camera, artistic expression and lighting techniques. Students will take pictures in and out of the classroom and must have access to a digital camera at all times. Students will have the opportunity to check out a Canon Rebel DSLR throughout the semester.

FINE ARTS: SPEECH AND DRAMA

641 Speech **1 semester** **½ credit**

Prerequisite: None

Open to all grade levels

Speech is designed to acquaint beginning speakers with the essentials of effective speech design and delivery. Through numerous and varied speech experiences, the students will learn to (1) overcome nervous tension and eliminate habits which hamper effective delivery, (2) design and deliver effective speeches, and (3) analyze and critique different speaking experiences. Speech is a prerequisite for Acting I, Competitive Speaking, Honors Speech Communications, and Video Production.

642 Theatre Appreciation **1 semester** **½ credit**

Prerequisite: None

Open to all grade levels

This is an introductory theatre course which surveys many aspects of theatre history and production. Course work includes theatre history, improvisations, scene work, and an introduction to technical theatre including lighting, sound, and set construction. Working on actual shows in production is an integral part of the course.

643 Acting I **1 semester** **½ credit**

Prerequisite: 641 Speech

Open to 2nd semester freshmen, all sophomores, juniors, and seniors.

Acting I is a laboratory class where students learn the techniques of acting through on-stage performances. The student will learn to act through the use of the voice, body, imagination, and basic stage movement techniques in a variety of presentations. The performances will include, but not be limited to, pantomime, story telling, improvisational acting, duet acting, group scene work, and monologues. Because of the nature of the class, rehearsal work outside of the class period may be necessary. This class may not be taken concurrently with Competitive Speaking. **Because of the variety of concepts learned, this class may be taken more than once.**

646 Competitive Speaking **1 semester** **½ credit**

Prerequisite: 641 Speech

Open to any sophomore, junior, or senior.

Competitive Speaking is a 1st semester class designed to train students in speech forensics. Students will prepare and deliver performances in radio speaking, humorous and dramatic interpretation, duet acting, duo interpretation, original oratory, extemporaneous speaking, and prose and poetry reading, as well as debate. Competitive Speaking students will be required to participate in co-curricular speech tournaments and oratories. This class may not be taken concurrently with 643 Acting I. **Because of the variety of concepts learned, this class may be taken more than once.**

648 Technical Theatre **1 semester** **½ credit**

Prerequisite: Theatre Appreciation

Open to any sophomore, junior, or senior

This class will concentrate on the technical aspects of play production. Students will gain hands-on experience in the fields of lighting and lighting design, set design and construction, sound operation and sound design, makeup, costuming, props construction, directing, stage management, and front of house responsibilities. **Because of the variety of concepts learned, this class may be taken more than once.**

649 Acting II**1 semester****½ credit**

Prerequisite: 643 Acting I.

Open to juniors and seniors

class has four objectives: 1) To build upon movement and vocalization techniques learned in Acting I class through advanced stage movement techniques, vocal exercises and creative “play”; 2) To teach the value of focusing personal attention on the immediate “moment to moment” experience; 3) To teach the value of “sincerity” in acting; 4) To build upon the student’s knowledge of theatre vocabulary and protocol through actual acting experiences before live audiences. Activities will include, but not be limited to, advanced improvisation exercises, stage movement and combat, character analyses, in-class performances and critiques, and the production of a one-act play.

651FA Honors Speech Communications**1 semester****½ credit****(With ECC option)**

Prerequisite: Must have received a passing grade in 641 Speech and obtain teacher approval. Note that to qualify for this course a student must have a cumulative grade point average (GPA) of 2.5. This course may be taken for college credit.

Open to juniors and seniors

This college level course is a practical study of designing and delivering various forms of public speeches. The course will explore the essentials of speech design and delivery, will go further in-depth into planning and delivery of informative and persuasive speeches, and will introduce the delivery of impromptu, entertainment, and special occasion speeches along with radio broadcasting and mass media performances.

If students elect to take this course for college credit (ECC course CT 1103, 3 credits) an additional fee will apply.

655 Musical Theatre**1 semester****½ credit**

Prerequisite: None

Open to all grade levels

This course will give students a background in many aspects of Musical Theatre. Units will include vocal techniques, stage terminology, dance, auditioning for musical theatre, scene work, and technical work. Students will perform scenes from musical theatre, complete with technical aspects, as part of their final for the class.

Students may be required to attend work sessions during seminar or after school as part of this course.

FINE ARTS: FILM**644 Film Appreciation****1 semester****½ credit**

Prerequisite: None

Open to juniors and seniors

Understanding film is the subject of this class. Through a variety of hands-on experiences, in class and out of class film viewing, discussions, and special projects, the world of cinema will be explored. Topics discussed include photography, Mise en Scene, movement, editing, sound, acting, drama, story, literature, ideology, theory, and synthesis.

647 Video Production and Communication I**1 semester****½ credit**

Open to all grades

The video production class will participate in all areas of pre-production, production and post-production of select video projects including “*The Knightly News Live*”, “*Knight Line*”, “*The Spirit of Borgia*” and “*Live Coverage of the Turkey Tourney*”. This class requires a time commitment before school on a rotating basis for students, who will demonstrate their abilities on the morning news show Knightly News Live.

650 Video Production and Communication II**1 semester****½ credit**

Prerequisite: Video Production I and/or permission of instructor

Open to all grades.

This class allows students to build on and refine the skills and knowledge that they acquired in Video Production I. Students will assume management roles; Producer, Director and Floor Manager for the morning news show as well as on additional projects. This is a hands-on class that is designed to instruct the students in producing creative work in a journalistic setting. Professionalism, journalistic writing skills, hands on use of technical equipment and meeting deadlines will be stressed.

This class may be taken more than once. (This course requires a B or better in Video Production I and permission of instructor.)

PHYSICAL EDUCATION

Freshman - Sophomore Requirement

700 Physical Education/Health **1 semester** **½ credit**

Required for freshmen and sophomores not enrolled in 610CB or MB Band

This class is taken twice, comprising a two term course with one unit of credit. This is a Physical Education course that covers general body development and mental health development through a variety of programs. These programs include flexibility, aerobics, basic weight training, fitness walking, and jogging. Also included are basic games, techniques and rules for volleyball, basketball, soccer, touch football, speedball, and softball. The health units are nutrition, substance abuse, general hygiene, first aid, and C.P.R.

700H Health **1 quarter** **¼ credit**

{Students completing four years of Marching Band may receive a total of 1 credit in PE/Health with successful completion of an independent study packet; ¼ credit is awarded each year.}

Prerequisite: Concurrent enrollment in 610MB.

Students who are enrolled in 610MB are required to complete a Health packet through the Physical Education department. After completion of the of the Health packet, the students will be enrolled in course 700H and will receive ¼ credit in PE. Students must be enrolled in 4 years of band in order to receive the 1 credit in PE/Health that is required for graduation.

701 Physical Education/Health **1 quarter** **¼ credit**

{Students enrolled in four years of Concert Band may receive a total of 1 credit in PE/Health by taking 701 PE/Health during the first quarter of each year; ¼ credit is earned each year.}

Prerequisite: Concurrent enrollment in 610CB Band

This is a Physical Education course that covers general body development and mental health development through a variety of programs. These programs include flexibility, aerobics, basic weight training, fitness walking, and jogging. Also included are basic games, techniques and rules for volleyball, basketball, soccer, touch football, speedball, and softball. The health units associated with this course are done in independent study. Students must be enrolled in 4 years of band in order to receive the 1 credit in PE/Health

Electives

703 Trimnastics **1 semester** **½ credit**

Prerequisite: None

Open to juniors and seniors

This course concentrates on physical fitness activities, body building, jogging and walking. It is an organized program to help students trim down and become physically fit. Class is open to both boys and girls.

This class may be repeated for credit. This class is graded A – F.

704 Recreational Activities **1 semester** **½ credit**

Prerequisite: None

Open to juniors and seniors

This course offers the student an opportunity to participate in a variety of co-recreational group activities such as softball, volleyball, bowling, tennis, and others, as recreational facilities are available. If the activities require equipment or fees, the student will be expected to pay the fees or have the necessary equipment. Class is open to both boys and girls. Activities include golf, lacrosse, outdoor skills, pickleball, badminton, ping pong, handball, Frisbee and dance.

This class may be taken only one time. The class is graded A – F.

705A Weightlifting - Semester 1 **1 semester** **½ credit**

Prerequisite: None

Open to juniors and seniors

This course is designed to give the student more strength, endurance, and flexibility. The accomplishment will come from a weightlifting, stretching, exercise, and running program. Class is open to both boys and girls. This class may be repeated for credit. Students may also take 705B second semester. The class is graded A – F.

705B Weightlifting - Semester 2**1 semester****½ credit**

Prerequisite: None

Open to sophomores, juniors and senior.

This course is designed to give the student more strength, endurance, and flexibility. The accomplishment will come from a weightlifting, stretching, exercise, and running program. Class is open to both boys and girls. This course may be repeated for credit. The class is graded A – F.

708 Recreational Bowling**1 semester****½ credit**

Prerequisite: None (an extra cost is associated with this class)

Open to juniors and seniors

This elective class will teach the basics of bowling. Students will learn the rules, history, terminology, and proper bowling techniques. Classes will be taught in the classroom and at Town N' Country Lanes. Students will need to car pool to the bowling alley. There is also a per-game fee of \$1.00. Shoes are free. The class will be graded pass/fail. The grade is dependent upon knowledge of the sport and participation. This course may be repeated for credit.

THEOLOGY**Freshman Course:****810 Theology I****2 semesters****1 credit**

Required for freshmen

The purpose of this course is to give students a general knowledge and appreciation of the Sacred Scriptures and to encounter the living Word of God, Jesus Christ, especially in the Gospels. As students come to understand that Jesus Christ is the ultimate Revelation to us from God, they will learn who He is and who He calls them to be.

Sophomore Course:**820 Theology II****2 semesters****1 credit**

Required for sophomores

Through a study of the NEW TESTAMENT, the student is challenged to enrich and deepen their understanding of, and relationship with Jesus, and to relate Jesus' teachings to present-day situations. SACRAMENTAL THEOLOGY is a study of Jesus Christ as He is encountered in sacraments, liturgy, and Scripture. The Sacraments are studied in depth from a theological, scriptural, and historical perspective.

Junior Course:**833 Theology III****2 semesters****1 credit**

Required for juniors

Theology III focuses on personal morality and justice in the world. It is designed to give students the knowledge and assistance in making intelligent, compassionate, and moral decisions. Specific moral issues are addressed in the light of Catholic Church teaching.

Senior Course:**844 Theology IV****2 semesters****1 credit**

Required for seniors

CATHOLIC RESPONSE TO NON-CHRISTIAN RELIGIONS encourages students to recognize and appreciate the religious diversity of humanity, while at the same time recognizing the Catholic teaching or viewpoint on each issue. LIFESTYLES provides a practical as well as theological guide to possible life choices for living one's faith as a Catholic/Christian adult.

Theology Elective:**843 Christian Service****1 semester****½ credit**

Prerequisite: Teacher approval

This course does not fulfill the Theology requirements

This elective course is open to seniors.

This program gives seniors the opportunity to put their Catholic/Christian beliefs into action. Students in the program must provide their own transportation. The type of service will be determined by a student option list, availability, and the discretion of the program moderator. Students may receive credit for up to 12.5 hours of Christian Service each school year. With permission of the Director of Christian Service, this class may be taken for two semesters.

PRACTICAL ARTS - APPLIED

900 Teacher Aide

1 semester

½ credit

Prerequisite: None

Open to seniors

This course is an option for those students seeking experience in office work or as department assistants. Students assisting in particular departments will be working with the teachers, doing clerical work or laboratory preparations, and with students, tutoring or staffing resource centers. Students must demonstrate mature, responsible behavior. This course is graded on a pass/fail basis. This course may only be taken for one semester and may not be taken in the same school year as Media Center Aide.

901 Media Center Aide

1 semester

½ credit

Prerequisite: Approval of Library/Media Specialist.

Open to seniors

This course is an option for students seeking experience working in a Library/Media Center. Students will assist with clerical work, routine Media Center operations such as circulation and processing new materials, and perform basic troubleshooting for computers and other audiovisual equipment. Students must demonstrate mature, responsible behavior. The course is graded on a pass/fail basis. This course may only be taken for one semester and may not be taken in the same school year as Teacher Aide.

PRACTICAL ARTS - BUSINESS

904 Personal Finance

1 semester

½ credit

Prerequisite: None

Open to sophomores, juniors, and seniors

The course is designed to give students an extensive understanding of several basic personal finance concepts. These will include opening and maintaining savings, checking and other bank accounts, household budgeting, fundamentals of credit, investing in bonds and stocks, vehicle, casualty and life insurance, retirement accounts and maintaining financial information. This class is required for graduation.

909 Macro Economics

1 semester

½ credit

Prerequisite: 904 Personal Finance

Open to juniors and seniors or teacher approval

This class will explain economic theory dealing with the economy as a whole and decision making by large units such as governments, the work force and the public and private sector. The course will analyze the study of employment, labor and wages, sources of government revenue, government spending, money and banking, international trade and global economic challenges.

911 Micro Economics

1 semester

½ credit

Prerequisite: 904 Personal Finance

Open to juniors and seniors or teacher approval

This class will explain the branch of economics that deals with behavior and decision making by small units such as firms and individuals. Topics will include economic decisions, economic roles, business structures, managing a small business, managing human resources, being an informed consumer, consumer rights and responsibilities, advanced personal finance including saving and investment.

912 Law For Business and Personal Use

1 semester

½ credit

Open to juniors or seniors or teacher approval

In this course students will learn how our nation's laws are formed, the ethics behind those laws, their enforcement and the difference between crimes and torts. Topics will include Constitutional Rights, Criminal Law and Procedures, Civil Law and Procedures, Contracts, and Employment Law. Students will use case law to understand their rights and responsibilities as a citizen. Current personal and business legal situations will be presented to endeavor to develop habits of thinking concerning legal aspects of one's acts and relationships.

918 Accounting**2 semesters****1 credit**

Open to juniors or seniors or teacher approval

This is a course designed to study methods of recording and summarizing business transactions. Both a service and a merchandising business will be studied as well as sole proprietorship and partnership businesses. Once a principle is taught, practice problems are assigned to gain skill. Automated accounting on the computer is also part of this course.

920 Marketing I**2 semesters****1 credit**

Open to juniors or seniors or teacher approval

This class focuses on the activities used to insure the effective exchange of goods and services between business and consumers. Particular areas that students will research include; Product/Service Planning, Purchasing, Financing, Distribution, Pricing, Risk Management and Promotion. Students will participate in individual and team projects in which they apply a marketing strategy, identify target markets and research the marketing mix in order to produce material with "real world" applications. Coursework will identify and describe a wide range of skills needed to perform in numerous business and marketing careers.

PRACTICAL ARTS – COMPUTER TECHNOLOGY

903-1 Web Page Design I**1 semester****½ credit**

Prerequisite: None

Open to sophomores, juniors, and seniors

Students will create web pages using basic design concepts for effective presentation of information in web pages. They will use HTML to write the code for the pages and CSS to specify style for the pages. Students will develop a personal website as a final project incorporating HTML features covered in the course. The ability to closely follow written directions is critical.

903-2 Web Page Design II**1 semester****½ credit**

Prerequisite: Minimum grade of C in the 903 Web Page Design I class.

Open to juniors and seniors

Students will expand their knowledge of web development using XML and CSS. Scripts will be used to increase user interaction with web pages. Students will develop an informational website as a final project, incorporating XML, CSS, and scripts as covered in the course.

907 Computer Repair and Networking Concepts**1 semester****½ credit**

Prerequisite: Recommendation of the Principal

Open to juniors and seniors

Pass/Fail. Students will actively work with the Computer Technician on troubleshooting and repairing computers in the school. Students will be able to identify proper procedures for installing and configuring system components and devices, diagnose and troubleshoot system problems, determine whether they are hardware or software related, and identify safety procedures and preventive maintenance techniques. Components of the course will be tailored to the student's specific interests and skills, and may include creation of educational content for teacher use. Students must be willing to work conscientiously and independently.

914 Principles of Technology I**1 semester****½ credit**

Required for freshmen

Students will review and improve keyboarding speed and skill and build various computer application skills, utilizing word processing, spreadsheet, database, electronic presentation, and other applicable software. Various technology-related topics, including website evaluation, digital ethics, and online safety, will be explored. Students will apply in their coursework the technologies that are available through the school intranet and the internet, such as online databases, plagiarism prevention, online discussion forums, social networking, online collaborative work environments, online data storage, and Atomic Learning tutorials, as well as gain understanding of resources available through Family Access, Moodle, Webmail, and network drives. Emerging education-based technologies will be introduced as applicable.

916 Principles of Technology II**1 semester****½ credit**

Prerequisite: Principles of Technology I

Open to sophomores, juniors, and seniors

In this semester course students will apply more advanced topics in computer technologies and services with an emphasis on preparing the student with the computer-related technical skills necessary for life beyond secondary school. This includes advanced spreadsheet capabilities that are useful for business applications and statistical analysis, data base software to store information and to facilitate queries, desktop publishing software to create flyers and newsletters that incorporate word art and digital photos, advanced presentation software capabilities to prepare multimedia presentations, Web 2.0 applications, and productivity tools. Students will describe basic network concepts and apply techniques to use the internet **effectively** for communication, research, and obtaining free downloads. Emphasis will be placed on integrating information from a variety of sources, collaborating with colleagues, and utilizing appropriate technologies, thereby creating effective end products.

PRACTICAL ARTS: FAMILY AND CONSUMER SCIENCES

921 Foods & Nutrition I**1 semester****½ credit**

Prerequisite: None

Open to all grade levels

This is a laboratory course in which students demonstrate safe kitchen management skills and prepare a variety of foods using various cooking techniques. In addition, students compare and contrast popular and fad diets as well as analyze nutritional information. Guest chef(s) add a little pizzazz to the course.

922 Foods & Nutrition II**1 semester****½ credit**

Prerequisite: Foods & Nutrition I

Open to sophomores, juniors, and seniors

This laboratory course is an extension of Foods & Nutrition I. Students are more involved in the planning of laboratory experiences. Students research and prepare a variety of foods from other cultures, demonstrate various intricate techniques for preparing poultry, pastries, and desserts, as well as analyze nutrition information from a variety of sources. Students also complete a unit on safety and sanitation. Guest chef(s) also add a little pizzazz to the course.

926 Housing and Interior Design**1 semester****½ credit**

Prerequisite: None

Open to juniors and seniors

This course concentrates on architectural and interior design. Students identify blueprint symbols, design floor plans, and create swatch boards in addition to many other activities. Students research various famous architects as well as identify a variety of architectural styles. Guest speakers, floor planning projects, and field trips allow students to interact with professionals, and explain a wide range of topics within the housing industry.

927 Child Development**1 semester****½ credit**

Prerequisite: None

Open to juniors and seniors

This course concentrates on the study of the social, emotional, intellectual, and physical development of children from birth to young adulthood. Students plan age appropriate activities, participate in "kid's day" practicums as well as in field trips. Students interact with guest speakers from a variety of backgrounds/careers, and are able to explain a wide range of topics within the child development discipline.

SENIOR OPTION

Independent Study

1 semester

½ credit

Independent Study is a one-semester, one-period option available to seniors who have demonstrated good citizenship and responsible academic behavior. This option involves writing a new course personalized just to this student. Seniors who request this option must FIRST find a sponsoring teacher who will guide them through the studies, and through the application process. The application is not complete until it contains ALL REQUIRED INFORMATION AND ALL REQUIRED SIGNATURES. Once approved, the course may be scheduled for a period convenient to the sponsoring teacher. Independent Study is not designed for credit recovery and must be taken during the regular school hours; attendance is required during the scheduled period. A minimum of one 30-minute conference per week with the sponsoring teacher is required and key to the success of the Independent Study program. Applications are available in Guidance.

JUNIOR-SENIOR OPTIONS: FOUR RIVERS CAREER CENTER

Four Rivers Career Center is a public education institution that offers specialized and diverse educational opportunities to secondary school students. St. Francis Borgia students are eligible to take courses at Four Rivers Career Center for one or two years their junior and/or senior year. The programs available consist of hands-on activities combined with classroom learning and professionalism.

Junior or Senior students who enroll in one of the following courses will attend Four Rivers in the afternoon and be enrolled in 4 courses at SFRHS. These courses are:

Automotive Collision Repair, Automotive Technology, Building Construction, Graphic Communications, Machine Tool Technology, Information Technology, Welding.

There is a new senior option available in Construction Management.

Senior students are eligible to enroll in Health Occupations. They will take 6 courses at SFRHS and attend Health Occupations in the afternoon at Four Rivers.

Students need to meet with his/her counselor for more details. An additional application form is required.