



# **St. Mary's High School**

## *Course Description Guide*

**2019 - 2020**

# St. Mary's High School

This course guide has been designed to provide you with the information you need to plan your education at St. Mary's High School. Course descriptions are listed by department.

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## Mission of St. Mary's High School

- ✚ To help each young man discover that life is a Christian Journey that must be rooted in God.
- ✚ To develop in the young man a deep sense of the goodness, self-worth and the dignity of every person.
- ✚ To maintain a community where all involved in the student's formation collaborate to create a climate of cooperation, respect, openness and trust.
- ✚ To provide a comprehensive program of learning that challenges and motivates each student to reach his fullest potential.
- ✚ To instruct each young man in the Marianist spirit.

### Academic Requirements for Graduation

Religion	4 Units of Credit
English	4 Units of Credit
Social Studies	4 Units of Credit
Mathematics	4 Units of Credit – highly recommended OR 3 units & 1 additional unit of STEM senior year
Science	3 Units of Credit
Fine Arts	1 Unit of Credit
Practical Arts	1 Unit of Credit
Physical Education	1 Unit of Credit
Health	.5 Unit of Credit
Personal Finance	.5 Unit of Credit
World Language or Equivalent	2 Units of Credit
Dragon FIRE Service	1 Unit of Credit
Electives	4 Units of Credit
<b>TOTAL</b>	<b>30 UNITS OF CREDIT</b>

### Registration Process for Students and Parents

#### STEP 1: Review course selection sheet.

Rising sophomores and juniors must register for 8 credits.

Rising seniors have several options:

- 1) Seniors can register for 8 credits.
- 2) Seniors can register for 7 credits and a senior study.
  - a. Students who are up-to-date on their service hours are eligible to take a senior study. If junior hours are not completed by May 1, students will be removed from Senior Study and assigned one of their alternate classes.
- 3) Seniors can register for more than 8 credits if they are taking online courses.

All students must be registered for the following classes:

	Sophomores		Juniors		Seniors
Core Classes	Religion	Core Classes	Religion	Core Classes	Religion
	English		English		English
	Math		Math		Math *
	Social Studies		Social Studies		Social Studies
	Science		Science		Science **
	Foreign Language		Elective		Elective
	Health / Finance		Elective		Elective
	Elective		Elective		Elective

\* Math selection for seniors: Many universities, including the University of Missouri, require 4 credits of high school math, Algebra I and higher. Pre-Algebra and Math Topics will NOT count as one of these credits. Please see Mrs. Boyce if you have questions.

\*\* Once a student has taken all required courses, additional courses are counted as electives. For example, students are only required to take 3 years of science. However, many students take a fourth year as an elective. Students are only required to take 2 years of foreign language but may take additional language classes as electives.

### STEP 2: Begin making your class selections for next year.

- 🌀 The course descriptions included on the following pages can help you make your decisions.
- 🌀 Placement in your core classes has been determined by recommendations from your teachers and your current grades. All placements will be finalized after second semester. If you are eligible for honors or college credit classes, these have been listed on your course selection sheet.
- 🌀 Moving from non-honors to honors is based on teacher recommendation.

- Juniors and seniors should choose electives carefully. Most juniors will need 3 credit hours, and most seniors will need 4 credit hours. Students will be assigned electives in the order in which they ranked their choices. The extra choices ranked will be used as alternate courses. **A \$50.00 fee will be charged for any schedule changes initiated after Friday, August 23, 2019.**
- **College Credit** and **Dual Enrollment Courses** are offered through St. Louis University's 1818 Program, Fontbonne University and St. Louis Community College. Although there is no longer a restriction to the number of college credits earned from college credit or dual enrollment classes in a given semester, WE DO NOT RECOMMEND STUDENTS TAKING MORE THAN 3 COLLEGE CREDIT COURSES. Please see Mrs. Ranciglio, Mrs. Boyce, or Mrs. Todd if you have any questions. There is an additional fee for all of these courses that is paid to the university. It is important to note that the fee is only a fraction of the cost of what the credit would cost once in college.

**STEP 3: Rank your electives in order of preference & Check to make sure your registration form is complete.**

- Rank your electives in order of preference by writing your rankings on your course selection sheet.
- *Sophomores* - **Rank 6 elective choices** in order; 1 being the selection that you would want the most and 6 being the least.
- *Juniors & Seniors* - **Rank 10 elective choices** in order 1 being the course you want the most and 10 the least.

**STEP 4: Parents and students sign the course selection form**

**STEP 5: Bring your completed course selection sheets, registration form, and \$340.00 to school on or before the day of registration.**

- **Rising Juniors and Seniors** will register on Tuesday, February 20<sup>th</sup>.
- **Rising Sophomores** will register on Wednesday, February 22<sup>nd</sup>.

**\*\*\* Students will be called down individually to register; however, the registration will not be finalized until the registration fee has been paid.**

Parents, if you have questions about **course selection** please contact the following:  
 Parents of rising seniors: Chrissy Boyce, [boycec@stmaryshs.com](mailto:boycec@stmaryshs.com), 314-481-8400 x. 303  
 Parents of rising sophomores and juniors: Larreta Divis, [divisl@stmaryshs.com](mailto:divisl@stmaryshs.com), 314-481-8400 x. 113  
 Questions about the **registration process**: Valerie Todd, [toddv@stmaryshs.com](mailto:toddv@stmaryshs.com), 314-481-8400 x. 101 or Kate Harden, [hardenk@stmaryshs.com](mailto:hardenk@stmaryshs.com), 314-481-8400 x102.

## Course Listings by Department

### FINE ARTS

Art and Music, as a way of life, are a sharing in the creativity of God, an openness to all that God and humans have fashioned; a discovery and manifestation of inner resources, convictions, and feelings.

Art and Music, as a way of education at St. Mary's High School, aims at developing an awareness of the visual and verbal world. The classes concentrate on the formation of an appreciation for Art and Theater, as well as artistic production. Each student will receive instruction needed to develop all his powers harmoniously and will be introduced to his cultural heritage.

#### **(FIN07) FOUNDATIONS OF STUDIO ART**

Semester Course  
Grade 9

This class serves as the introduction to Fine Art practices in a studio environment. Basic drawing skills of perspective, line, and form are coupled with the study of color to gain introductory still life drawing skills. This course includes introductory painting and sculptural techniques as well as a general Art History survey from prehistory to modern era.

#### **(FIN08) FOUNDATIONS OF DIGITAL ART**

Semester Course  
Grade 9

This introductory class provides a starting spot for the student interested in art making in the digital realm. Basic topics of Design Principles, line, color and perspective drawing leads into computer-based projects using St. Mary's state-of-the-art MAC computer lab. Projects will include animation, video, and digital painting. This course includes a general Art History survey from prehistory to today with a special nod to the moving image. Students will gain a basic understanding of these subjects, while learning how to apply these skills to other classes and projects.

#### **(FIN16) DRAWING**

Semester Course  
Grade 10, 11, 12

Students will create artworks in both black and white and color that have an emphasis in line perspective shading, depth, and texture. Students will create artworks from still-life, life, and abstract thinking. Students will use charcoal, pencil, color pencil, pastel, and ink

within their creations. The course includes an Art History component focusing on modern era to pre-war.

### **(FIN17) PAINTING**

Semester Course

Grades 10, 11, 12

Prerequisite: FIN16 Drawing

Students will explore painting methods and materials to further develop skills developed in drawing, including use of line, shading, color and composition. Students will explore the use of historical and current art styles, including Impressionism, Post-impressionism, Cubism, Modernism, Abstract and Pop Art. This course includes an Art History component focusing on painting styles and techniques.

### **(FIN27) CERAMICS**

Semester 1

Grades 11 and 12

Prerequisite: FIN16 Drawing

In the course, students will explore a variety of ceramic techniques including coil, slab, and pinch. Advanced students will also experience time on the pottery wheels, creating a variety of works by throwing the clay. In addition, students will be glazing their pieces, while adding carvings and designs to the glaze. Students will also be responsible for firing the clay in the kiln throughout the semester. The course includes an Art History component focusing on primitive and traditional pottery techniques to modern trends.

### **(FIN18) GRAPHIC DESIGN**

Semester 1

Grades 10, 11, 12

This class will use the computer to explore and apply the Elements of Design into real life assignments. Students will use these art ideas to design logos, t-shirts, advertisements, etc. Students will be responsible for completing assignments given to the class by St. Mary's Staff (i.e. homecoming shirt design, play posters, etc.), as well as projects from the community. Students will utilize current industry programs such as Photoshop and Illustrator, etc. The course includes general Design History survey from the modern era through contemporary design.

**(FIN19) ANIMATION**

Semester Course

Grade 10

Students will begin animating by hand and move into using a 2D animation program called Pencil to create characters and story-lines to create their own cartoons. Stop motion animation will feature heavily using iMovie. The semester culminates with cutting-edge techniques using Premiere Pro and After Effect. This course includes general animation history component.

**(FIN29) VIDEOMAKING**

Semester 2

Grades 11 and 12

Students in this class will create a variety of videos, including documentaries, interviews, advertisements, and skits. These projects will also help develop writing and storytelling techniques. Students will use iMovie and move into Premier software to edit and enhance their video making skills. This course includes a general art and video history component.

**(FIN34) HISTORY OF FILM**

Year Course

Grades 11 and 12

This course is designed to teach students the basics of cinema and to examine at length the cultural history shown in the movies. The student is required to actively participate in class discussions and provide a written critical observation of each decade in the 20<sup>th</sup> Century.

**(FIN36) PORTFOLIO I**

Year Course

Grade 11 &amp; 12

This is an advanced level art class where students will have the opportunity to explore a variety of two and three dimensional materials through painting, drawing, sculpting and printmaking. Within each assignment, students will work on developing personal style and will take their work in an independent direction. Class will include both individual and group critiques with an end goal of creating finished presentation portfolio pieces, suitable for a partial application to a college level art department. This course includes an Art History component focusing on postmodern to contemporary practices.

**(FIN37) PORTFOLIO II**

Year Course

Grade 11 &amp; 12

This is a continuation of the previous portfolio class where students will continue their exploration into personal style and mastery of media. This course includes the possibility for two and three dimensional materials through painting, drawing and sculpting and printmaking. Assignments become increasingly independent in execution and direction. Class will include both individual and group critiques with an end goal of creating professional portfolio pieces, suitable for full submission to a college level art department. This course includes and Art History component focusing on postmodern to contemporary practices.

**MUSIC**

INSTRUMENTAL MUSIC, in all of its forms is an integral part of life and must be an integral part of the educational process. In determining the needed experiences that most effectively meet the needs of our students, basic areas must be considered. These areas should include: the intellectual, the emotional, the social, the aesthetic, the cultural, and the spiritual factors of our students.

It is our hope to promote the following areas as well as those listed above: individual and group expression, personal enrichment, personality development, and extra work for the musically gifted student.

**(FIN12) BEGINNING BAND**

Year Course

Grades 9, 10, 11, 12

The course is designed primarily for beginning students who wish to learn how to play a band instrument. No prior musical training is necessary. Students will be introduced to woodwind instruments (flute, clarinet, alto saxophone), brass instruments (trumpet, French horn, trombone, euphonium, tuba) and percussion instruments (bells, xylophone, snare drum). The band director will make suggestions to help you pick an instrument based on physical characteristics (lips, fingers, teeth, etc.), your interest, available instruments, and needs of the band. The student is given daily instruction every other day ("A-day" or "B-day") with concentration on the fundamentals of reading music, learning a counting system, proper posture, hand positions, and embouchures to produce a characteristic tone quality. Daily band homework (practice) will be necessary and expected in order to make progress in learning how to play your instrument. Grades are based on individual playing tests, written tests, and attendance at all performances (Christmas Concert, Spring Concert and Graduation).

**(FIN30) INTERMEDIATE BAND**

Year Course

Grades 9, 10, 11, 12

This course is designed for students with previous playing experience who are no longer beginners but are not yet ready for the Concert Band. The student is given instruction every other day ("A-day" or "B-day") with concentration on improving sight reading skills, building on previous knowledge and playing skills. Daily band homework (practice) will be necessary and expected in order to make progress in learning how to play your instrument at a more advanced level. Grades are based on individual play tests, written tests and attendance at all performances (Christmas Concert, Spring Concert and Graduation).

**(FIN46) CONCERT BAND**

\*Honors credit may be available.

Year Course

Grades 9, 10, 11, 12

This course is designed for students with previous playing experience who wish to improve their levels of technique from a beginner to intermediate or advanced. The student is given instruction every other day ("A-day" or "B-day") with concentration on improving sight reading skills, building on previous knowledge, and playing skills.

**PRACTICAL ARTS**

The practical arts education courses at St. Mary's High School afford a student the opportunity to develop, in light of Christian principles and ethics, an understanding and the skills of basic practices from the viewpoint of his own personal competence and in a broader way and appreciation of the contributions of others to the American free enterprise system. The computer courses prepare the student with the fundamentals of technology which is needed to succeed in an increasingly complex and information-rich society. Courses marked with an asterisk (\*\*) fulfill the 12<sup>th</sup> grade STEM option outlined on page 4 of the student handbook.

**(PRA08) "7 HABITS" & DIGITAL STRATEGIES FOR SUCCESS**

Semester Course

Grades 9

The course will explore topics such as relationships with self and others, pro-activity, goal setting, using your time well, communication skills, teamwork, and developing healthy life skills.

**(PRA22) COLLEGE PREPARATION**

Semester Course  
Grades 11 and 12

This course will provide a comprehensive program to help students understand the ACT format and better their skills in standardized testing by practicing the ACT.

**(PRA26) ARCHITECTURAL DESIGN \*\***

Year Course  
Grades 11 and 12

This course will provide an introduction to the world of architects and architecture. This class begins with a general survey of architecture styles and movements, culminating with the modernist era. After an introduction into hand-drawn architectural renderings and mechanical drawing, students then advance to computer design software. Students will create layouts, floor plans, perspective drawings and landscaping designs. Students will be given real world design problems and will be expected to create possible solutions. Students will be asked to present their ideas to a jury of their peers and professionals throughout the class.

**(PRA28) PERSONAL FINANCE**

Semester Course  
Grades 10, 11 and 12

This course will inform students how individual choices directly influence occupational goals and future earnings potential. Real world topics covered will include income, money management, spending and credit, as well as saving and investing. Students will design personal and household budgets utilizing checking and saving accounts, gain knowledge in finance, debt and credit management, and evaluate and understand insurance and taxes. This course will provide a foundational understanding for making informed personal financial decisions leading to financial independence.

**(PRA32) INTRODUCTION TO BUSINESS PRACTICES**

Semester Course  
Grades 11 and 12

Introduction to Business Practices is a comprehensive business practices course that addresses the many areas and functions of the business world. Students will complete project based assignments and will learn from real world business scenarios. The following aspects of business will be covered: Web Research, Marketing, Economics & Personal Finance, Business Law, Accounting, Management, International Business,

Technology in Business, Human Resources (Applications, Resumes, & Interviews), and Entrepreneurship.

### **(PRA36) YEARBOOK**

Year Course

Grades 11 and 12

Students in Yearbook will be responsible for the production of the yearbook from cover to cover. While not generally thought of as a multi-disciplinary, Yearbook class offers the refinement of skills in the areas of graphic design, creative writing, photography, journalism and history. Students will create a theme to guide the entire feel of the yearbook, research events, locate photos, and produce pages throughout the year. Students will also assist in taking photos of events, working school pictures days, and delivering photo orders. Students will answer to a junior editor and editor, as well as the instructor. The instructor will assign the titles of editor to the appropriate students and they will in turn have extra responsibilities assigned by the instructor. This is designed to be a small class for the most efficient outcome.

### **(PRA55) UNDERSTANDING LAW I**

Semester Course

Grades 11 and 12

This is a one semester course that provides an overview of the U.S. legal system. The class will provide an introduction to criminal and civil law at the federal, state and local levels. Students will learn about court decisions and study how laws are created, enforced and interpreted. In examining the law, a relationship will be drawn to the Constitution of the United States.

### **(PRA57) UNDERSTANDING LAW II**

Semester Course

Grade 12

Prerequisite Understanding Law I

Understanding Law II will pick up where Understanding Law I ended. Students will begin applying their basic knowledge of law by debating legal issues and analyzing both historical and current court cases, both civil and criminal. After reviewing and expanding their knowledge of trial procedures, students will participate in a mock trial. Students will also have the opportunity to learn from guest speakers.

**(PRA53) COMPUTER TECHNOLOGY \*\***

Year Course

Grades 10, 11, 12

This course will include a survey of electronics technology and its essential applications along with the difference between hardware and software and how the two are blended into organized systems. Students will gain a broad overview of mainframe and personal computer operations, computer components, solid-state electronics and basic computer networking principles. Once students have mastered computer basics, they are ready to learn about installing, maintaining, upgrading and repairing personal computers and computer systems. This course will offer hands on practice in installing an operating system, diagnosis computer problems and working to repair those problems.

**(PRA65) BROADCASTING**

Year Course

Grades 11, 12

The class will teach and use various forms of media, including creative writing, videography, broadcasting, and public speaking. This course will have two focuses. The first is to develop the skills necessary to run a news broadcast and will cover topics such as interviewing, videography, photography, and familiarity with local high school sports, U.S. and world news. The second is to use editing software to create creative videos with a variety of topics, including PSAs and short films. Students will have the opportunity to present their work to the student body via TV broadcast.

**(PRA92) LEADERSHIP I**

Year Course

Grade 11

This course is a junior year-long course and serves as the follow-up to the freshman and sophomore Leadership Seminars. Themes for this course include self-awareness, community building, communication skills, organization skills, vision and mission, and basic event planning. Programming and planning for this course include Admissions events, Campus Ministry events, and Student Council events. Students in this course are expected to be present at many events outside of the class scheduled period.

**(PRA94) LEADERSHIP II**

Year Course

Grade 12

This year-long course is a follow-up to Leadership I and is the culmination of the Leadership Curriculum Program. Open only to seniors, this course will take lessons and skills learned through Leadership I and the freshman and sophomore seminars and apply it to projects and events for the greater school community. Themes for this course include communication and interpersonal skills, managerial skills, fundraising and budgeting, vision and mission, and a survey of various published leadership models. Programming and planning for this course include Admissions events, Campus Ministry events, and Student Council events. Students in this course are expected to be present at many events outside of the class scheduled period.

### **(PRA100) FONTBONNE PUBLIC SPEAKING**

**Fontbonne Course #--COM102-3hrs**

**Dual Enrollment College Course**

Semester Course

Grades 11 &12

In this introductory course students have an opportunity to gain skill, confidence, and fluency in public speaking. Students develop an understanding of both basic communication principles and public speaking strategies through their application of these principles to a variety of speaking assignments.

### **ENGLISH**

The fields of Humanities, English and the Communication Arts help the adolescent mature intellectually and emotionally. Working toward this goal should be a pleasurable experience for the student.

The student's ability to think, judge, and constructively evaluate works of literature, film, and television should be stimulated in a creative atmosphere.

A solid foundation in grammar, mechanics, and the writing process will aid the student in expressing himself correctly. The end result of English and Communication Arts courses should be a clear thinking student who can articulate well through both the written and spoken word.

### **(ENG12) ENGLISH I**

Year Course

Grade 9

The freshman year English course involves an intense review and study of grammar and composition, with a strong emphasis on proper usage and the writing process. Throughout the course, the student reads, analyzes, interprets, and writes about literary works. Grammar, composition, and language are studied concurrently. Vocabulary build-up is also emphasized. The teaching of good sentence and paragraph structure is

essential to the total students' high school education and composition is emphasized throughout his education at St. Mary's. The research process is also introduced.

### **(ENG13) ENGLISH I – HONORS**

Year Course

Grade 9

In addition to the above guidelines and requirements, students enrolled in an honors program will concentrate attention on developing creative and innovative writing strategies. Through select writing projects, writing, reading comprehension and analytical skills will be developed in support of thesis statements and hypotheses. Clarity and consistency of written expression will be emphasized throughout the coursework.

### **(ENG 22) ENGLISH II**

Year Course

Grade 10

During sophomore year students take an extensive look at several genres of literature through reading, discussing, and writing. The students are given background notes on the various time periods in literary history to help better understand the human condition and author purpose. The research process is also taught and a formal research paper is assigned. Interactive notebooks are kept and organized as vocabulary, literary, and grammatical notes. The students gain a greater knowledge of several literary movements and its famous authors, the MLA research process, and the conventions of writing and grammar.

### **(ENG23) ENGLISH II HONORS**

Year Course

Grade 10

Honors English II students take an in-depth look at several genres of literature through independently read, Socratic Seminar discussion, and extensive writing. The students are required to read, research, and take notes on the background of various time periods in literary history and use that knowledge to better understand the human condition, author purpose, and literary genre of choice. The students will then create works that mimic these historical literary qualities. The research process is also taught and a formal research paper is assigned. Additionally, vocabulary development and grammatical practice will take place on a weekly basis. Overall, students will gain thorough knowledge of several literary movements and its famous authors, the MLA research process, and the conventions of writing and grammar.

**(ENG28) CONTEMPORARY LITERATURE**

Year Course

Grade 11

*Hunger Games, The Maze Runner, the Harry Potter Series, Diary of a Wimpy Kid.* What do these books have in common??? They are bestselling books AND blockbuster movies! Students in this discussion-based class will read bestselling novels that have been turned into movies. Students will read the book, watch the movie, to compare and contrast the two. It will be part literary analysis, part film critique, and ALL fun.

**(ENG32) AMERICAN LITERATURE/COMPOSITION**

Year Course

Grade 11

The students are given an extensive look at great American literature by reading, discussing in class, and writing compositions on the works of many American authors. The students are also given background notes on the various time periods in American literature to help better understand the human condition. Vocabulary build-up, movies, and class discussions are also integral parts of the course work. Research projects are emphasized. The students gain a greater understanding of their country through a thorough study of some of its very best writers and their greatest works. A grammar review is also included.

**(ENG03) ACC JUNIOR LITERATURE/COMPOSITION**

SLU Course #s:

**ENGL 1500 - The Process of Composition – 3 hours &****ENGL 2250 - Conflict, Social Justice & Literature – 3 hours**

Year Course

Grade 11

**The Process of Composition (3)**

This course develops effective personal and expository prose writing skills, including methods of invention, organization, audience analysis, and style. The Focus is on the compositional process.

**Conflict, Social Justice & Literature (3)**

This course introduces literary study within the context and theme of Cultural Conflict and Social Justice. Through the reading of a wide variety of genres - including drama, poetry, and fiction - the course engages students in literary ways of knowing. Methods include close reading, comparative textual analysis, and argumentative writing.

**(ENG40) SENIOR LITERATURE/COMPOSITION**

Year Course

Grade 12

The students now go into a more detailed study of the human condition as viewed through some of the most exceptional works of literature. Students study the background, the authors, and the style of the various literary works. Students will continue to develop the ability to write using a variety of composition styles specific to his purpose and audience. A research paper, vocabulary building assignments, films, critiques, grammar practice, and participation in the Socratic Method all enhance the learning process.

**(ENG44) ACC LITERATURE & COMPOSITION****SLU Course #s:****ENGL 1900 – Advanced Strategies of Rhetoric & Research – 3 hours****ENGL 2550 – Gender Identity & Literature – 3 hours**

Year Course

Grade 12 (Honors only)

**Advanced Strategies of Rhetoric & Research (3)**

Prerequisite: ENGL 1500 or its equivalent.

This course studies complex structures of language, including its logical and persuasive possibilities. There is an emphasis on analytical reading, critical thinking, and research methodology skills. The course seeks to help students integrate their own reasoned opinions with the fruits of reading and research, in order to produce coherent, persuasive essays. Criteria for admission: teacher recommendation, GPA of 3.00 and writing sample.

**Gender Identity & Literature (3)**

This course introduces literary study within the context and theme of Gender and Identity. Through the reading of a wide variety of genres - including drama, poetry, and fiction - the course engages students in literary ways of knowing. Methods include close reading, comparative textual analysis, and argumentative writing.

**FOREIGN LANGUAGE**

The Foreign Language department of St. Mary's High School offers Spanish in a four year curriculum. One of the goals of the study of a foreign language, whether in a classical or modern idiom, is that of communication with other peoples of other cultures through listening, speaking, reading, and writing activities in a culturally appropriate context.

The study of a foreign language also has as its goal the awareness of and appreciation of other peoples, other modes of expression and other cultures, contemporary or classical.

A further value of foreign language study is that it is an aid in the understanding of language as language through a systematic study of grammar, syntax, multimedia resources, and vocabulary.

Finally, the Foreign Language department hopes to promote global awareness and justice as citizens of a world community whose linguistic and cultural boundaries are broadening through the rapid expanse of tele-communication, travel, and trade.

### **(LAN12) SPANISH I**

Year Course

Grade 9

A basic Spanish course, Spanish I introduces basic listening, speaking, reading, grammar, mechanics, and writing skills and introduces the geographic and cultural variety of the Spanish speaking world.

### **(LAN14) SPANISH II**

Year Course

Grades 10, 11, and 12

This level II course expands the student's vocabulary, conversational skills and grammar base, strengthening their listening, speaking, reading, and writing skills. Writing and reading for comprehension is also emphasized.

### **(LAN15) SPANISH II Honors**

Year Course

Grades 10, 11, and 12

An accelerated level II course, Spanish II Honors builds on the skills acquired in Spanish I and expands the students' vocabulary, conversational skills and grammar base, strengthening their listening, speaking, reading, and writing skills. Communication in Spanish and writing and reading for comprehension are also emphasized.

### **(LAN03) ACC SPANISH III**

Year Course

Grades 10, 11 and 12

### **SPAN 1010- Communicating in Spanish I (3 hrs.)**

This course is an introduction to Spanish language and culture and prepares student to operate within areas of immediate needs and simple situations.

### **SPAN 1020- Communicating in Spanish II (3 hrs.)**

Prerequisite: Two years of high school Spanish or placement. This course is a continuation of SPAN 1010. The course prepares the student to function in simple situations related to personal interests and daily life.

### **(LAN04) ACC SPANISH IV**

Year Course

Grades 11 & 12

### **SPAN 2010- Intermediate Spanish: Language and Culture (3hrs)**

Prerequisite: SPAN 1020. This course provides continued practice in all skills and readings in and discussion of Hispanic Culture.

## **MATHEMATICS**

The Mathematics Department strives to teach each student to be a responsible learner who will be challenged and stretched to reach his highest goals in mathematics. We believe that math courses should be structured so that students can enjoy achievement and success in their work according to their ability. The range of our subject matter begins with an understanding of the basic skills for those who are interested in immediate life preparation in mathematics and continues to calculus, which is a sound foundation for future professional and technical work. The mathematics program continually strives to develop the student's problem solving ability and critical thinking skills, while contributing to his understanding of the many kinds of problems that can be handled efficiently by mathematical means. The math department reinforces the concept that mathematics is everywhere and useful in every discipline. All honors courses require department approval.

### **(MAT07) ALGEBRA I A**

Year Course

Grade 9

This course is designed to help students make the transition from elementary mathematics to algebra. Beginning with a review of fractions, decimals, ratios, and percentiles, it progresses to solving multiple step equations with the use of integer rules and the order of operations. Graphing equations, simplifying polynomials, and solving word problems are introduced. Class size is kept small, which insures time for added individualized attention. This course is not accepted by some universities as one of the four years needed in high school.

**(MAT12) ALGEBRA I**

Year Course

Grade 9

Beginning with learning the rules for integer operations and the order of operations, this course continues with solving equations and inequalities, solving algebra application problems, graphing, solving systems of equations, and performing all operations with polynomials. Algebraic fractions, functions, radical expressions, and quadratic equations are introduced.

**(MAT13) ALGEBRA I HONORS**

Year Course

Grade 9

Freshmen are eligible for this course if they have excellent math skills and have a good understanding of algebra already. The topics covered are about the same as in Algebra I; however, this course is more rigorous, faster paced, and each topic is covered more deeply. Additional topics covered include probability, statistics, and sequence. The student is expected to use good problem solving techniques along with critical thinking skills to solve many of the problems on his own.

**(MAT22) GEOMETRY**

Year Course

Grades 10, 11

Geometry is the study of the properties of geometric solid figures with the emphasis placed on plane figures. The course provides experience in abstract deductive thinking with deductive proofs being introduced. A full year of Algebra must be successfully completed before entering this course.

**(MAT23) GEOMETRY HONORS**

Year Course

Grades 9, 10

Geometry is the study of the Euclidean geometric properties of solid figures with the emphasis placed on plane figures. The course provides experience in abstract deductive thinking with deductive proofs being studied and written. A study of coordinate geometry and transformational geometry is introduced. A full year of Algebra must be successfully completed before entering this course.

**(MAT32) ALGEBRA II**

Year Course

Grades 11, 12

Algebra II is an extension of topics covered in Algebra I, including more development of the usefulness of equations and systems and their manipulations. An introduction to new topics including relations and functions, analytic geometry, and basic triangle trigonometric definitions are included in this course. A TI-83 (+) or TI-84 (+) Calculator is required.

**(MAT33) ALGEBRA II-TRIGONOMETRY HONORS**

Year Course

Grades 10, 11

Department Approval

This course gives a carefully integrated treatment of Algebra and Trigonometry. A logical development of the number system is given from the natural numbers through the complex numbers. Students will manipulate polynomial, rational, and exponential expressions and solve equations involving them. Emphasis is on the study of functions: algebraic, trigonometric, exponential, and logarithmic. Other topics include radicals, conics, systems of linear equations, and word problems. Students must have a TI-83 (+) or TI-84 (+) calculator.

**(MAT35) ALGEBRA III**

Year Course

Grade 12

Algebra III touches base on a wide variety of topics that a first year college student would typically encounter in a College Algebra course. In addition to reviewing some basic algebra skills, we will be studying matrices and determinants, polynomial functions, conics, exponential and logarithmic functions, sequences and series, probability and statistics. If time permits, we will also take a look at sequences and series as well as statistical analysis.

**(MAT40) ADVANCED ALGEBRA**

Year Course

Grade 12

This course includes a review of Algebra II topics, an in depth study of functions and their graphs (polynomial, rational, exponential, logarithmic, etc.), solving polynomial, rational, exponential, and logarithmic equations, as well as the study of matrices, conics,

and sequences and series. This course touches base on a wide variety of topics that a first year college student would typically encounter in a College Algebra course.

### **(MAT41) MATH TOPICS**

Year Course

Grades 11, 12

This course covers number sense and numerical operations, algebra, geometry, data interpretations, statistics, and probability. Woven throughout these topics, problems will be given to increase advanced mathematical reasoning and problem solving skills. Each student will work primarily at his own pace on ALEKS, a computerized software program, costing about \$40 for the year. In addition, material will be presented by the course teacher to align with college expectations of mathematical reasoning.

### **(MAT43) PRE-CALCULUS HONORS**

Year Course--Department Approval

Grade 12

This course includes a review of Algebra II topics and pre-calculus mathematics including trigonometry, sequences and series, polar coordinates, conic sections, higher order polynomials, determinants, and some matrices and logarithms. Students are required to have a TI-83 (+) or a TI-84 (+) calculator.

### **(MAT44) ANALYSIS**

Semester I

Grade 12

Prerequisite Algebra II/Trig Honors and Department Approval

This intensive course is to prepare students for Calculus 1-8-1-8 and is required for any student desiring to take Calculus 1-8-1-8. This course meets every day. This course includes a review of Algebra II topics and pre-calculus mathematics including trigonometry, sequences and series, polar coordinates, conic sections, higher order polynomials, determinants, and some matrices and logarithms. The course will conclude with an introduction to limits and proceed onto the study of Calculus. Students are required to have a TI-83 (+) or a TI-84 (+) calculator.

### **(MAT46) ACC CALCULUS**

**SLU Course #--MATH 1510-Calculus I-3hrs**

Semester II

Grades 12

Prerequisite Analysis and Department Approval

This course starts at the end of Analysis and continues into semester 2. The work is a college level course in elementary calculus, with emphasis on differential calculus of one variable. Topics covered include: real numbers, analytic geometry, functions, limits, continuity, derivatives and their applications, anti-derivatives, definite integrals, fundamental theorems of calculus, and rudimentary treatment of integrals. College credit is available through St. Louis University's 1-8-1-8 program. Students are required to have a TI-83 (+) or a TI-84 (+) calculator. This course meets every day. **Students must have signed up for Analysis.**

## **PHYSICAL EDUCATION**

The Physical Education department of St. Mary's High School recognizes the need to develop students intellectually, physically, socially, emotionally, and spiritually. Further, it recognizes the responsibility to conduct for all students a curriculum designed to develop an informed and effective citizenry, by providing a foundation for continued education, as it promotes the constructive use of leisure time (sports).

Gym classes, competitive sports and the intra-mural programs are the basis by which this department will teach/encourage the values of health, constructive recreation, and life-long sports as these programs afford the opportunity to develop co-operation, sportsmanship, scholarship, leadership, school spirit, loyalty, and positive school morale.

### **(PED12) PERSONAL FITNESS CONCEPTS**

Semester Course  
Grade 9

This course gives a broad view of physical education and the importance of physical activity related to the brain. Being a required course, students must participate in class unless excused for medical reasons.

### **(PED13) TEAM SPORTS**

Semester Course  
Grade 10

### **(PED14) LIFETIME SPORTS & FITNESS**

Year or Semester Course  
Grades 11, 12

### **(PED18) STRENGTH & CONDITIONING I**

### **(PED19) STRENGTH & CONDITIONING II**

Year Course & Semester Course  
Grades 10, 11, 12

Strength & Conditioning class will provide an opportunity for the development of strength and conditioning for various sports and fitness related activities. Students wishing to enroll in this class will need a recommendation for the Strength & Conditioning Coach, or their Sport Coach, and a parent signature. Free weights, exercise machines and conditioning activities will be incorporated to promote improvement in mobility, strength, endurance, balance, agility and speed. Students will participate in strength & conditioning activities each class. Proper technique, safety precautions and proper application of the Principles of Training will be emphasized. Students will be tested every 3-6 weeks in 5-8 different areas to monitor physical progress, and will be tested on their understanding and comprehension of various strength & conditioning topics to determine quarter and semester grades. A plan to achieve goals will be developed and implemented during this year long course. This course can fulfill the requirements as a half or one full credit of physical education &/or as half of or one full credit of elective necessary for graduation.

## **RELIGION**

The religion department of St. Mary's High School will share and deepen the Catholic faith with the students. The students are to be instructed in the values, teaching-beliefs and practices-worship of the Catholic Church. Therefore, it is imperative that these issues be dealt with in the religion curriculum.

Religious education at St. Mary's is an academic subject with content and expectations. Students are expected to learn and religious educators are expected to share their Roman Catholic faith. These goals are to be implemented by having each course and each class comprised of the four main elements of our faith: Scripture, Tradition, Doctrine, and Prayer.

### **(REL09) RELIGION I**

Year Course

Grade 9

Semester I: This course gives students a general knowledge and appreciation of the Sacred Scriptures. Through their study of the Bible, they will come to encounter the living Word of God, Jesus Christ. In the course they will learn about the Bible, authored by God through Inspiration, and its value to people throughout the world. The students will pay particular attention to the Gospels, where they may grow to know and love Jesus.

Semester II: This course introduces students to the mystery of Jesus Christ, the living Word of God, and Second Person of the Blessed Trinity. In this course students will understand that Jesus Christ is the ultimate Revelation to us from God. In learning about who he is, the students will also learn who he calls them to be.

**(REL20) RELIGION II**

Year Course

Grade 10

The purpose of this course is to tell the story of Jesus Christ in our life. We study the impact of the Paschal Mystery, Christ's Mission of Salvation in our lives during the first semester. In the second semester, our view broadens out to consider the role of the Church and learn how it manifests Christ in our world today.

**(REL30) RELIGION III**

Year Course

Grade 11

The purpose of this course is two-fold. The first semester covers the encounter with Christ in the sacraments; especially through the Eucharist. The second half of the course presents the need for students to understand that it is only through Christ that they can fully live out God's plan for their lives. Students will learn the moral concepts and precepts that govern the lives of Christ's disciples.

**(REL04) RELIGION IV**

Year Course

Grade 12

This course has two important areas of study. The first is the teaching of the Catholic Church in Social Justice. Students will learn about their responsibilities in community to live as Jesus teaches. The second component takes up the study of Christian lifestyles as they manifest themselves in marriage, single life, priestly vocation, and in the vowed religious life. Students will learn the charisms and blessings involved in each.

**(REL45) ACC RELIGIONS & SCIENCE****SLU Course #s:****THEO 2820 – Religions & Science – 3 hours**

Semester Course

Grade 12

This course examines the history and recent development of three disciplines--cosmology, physics, & biology--to show how religion and science have related to one another in the past & relate to one another in contemporary research and reflection. A final part of the course considers issues that involve multiple scientific disciplines (e.g., extraterrestrial intelligence, environmentalism, etc.)

## SCIENCE

Underlying the Science Department's philosophy, as a part of the overall Christian environment, is the acceptance of the beauty and order of God's creation. The department stresses the special place of humanity in the universe and humanity's ability to appreciate, preserve, use and/or alter the forces and products of our natural environment.

The department strives to develop the individual student's ability to think critically and efficiently. As science is an active process of discovery, the courses contain a balance of lecture and laboratory work. It is believed that only through participation will science become an active part of the educational process.

Besides helping students prepare to daily cope with technology, the science program seeks to stimulate enthusiasm among those students considering careers in science, engineering, medicine, etc. All honors courses require department approval. Courses marked with an asterisk (\*\*) fulfill the 12<sup>th</sup> grade STEM option outlined on page 4 of the student handbook.

### **(SCI12) CONCEPTUAL PHYSICS**

Year Course

Grade 9

This course is an introduction to essential topics in physics and science investigation. The course works to explore basic rather than detailed physics concepts. Investigative skills in measurement, critical thinking, and reasoning are developed while exploring these basic physics topics. Topics uncovered: forces and motion, Newton's Laws, energy and energy transfer, electricity, and basic principles of chemistry. Demonstrations and lab investigation are an important part of the course. Pre-algebra math skills are utilized in concept formation.

### **(SCI14) CONCEPTUAL PHYSICS HONORS**

Year Course

Grade 9

This course is designed to provide students with the strong knowledge base and reasoning skills required in higher level science courses. Essential physics topics are introduced in a setting inquiry and concept application. The course emphasizes logical thought and problem solving within each topic. Topics uncovered: Newton's Laws, forces, motion, momentum, energy transfer, electricity, and basic principles of chemistry. Demonstrations and labs are an important part of the course. Basic algebra math skills are utilized in concept formation.

**(SCI24) HEALTH**

Semester Course

Grade 10

This course is an introductory health science course that emphasizes the history, signs and symptoms, causes, treatments, prevention and cure, and prognosis of illnesses and diseases which affect the health of the human body. Maintaining and improving health through diet, exercise, and life style are emphasized. One goal of this course is to instill an interest and appreciation for these issues as they relate to the student's personal health.

**(SCI18) CHEMISTRY I**

Year Course

Grade 10

Chemistry is the study of the properties of matter and the changes that occur in the composition of matter. The course is developed primarily on the conceptual level, with emphasis on logical thought, aided by theories, laws and principles, rather than memorization. The laboratory is an integral part of the course, and the results and observations obtained are used to underscore and develop the topics which are presented in class. The material is presented in a logical progression of topics, rather than historically or chronologically.

**(SCI19) CHEMISTRY HONORS**

Year Course

Grade 10

This is a challenging course that covers the properties of matter and the changes that occur in the composition of matter. There is a strong emphasis on logical thought and problem solving along with some memorization. Students will learn how to use the periodic table, balance equations, determine reaction rates, and determine equilibrium in solutions. The laboratory is an integral part of the course, as students observe and use their results to discover, confirm, and reinforce chemical properties.

**(SCI22) BIOLOGY**

Year Course

Grade 11

This is an introductory life science course. It emphasizes fundamental concepts as it instills an interest and appreciation in the students for all living things and their

environments. Students will be introduced to basic biochemistry, genetics, evolution, and conservation. Labs, demonstrations, and basic scientific writing are part of the course.

### **(SCI23) BIOLOGY HONORS**

Year Course

Grade 11

This life science course is designed to give students a detailed understanding of living organisms, their interactions, and basic life processes while noting relationships and connection of principles. Topics include: basic biochemistry and enzymology, cell biology, cell division, genetics, evolution, basic ecology, photosynthesis, respiration, and basic plant and animal anatomy. Lab exercises, modeling, demonstrations, and scientific writing are an integral part of this course.

### **(SCI34) ACC BIOLOGY**

**SLU Course #--BIOL 1040- Principles of Biology I (4hrs)**

Year Course

Grade 12

Prerequisite: Completed Biology and Chemistry and department approval

This course covers the basic principles of biology. The course will emphasize the definition of life; cells—their organization, chemical composition and metabolic activity; the basis of genetics and heredity; biotechnology; basic biochemistry; and evolution. Labs and demonstrations are part of this science course.

### **(SCI36) ACC CHEMISTRY**

**SLU Course #s**

**CHEM 1110 & CHEM 1115--General Chemistry I Lecture & Lab (4hrs)**

**CHEM 1120 & CHEM 1125--Introduction to Chemistry II &Lab (4hrs)**

Year Course

Grades 11 and 12

Prerequisite: Honors Chemistry with department approval/recommendation

ACC Chemistry is an intensive course covering matter, atoms, thermochemistry, chemical bonding, solutions, acids, bases, intermolecular forces, electrochemistry, organometallics and an introduction to organic chemistry. Laboratory experiments are an integral component of this course. The course schedule and topics are outlined by the SLU chemistry department for 2 full semesters of college credit. Students must have a strong work ethic and completed Honors Chemistry with a high grade.

**(SCI40) ECO-ACT \*\***

Year Course

Grades 11, 12

This course is designed to teach high school students about ecology and ecological issues directly related to the St. Louis area. The students go through a 3 week summer training session, including a week of canoeing, camping and other outside activities to teach them about the environment. The students are then taught techniques used to teach various ecological topics to a 4th grade class and the process needed to research and follow through on an environmental project. They present their lessons and projects to their peers and the ECO-ACT staff and then teach that unit to their 4th grade class. This class is taught through the Missouri Botanical Gardens.

**(SCI41) ANATOMY & HUMAN BIOLOGY \*\***

Semester Course

Grades 11, 12

This semester course will cover the basics of an anatomy and physiology course covering the organization and function of all major body systems and their importance in everyday activities. This is recommended for those interested in careers in patient care, research and allied health professions.

**(SCI42) INTRODUCTION TO SPORTS MEDICINE \*\***

Semester Course

Grades 11, 12

This course is designed for students interested in the field of Sports Medicine. Students will discuss different sports medicine professions and will be instructed in basic cpr/aed and first aid techniques. Students will also be instructed in basic anatomy and physiology, injury management, mechanisms of injury, nutrition, drug use, and mental health issues in sports.

**(SCI43) PHYSICS HONORS \*\***

Year Course

Grades 11, 12

Prerequisite-completed Chemistry

Department approval

Physics is the study of the physical world. The course is developed along traditional conceptual concepts that include motion, forces, energy, and electrostatics. There is a logical sequence of presentation of theories, concepts, laws, and principles. Laboratory

experiments are an integral part of the course and are used to develop and support topics presented in the course.

### **(SCI47) EARTH AND SPACE SCIENCE \*\***

Year Course--Elective

Grades 11, 12

This course is a general survey of earth science and astronomy topics. This course will enable the student to learn basic concepts of: soils, groundwater, weather and the atmosphere, the hydrologic cycle, urban geology, rocks and minerals, historical geology, plate tectonics, scale of the solar system, historical astronomy, basic motions of the earth, celestial bodies, constellation identification, planet evolution, galaxies and stellar evolution.

### **SOCIAL STUDIES**

The Social Studies philosophy which underlies the work of this department is the soul of our teaching and permeates, invigorates, and inspires the whole curriculum. The American way of life is based on the traditional Christian doctrines of the sacred origin, social justice, and the nature and destiny of humanity. Our civilization cannot be understood outside the context of Christianity.

This Social Studies program gives our young American citizens background knowledge of national and world society in the light of Christianity. In classes impregnated with Christian social principles the individual will grow in the realization of his own personal worth. He will live his life more effectively because he will have been taught to evaluate and judge events in their true perspective of the human actions of those who have shaped the destinies of nations.

### **(SOC14 & SOC21) GLOBAL STUDIES I and II**

Two Year Course

Grades 9 and 10

This is a course of study which examines the geography, history and civilizations of the world from its beginnings to the present day. Characteristically, the honors program will be more research based and go deeper into such concepts as change, growth and the nature of civilization.

### **(SOC15 & SOC24) GLOBAL STUDIES HONORS I and II**

Two Year Course

Grades 9 and 10

This two year course will examine the characteristics of Geography and incorporate area studies as well as a chronological approach to global development and history.

Throughout the course, the elements of civilization will be explored in depth. This course will be researched based, and explore more deeply concepts such as change and growth.

### **(SOC32) U.S. HISTORY**

Year Course

Grade 11

This is a two semester survey course. It covers United States history from the founding colonies to the late twentieth century. Emphasis is placed on the importance of the Puritan heritage, the development of the constitution, the course of nationalism and sectionalism, the civil war and reconstruction, in the first semester. In the second semester, the students will study the major events of the twentieth century. These include World Wars I and II, the Cold War, the Great Depression and New Deal, and the Civil Rights Movement. Methods include lecture, video presentations, small group assignments, and presentations.

### **(SOC34) ACC U.S. HISTORY**

**SLU Course #s**

**HIST 2600 - History of the U.S. to 1865 – 3 hours**

**HIST 2610 - History of the U.S. since 1865 – 3 hours**

Year Course

Grade 11

The United States History Survey Honors Course which is taught in the junior year may also be taken for six college credits through the 1-8-1-8 program of St. Louis University. The content of this course is a survey of United States History from its colonial beginnings to current times. Some particular themes are developed throughout the year. Those themes are: The influence of the Puritan experience; the development of the office of the Presidency; Nationalism, Sectionalism, Regionalism throughout the course of the years; the impact of immigration and the arrival of African-Americans as well as slavery and variations of "Know nothing-ism"; the rise, flourishing, and changing nature of American business life; Isolationism; the development of the United States as a World Power in the Twentieth Century; World War II, the atom bomb, and the Cold War; the unique place of American Catholics in the life of the United States. The methods employed in the course are that of teacher lecture, student researched reading, question and answer sessions and the viewing of selected video materials.

**(SOC38) PSYCHOLOGY**

Year Course--Elective  
Grades 11 and 12

This course is an introduction into Behavioral Science centering on the method of inquiry of Behavioral Science and selected generalizations about human behavior.

**(SOC39) GENERAL PSYCHOLOGY (PSY: 200)**

Dual Enrollment Meramec Community College - **College Credit -3 hours**  
Semester Course--Elective  
Grade 12

This course is an introduction to the scientific study of human behavior. It attempts to help students gain insights into their own and other's behavior. A variety of topics relating to psychological development will be covered. Prerequisite: Reading Proficiency.

**(SOC43) ABNORMAL PSYCHOLOGY (PSY: 208)**

Dual Enrollment Meramec Community College - **College Credit 3hours**  
Semester Course  
Grade 12

A survey of abnormal/deviant behavior, including the causes and theories concerning neuroses, psychoses, mental retardation, drug abuse, sexual disorders, criminal behavior, and other selected topics. A discussion of the prevention and treatment of these disorders is included. Prerequisite: PSY: 200 and Reading Proficiency.

**(SOC44) ACC WESTERN CIVILIZATION**

**SLU Course #s**

**HIST 1110 - Origins of the Modern World to 1500 - 3 hours**

**HIST 1120 - Origins of the Modern World, 1500 to the Present - 3 hours**

Year Course  
Grade 12

The Western Civilization Honors Course which is taught in the senior year may also be taken for six college credits through the 1-8-1-8 program of St. Louis University. The content of this course is a survey of Western Civilization from the beginning of man to the present. Some of the themes and topics that are to be developed this year include: the first civilizations; the contributions of Greek and Roman Civilizations; the influence of Judaism, Christianity and Islam on the world; the transformation of Europe from Roman Civilization to nation states that occurred during the Middle Ages; the Renaissance; the Reformation and Counter Reformation; the Age of Exploration and Expansion; the Enlightenment; the French Revolution and Age of Napoleon; the Industrialization and

Modernization of Nations; Imperialism, World War I, and the inter-war years; World War II and its aftermath; the changing 20th century.

**(SOC45) AMERICAN ISSUES**

Year Course

Grade 12

This course exams significant issues in the United States such as racism, poverty, and immigration. This course will also deal with recent political history and current politics as well as other current events. Course fulfills senior year social studies graduation requirement.

