



A Catholic, college-preparatory school

St. Mary's High School

2023 – 2024

Course Catalog

St. Mary's High School
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Art and Music

ELECTIVES

Art Foundation

FA70

.5 Credit

Grades 9-12

This foundation course will give students the understanding of the Elements of Art and Principles of Design as well as Art Appreciation. Students will develop visual skills and design perception by the learned process of “how” we see. Throughout this course, students will keep a sketchbook to practice and develop techniques and will experiment in various art media. Projects will support students in creative problem solving and visual expression and will include concepts that students are familiar with to build stronger visual connections. Some topics will include drawing and painting based on color theory, perspective, contour drawing, still life and an introduction to Graphic Design.

Advanced Art

FA71

.5 Credit

Grades 10-12

Advanced art is for students who enjoy art and who are interested in refining and applying their skills. Students will explore various media in depth in a series of guided and open-ended assignments. Students must be able to work independently on assignments that are tailored to their interests and strengths. Select students will establish a portfolio of work designed to help them demonstrate their abilities as well as their versatility with techniques, problem solving and ideation. This includes observational drawings and concentrating on subject matter that is of personal interest to them.

Prerequisite: Art Foundation

Chorus

FA73

.5 or 1 Credit

Grades 9 - 12

This course explores choral music from a wide variety of cultures and time periods through both study and performance. There will be a special focus on liturgical music. The core curriculum emphasizes the basics of vocal technique, sight-reading, music theory, and music history. The course also provides opportunities for growth in the understanding of musical elements (rhythm, melody, form, harmony, dynamics, expressive elements, tone, articulation, and style) as applied to the music performed. Students will learn to enjoy participating in vocal music and work cooperatively with other students in the musical organization. Students are expected to participate in evening concerts as a part of the class. **Semester Course 9-12 or Full-Year 10-12**

Multi-Media Lab

FA75

.5 Credit

Grades 9 - 12

This course is an introduction to the integration of electronics into the world of music performance. Students will learn the basics of acoustics & sound, sequencing (composing with MIDI technology), and sampling (recording digital audio), along with studying other Multi-Media Performance skills such as: Podcasting, Music for film and A/V Technology. Multi-Media Lab will include discussions of the historical development of the electronic music genre. Some music theory & performance experience is helpful. Theory review will be included in the coursework as needed.

Music Appreciation

FA74

.5 Credit

Grades 9 - 12

This course introduces students to the history, theory, and genres of music. The course explores the history of music, from the surviving examples of rudimentary musical forms through to contemporary pieces from around the world. The first half of the semester covers early musical forms, classical music, and American jazz. The second half of the semester presents modern traditions, including gospel, folk, soul, blues, Latin rhythms, rock and roll and hip hop. The course explores the relationship between music and social movements and reveals how the emergent global society and prominence of the Internet are making musical forms more accessible worldwide.

Piano 1**FA81****.5 Credit****Grades 9-12**

This course is designed to present an overview of musical principals and theories as they relate to the piano and to develop the student's technical skills. The basic musical elements of melody, harmony, and rhythm are studied and discussed. Musical notation and terms are emphasized and are assessed on a regular basis. The course is designed to develop self-sufficiency with the piano and allows the individual to set and achieve personal goals and expectations. This course may require extra study and/or practice during the students' own time.

Music Appreciation 2**FA72****.5 Credits****Grades 10-12**

This course takes a deeper look at early musical forms, classical music, and American jazz, gospel, folk, soul, blues, Latin rhythms, rock and roll and hip hop. The course explores the relationship between music and social movements and reveals how the emergent global society and prominence of the Internet are making musical forms more accessible worldwide.

(Prerequisite: Music Appreciation or Teacher approval)

Business

ELECTIVES

Personal Finance ACC

BUS739

.5 Credit

Grades 10 - 12

A financial literacy course designed to help the student to make informed decisions about spending, saving, borrowing and investing in order to build a solid foundation for their financial security. **Semester Course**

English

English I-ACC

ENG211

1 Credit

Grade 9

This course is designed to develop reading and writing skills, vocabulary, and grammar with more individualized guidance. The reading material is diverse and includes short stories, novels, plays, essays, and poems. The selection of texts, while subject to change, may include *To Kill a Mockingbird*, *Romeo and Juliet*, and *A Raisin in the Sun*. Students learn to make inferences from their reading and write organized five-paragraph essays with additional time given for proofreading, editing, and rewriting essays. Vocabulary and grammar are strengthened with intensive practice.

English I ACC

ENG214

1 Credit

Grade 9

This course is designed to guide students in the development of their reading and writing skills, vocabulary, and grammar. The reading material is diverse and includes short stories, novels, plays, essays, and poems. The selection of texts, while subject to change, may include *To Kill a Mockingbird*, *Romeo and Juliet*, and *A Raisin in the Sun*. Vocabulary is strengthened with comprehensive exercises and practice with recognition of context clues. Special attention is given to writing the five-paragraph essay and citing textual evidence.

English I Honors

ENG213

1 Credit

Grade 9

This course is designed to challenge the academically advanced student. The reading material is diverse and includes short stories, novels, plays, essays, and poems. The selection of texts, while subject to change, may include *To Kill a Mockingbird*, *Romeo and Juliet*, and *A Raisin in the Sun*. The focus of the course is developing high-level reading, writing, and critical thinking skills for the rest of high school and beyond through an in-depth study of literature, grammar, and vocabulary. Special attention is given to the five-paragraph formal essay. The quality of analysis, discussion, and writing is expected to be particularly thoughtful and sophisticated, and the rate at which material is covered is relatively fast.

Prerequisite: Based on placement testing

English II ACC

ENG224

1 Credit

Grade 10

This course will further develop and refine the college bound student's reading comprehension, analytical, writing and communication skills through reading, vocabulary, research and writing assignments and exercises. Literature includes, but is not limited to, a survey of the short story, poetry, modern and Shakespearean drama, novels and non-fiction. Outside reading is required and students use this reading as a basis for developing oral communication. A concentration of expository, descriptive and creative writing is incorporated throughout the course.

English II Honors

ENG223

1 Credit

Grade 9 - 10

This course is designed to challenge the academically advanced student. The course will further develop and refine the student's reading comprehension, analytical and writing skills through reading, vocabulary, writing and research skills. This course serves as a foundation for subsequent, more advanced English classes.

Literature includes a survey of the short story, modern and Shakespearean drama, poetry, novels, and non-fiction. Outside reading is required and students use this reading as a basis for developing oral communication. Emphasis is placed on reading, literary analysis, oral communication and expository, descriptive, and creative writing. **Teacher or Counselor Recommendation**

Prerequisite: 80 in Honors English I or a 90 in Accelerated English I.

American Literature ACC**ENG235****1 Credit****Grade 11**

This course is designed for the college bound junior who demonstrates proficient reading, writing and communication skills. The course focuses on themes in American Literature and examines the major authors, periods and genres in American Literature and the impact of the literature on the culture, history and growth of the American civilization. The development of language arts and skills is achieved through reading, writing, vocabulary, grammar, SAT preparation, critical thinking, oral communication, and collaboration. Clear, concise and effective oral and written communication is stressed. Research and analytical skills will be studied and applied with the completion of a comparative literary analysis paper.

American Literature Honors**ENG233****1 Credit****Grade 10-11**

Designed for the advanced junior who demonstrates an ability to read, write and communicate on a mature level, this course surveys American Literature from an historical perspective. The study of American Literature encompasses the periods extending from early Native American through contemporary American authors who employ various literary genres. Students examine the impact of the literature on the culture, history and growth of the American civilization. Skills focus on reading, writing, vocabulary, grammar, SAT preparation, critical thinking, oral communication, and collaboration. Research and analytical skills will be studied and applied with the completion of a comparative literary analysis paper. The student will be challenged to become a better reader, writer and thinker.

Prerequisite: 80 in Honors English II or a 90 in Accelerated English II.

Teacher or Counselor Recommendation

AP English Language and Composition**ENG234****1 Credit****Grade 11**

This college level course is designed to help students learn to identify rhetoric (persuasion) in as many forms as possible. Included forms (but not limited to) are political articles, nonfiction readings from current magazines, novels, essays, and et al. Three pre-course summer papers are required, and writing in class is done often, and is timed. All students taking this course are required to take the AP test in the spring.

Prerequisite: Teacher or Counselor Recommendation

A student cannot drop without a consultation with the Principal who will consider extenuating circumstances after the normal add/drop period.

ALL STUDENTS TAKING THIS COURSE WILL TAKE THE A.P. EXAM.

British & World Literature ACC**ENG240****1 Credit****Grade 12**

This course is designed for the college bound senior who has exhibited a special proficiency in reading and writing. Important works of British and World literature are examined in close detail with an emphasis on literary analysis and analytical writing. All aspects of the college admissions process are covered. The second semester involves emphasis on the types of writing and research skills required of a college student.

British & World Literature Honors**ENG244****1 Credit****Grade 12**

This course is designed to challenge the advanced college bound senior who demonstrates a great proficiency in the English Language Arts. The works of important writers in British and World literature are covered extensively with emphasis on literary analysis and interpretation. The college admission's process is also an integral part of this course. The college application essay is explored in detail. There is a heavy concentration placed on formulating expository and persuasive essays, culminating with the writing of a 10-12 page persuasive research paper. The course's goal is to prepare students for the rigors of college reading and writing.

Prerequisite: 80 in Honors American Literature or a 90 in ACC American Literature.

Teacher or Counselor Recommendation

AP English Literature & Composition **ENG243** **1 Credit** **Grade 12**

This college level course is designed to help seniors recognize and consider some of the BIG questions and subjects that have concerned writers for several millennia. Many of these questions and subjects will serve as topics for timed essays written in class. There are three summer pre-course essays required. Students will also learn how to distinguish analyses from mere descriptions. All students in the course are required to take the AP exam in the spring.

Prerequisite: Teacher or Counselor Recommendation

A student cannot drop without a consultation with the Principal who will consider extenuating circumstances after the normal add/drop period.

ALL STUDENTS TAKING THIS COURSE WILL TAKE THE A.P. EXAM.

English

ELECTIVES

Creative Writing **ENG245** **.5 Credit** **Grades 9 - 12**

This year long workshop course will be a study in the techniques and methods of creative writing, with an emphasis on the development of prose and poetry. Students are required to write in a variety of genres and to demonstrate a capability for giving and receiving constructive criticism. Students will demonstrate a better understanding of the revision and rewriting process through mastery of editing skills, including peer-editing.

Students will be required to present their prose and poetry in class and a mandatory final portfolio will be due at the end of the course.

History of American Comedy **ENG226** **.5 Credit** **Grades 11-12**

This half-year course will provide students with an extensive overview and understanding of how comedy evolved in the United States. Through readings, discussions, viewings, listening, and research, students will analyze the numerous eras of stand-up comedy starting with the vaudeville and lecture comedies of the 19th century and continuing through current day performers in comedy clubs and on streaming platforms. Students will explore various types of comedy, including, but not limited to, satire, farce, slapstick, parody, stand-up, surreal, sketch, and improv, through its historical context, both political and social.

Pop Culture **ENG225** **.5 Credit** **Grades 9-12**

Popular Culture plays a vital role in shaping not only how we think about ourselves and each other, but also about the larger world around us. This survey course will explore popular culture in American society from the 1960's through the 1990's. We will analyze factors such as ethnicity, race, gender, class, age and religion and how they are shaped and reflected within popular culture, with particular attention to the literature, film, television, music and advertising of the respective decades.

Foreign Language

Spanish I ACC

WL512

1 Credit

Grades 9 - 12

This course introduces students to the culture and language of the Spanish-speaking world. Emphasis will be placed on pronunciation, basic grammatical structures, vocabulary, culture and basic conversations. Some topics will be developed based on the MA Foreign Language Curriculum Frameworks (Communication, Cultures, Connections, Comparisons, and Communities.) In addition, the integration of the study of language with the study of culture (which includes daily life, history, literature, visual and performing arts, mathematics and science) creates natural links to other disciplines.

Spanish I Honors

WL513

1 Credit

Grades 9 – 12

This course introduces students to the culture and language of the Spanish-speaking world. Emphasis will be placed on pronunciation, basic grammatical structures, vocabulary, culture and basic conversations. The course will also offer an emphasis approach to listening, reading comprehension and writing. Major topics will be developed based on the MA Foreign Language Curriculum Frameworks (Communication, Cultures, Connections, Comparisons, and Communities.) This course will give the students the ability to carry on a simple conversation. In addition, the integration of the study of language with the study of culture (which includes daily life, history, literature, visual and performing arts, mathematics and science) creates natural links to other disciplines.

Prerequisite: Teacher or Counselor Recommendation

Spanish II ACC

WL522

1 Credit

Grades 9 - 12

This course builds upon knowledge gained in Spanish I. This course will also reinforce the skills learned in Spanish I: listening, speaking, reading and writing. Emphasis is on perfecting pronunciation, mastery of the basic grammatical structures, and increased communicative proficiency. Most of the major topics will be developed based on the MA Foreign Language Curriculum Frameworks. (Communication, Cultures, connections, Comparisons, and Communities.) Acquisition of functional vocabulary is expected. Students will be exposed to the past tenses, future, conditional and subjunctive mood. Students will be expected to apply them in their writing and speaking.

Spanish II Honors

WL523

1 Credit

Grades 9 – 12

This course builds upon knowledge gained in Spanish I. This course will also reinforce the skills learned in Spanish I: listening, speaking, reading and writing. Emphasis is on perfecting pronunciation, mastery of the basic grammatical structures, and increased communicative proficiency. Major topics will be developed based on the MA Foreign Language Curriculum Frameworks (Communication, Cultures, Connections, Comparisons, and Communities.) This course will give the students the ability to carry on a simple conversation. Acquisition of functional vocabulary is expected. Students will be exposed to the past tenses, future, conditional and subjunctive mood. Students will be expected to apply them in their writing and speaking. Students will be encouraged to participate in Spanish Club activities.

Prerequisite: Teacher or Counselor Recommendation

Spanish III ACC**WL532****1 Credit****Grades 10 - 12**

This course builds upon knowledge gained in Spanish II and will reinforce the skills previously learned and provide a greater emphasis on the Spanish language, grammar, and culture. Students in this course will build on their Spanish knowledge by learning more complex grammatical structures and become equipped to read and understand a variety of literary selections and gain necessary skills to interact verbally and in writing with Spanish speakers in varied social and business situations. As part of the course, students will be afforded opportunities to read, write, hear, and speak Spanish while they work towards becoming linguistically and culturally literate. Major topics will be developed based on the MA Foreign Language Curriculum Frameworks (Communication, Cultures, Connections, Comparisons, and Communities.) This course will give the students the ability to carry on a simple conversation for this reason acquisition of functional vocabulary is expected.

Spanish III Honors**WL533****1 Credit****Grades 10 - 12**

This course is considered high intermediate level and will continue building upon knowledge gained in Spanish II. They will also reinforce the skills previously learned and provide a greater emphasis on the Spanish language, grammar, and culture. It is a challenging course taking in considerations that students will be presented with high standard vocabulary with a lot of synonyms and cognates, grammar that deals with many complex tenses and clauses as well as idiomatic expressions. In addition, there will be a demanding immersion in Spanish literature and deeper knowledge of the Spanish culture, consistent oral conversation, written composition, listening and reading comprehension. All of the aforementioned will be ongoing activities perform in class in accordance to the MA Foreign Language Curriculum Frameworks (Communication, Cultures, Connections, Comparisons, and Communities.) This course will give the students the ability to carry on complex conversation.

Prerequisite: Teacher or Counselor Recommendation

Spanish IV ACC**WL542****1 Credit****Grades 11 - 12**

This course deepens the four language skills of listening, speaking, reading, and writing. Students will discuss in Spanish contemporary topics and literature while extending their vocabulary and increasing their understanding of grammatical concepts. The classroom activities are designed to develop those skills. Vocabulary will focus on words and expressions relevant to readings or other input. The readings address topics ranging from history and systems of government to professions, celebrations, leisure time, health, and others. Grammatical concepts introduced in Spanish III will be reviewed and reinforced. New grammatical concepts include the conditional and future tenses, the impersonal se, the perfect tenses, and further uses of the subjunctive. This course is conducted mostly in the target language. All of the aforementioned will be ongoing activities perform in class in accordance to the MA Foreign Language Curriculum Frameworks (Communication, Cultures, Connections, Comparisons, and Communities.) This course will give the students the ability to carry on complex conversation.

Spanish IV Honors**WL543****1 Credit****Grades 11 - 12**

This course deepens the four language skills of listening, speaking, reading, and writing. Students will discuss in Spanish contemporary topics and literature while extending their vocabulary and increasing their understanding of grammatical concepts. The classroom activities in Honors Spanish IV are designed to develop those skills. Vocabulary will focus on words and expressions relevant to readings or other input. The readings address topics ranging from history and systems of government to professions, celebrations, leisure time, health, and others. Grammatical concepts introduced in Honors Spanish III will be reviewed and reinforced. New grammatical concepts include the conditional and future tenses, the impersonal se, the perfect tenses, and further uses of the subjunctive. Honor Spanish IV course is conducted entirely in the target language. The pace of the Honor class is accelerated and college directed. All of the aforementioned will be ongoing activities perform in class in accordance to the MA Foreign Language Curriculum Frameworks (Communication, Cultures, Connections, Comparisons, and Communities.) This course will give the students the ability to carry on complex conversation.

Prerequisite: Teacher or Counselor Recommendation.

AP Spanish Language**WL553****1 Credit****Grades 11-12**

This course is intended for the highly motivated and capable student who would benefit from a more accelerated pace of learning and additional, more challenging areas of study. The class will focus on both grammatical accuracy and communicative fluency. Grammatical knowledge and vocabulary will be refined and expanded so that, as a student, you will be able to more easily comprehend written and spoken Spanish, and more easily express your own ideas when writing and speaking. This class will allow you to continue to build proficiency in the areas of reading, writing, listening, and speaking through a variety of interactive and non-interactive activities such as compositions, essays, telephone conversations, email replies, oral presentation, skits, in-depth studies of Spanish and Latin American literature, history, and geography. The primary purpose of the course is to prepare students to be college-ready, well-rounded global citizens who can communicate effectively in Spanish and are aware of the cultural influences of the Spanish and Latino heritage at homeland abroad.

Prerequisite: Completion of Honors Spanish IV and 90 or above average. 89 or below requires Teacher or Counselor Recommendation.

A student cannot drop without a consultation with the Principal who will consider extenuating circumstances after the normal add/drop period.

ALL STUDENTS TAKING THIS COURSE WILL TAKE THE A.P. EXAM

Foreign Language

ELECTIVE

Introduction to Italian**WL561****.5 Credit****Grades 9-12**

This course introduces students to the culture and language of the Italian speaking world. Emphasis will be placed on pronunciation, basic grammatical structures, vocabulary, culture and basic conversations. In addition, the integration of the study of language with the study of culture (which includes daily life, history, literature and art). Topics will be developed based on MA Foreign Language Curriculum Frameworks and will include the four basic domains (speaking, listening, writing and reading).

Statistics & Probability Honors**MAT310****1 Credit****Grades 10-12**

This course in statistics and probability will enhance our students understanding and comprehension of subjects as varied as physics, biology, history, and political science. Students would be introduced to the different types of data, ways in which data can be collected, and the branches of statistics and experimental design. Also, students will learn the basics of probability and how to calculate probabilities of simple and compound events. **Prerequisite: Completion of Algebra I H or Algebra II ACC (90 or above)**

Pre-Calculus ACC**MAT346****1 Credit****Grades 11 - 12**

This course is for the college-bound student who will profit from and understanding of the limit of functions, a topic discussed in Calculus. Topics include: evaluation and graphing functions of many forms including quadratic, polynomial, rational, exponential, logarithmic, and trigonometric. The course ends with conic sections their graphs and their applications.

Prerequisite: Successful completion of Honors Algebra II or ACC Algebra II and current Math Teacher's Recommendation and Counselor Recommendation

Pre-Calculus Honors**MAT347****1 Credit****Grades 11 - 12**

This course is for the college-bound student who will profit from and understanding of the limit of functions, a topic discussed in Calculus in college or senior year. Topics include: evaluation and graphing functions of many forms including quadratic, polynomial, rational, exponential, logarithmic, and trigonometric. The course ends with conic sections their graphs and their applications.

Prerequisite: Successful completion of Honors Algebra II, 90 or better in Algebra II ACC Current Math Teacher's Recommendation and Counselor Recommendation

Calculus Honors**MAT343****1 Credit****Grade 12**

After a full review of all Pre-calculus topics, the student will study the connections among functions as well as the concepts of the derivative, integral, the limit and the antiderivative of many functions including the trigonometric functions.

Prerequisite: Successful completion of Honors Pre-calculus or a 90 or above in Pre-calculus ACC. A recommended PSAT Math 60 or SAT Math 600.

Current Math Teacher's Recommendation and Counselor Recommendation

AP Calculus**MAT340****1 Credit****Grade 11 - 12**

This course includes methods of finding and applying the derivative and integral as a limit. Students will study: Calculus of polynomials, trigonometric, exponential, logarithmic and inverse functions. There will be applications involving: analytic geometry, science, business and economics.

Prerequisites: B or better in Honors Pre-calculus and Counselor Approval.

A student cannot drop without a consultation with the Principal who will consider extenuating circumstances after the normal add/drop period.

ALL STUDENTS TAKING THIS COURSE WILL TAKE THE A.P. EXAM.

Science

Biology ACC

SCI112

1 Credit

Grade 9

This accelerated level course includes a phylogenetic study of the various forms of life from the unicellular level to multicellular level, the manner in which organisms interact, their evolutionary nature, the life processes common to all living organisms and the basic principles of genetics and heredity. Fundamental aspects of scientific inquiry are encouraged both in class discussions and related laboratory investigations.

Biology Honors

SCI113

1 Credit

Grade 9

This honors level course that involves a phylogenetic study of life from the unicellular level to the multicellular level, the manner in which living organisms interact, their evolutionary nature, the life processes common to all living things and the basic principles of genetics and heredity. Laboratory procedures and techniques will accompany topics discussed in classroom. Recommended for the student with a strong aptitude for science or who plans to pursue a science-related career. Related field trips provide the student with access to techniques used in modern biotechnology laboratories.

Prerequisite: Student selection based upon high school placement test

Chemistry ACC

SCI125

1 Credit

Grade 10

This course is meant to supply sufficient diversity to meet the needs of the students who are interested in Chemistry-related technological careers. This course will include an introduction to scientific measurement and calculations, concepts, principles and chemical reactions. The course will include both the theoretical and the mathematical approaches to Chemistry, including laboratory procedures and techniques.

Chemistry Honors

SCI123

1 Credit

Grade 10

This course is meant to provide an in-depth introduction to the field of Chemistry. This course will include an introduction to scientific measurement and calculations, concepts, principles and chemical reactions. Laboratory sessions will be held. These will include an introduction to laboratory procedures and techniques through quantitative experimentation.

Prerequisite: Teacher or Counselor Recommendation

Physics ACC

SCI135

1 Credit

Grade 11

This course is meant to supply sufficient diversity to meet the needs of the students who are interested in science related careers, which may require some background in Physics. This course will provide an introduction to the principles of classical and modern physics, Newtonian and basic quantum mechanics, light and optics. This will be accomplished through classroom discussion and laboratory exercises.

Prerequisite: Minimum grade of an 80 in Algebra I and Chemistry or by Teacher or Counselor Recommendation

Physics Honors

SCI133

1 Credit

Grade 11

This course is meant to provide an in-depth study of the principles of classical and modern Physics, Newtonian and basic quantum mechanics, light and optics. This course is highly recommended for students with a strong aptitude of science and mathematics. It will provide a sufficient foundation for students interested in careers in science and/or engineering.

Prerequisite: Minimum grade of a 70 in Honors Algebra I and Honors Chemistry or Teacher or Counselor Recommendation

Marine Biology ACC**SCI116****.5 Credit****Grades 10 - 12**

This semester course introduces students to the physical, chemical, and biological aspects of life in the oceans. Topics include changes with depth from the surface to the seafloor, the effects of salinity and temperature on marine organisms, taxonomy of marine and aquatic life, niches and anatomy of marine invertebrates, fish and mammals, and the human impacts on the ocean environments. Laboratory exploration focuses on the physical aspects of the ocean environment. Students will also select a topic for independent research and learn citizen science and awareness through development of a mock social media campaign. Students may also participate in field trips to the Northeastern University Marine Science Center and to the local coastlines of Lynn and Nahant.

AP Biology**SCI145****1 Credit****Grades 9 - 12**

This college level course is designed to provide students with awareness and increased understanding of complex biochemical and biological principles. Three general areas are studied in detail: Molecules and Cells; Heredity and Evolution; and Organisms and Populations. Laboratory exercises are a demanding aspect of this course. The course prepares students to take the Advanced Placement exam in Biology.

Prerequisite: Teacher or Counselor Recommendation

A student cannot drop without a consultation with the Principal who will consider extenuating circumstances after the normal add/drop period.

ALL STUDENTS TAKING THIS COURSE WILL TAKE THE A.P. EXAM.

AP Chemistry**SCI 126****1 Credit****Grades 11-12**

The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore content such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year.

Social Studies

World Civilization II ACC

SOC414

1 Credit

Grade 9

Students will study the rise of the nation state in Europe, the French Revolution and the economic and political roots of the modern world. The course of study also includes the origins and consequences of the Industrial Revolution, 19th century political reform in Western Europe and imperialism in Africa, Asia, and South America. They will explain the causes and consequences of the great military and economic events of the past century, including World War I, the Great Depression, World War II, the Cold War, and the Russian and Chinese revolutions. Finally, students will study the rise of nationalism and the continuing persistence of political, ethnic, and religious conflict in many parts of the world.

World Civilization II Honors

SOC413

1 Credit

Grade 9

Students will study the rise of the nation state in Europe, the French Revolution and the economic and political roots of the modern world. The course of study also includes the origins and consequences of the Industrial Revolution, 19th century political reform in Western Europe and imperialism in Africa, Asia, and South America. They will explain the causes and consequences of the great military and economic events of the past century, including World War I, the Great Depression, World War II, the Cold War, and the Russian and Chinese revolutions. Finally, students will study the rise of nationalism and the continuing persistence of political, ethnic, and religious conflict in many parts of the world. Honors Level courses are distinguished from Accelerated Level by increased emphasis and expectation in essay and research writing, work with and interpretation of primary sources and the use of document-based-questions for more in depth and nuanced study of the period in question.

Prerequisite: Placement based upon HSPT

U.S. History I ACC

SOC422

1 Credit

Grade 10

The course covers the early history of America, beginning with the Pre-Colonial and early Colonial periods. Other areas of study will include the Great

Awakening, the pre-revolutionary period, the American Revolution, the Constitution, and the growth of our young nation. The course continues through the Civil War and Reconstruction.

U.S. History I Honors

SOC423

1 Credit

Grade 10

The course covers the early history of America, beginning with the Pre-Colonial and early Colonial periods. Other areas of study will include the Great Awakening, the pre-revolutionary period, the American Revolution, the Constitution, and the growth of our young nation. The course continues through the Civil War and Reconstruction. Honors Level courses are distinguished from Accelerated Level by increased emphasis and expectation in essay and research writing, work with and interpretation of primary sources and the use of document-based-questions for more in depth and nuanced study of the period in question.

Prerequisite: Teacher or Counselor Recommendation

U. S. History II ACC

SOC436

1 Credit

Grade 11

The course covers a variety of themes in United States History beginning with a review of Reconstruction. Other areas of study include industrialization, immigration, the Gilded Age, Progressivism, American Imperialism, WWI, the Great Depression, WWII, the Cold War, the 1960's, and the modern era.

U. S. History II Honors**SOC435****1 Credit****Grade 11**

The course covers a variety of themes in United States History beginning with a review of Reconstruction. Other areas of study include industrialization, immigration, the Gilded Age, Progressivism, American Imperialism, WWI, the Great Depression, WWII, the Cold War, the 1960's, and the modern era. Honors Level courses are distinguished from Accelerated Level by increased emphasis and expectation in essay and research writing, work with and interpretation of primary sources and the use of document-based-questions for more in depth and nuanced study of the period in question.

Prerequisite: Teacher or Counselor Recommendation

Social Studies

ELECTIVES

AP Government & Politics: United States**SOC445****1 Credit****Grade 10 - 12**

U.S. Government and Politics is designed to give students an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret U.S. policies, as well as the analysis of specific examples. It also requires that students become familiar with the various institutions, groups, beliefs and ideas that constitute U.S. politics.

Prerequisite: Teacher or Counselor Recommendation

A student cannot drop without a consultation with the Principal who will consider extenuating circumstances after the normal add/drop period.

ALL STUDENTS TAKING THIS COURSE WILL TAKE THE A.P. EXAM.

AP U.S. History**SOC433****1 Credit****Grade 11 - 12**

Juniors who have performed at a high level during their sophomore year will examine the same issues as listed in U.S. History (423) as well as review those topics covered in U.S. History I. Primary sources will be used as well as American Literature and works by modern day American supports and iconoclasts. Skills in a higher order of thinking and research will be developed in order to prepare the student for the A.P. test given in the spring.

Prerequisite: Teacher or Counselor Recommendation.

A student cannot drop without a consultation with the Principal who will consider extenuating circumstances after the normal add/drop period.

ALL STUDENTS TAKING THIS COURSE WILL TAKE THE A.P. EXAM.

AP World History**SOC437****1 Credit****Grades 9 - 12**

Advanced Placement World History is designed for students who wish to complete high school level studies that are equivalent to an introductory college course in World History. This course offers a detailed, and in-depth study of our shared global history. It will examine the cultural and historical diversity among major civilizations from approximately 8000 B.C.E. to the present. By taking this course, students will develop a greater understanding of global processes and interactions among societies throughout the world. Secondly, students will examine how these societies have changed over periods of time, as well as being able to identify patterns of continuity between different civilizations and time periods. Students will read and organize data based on themes, write analytical and document-based essays, and analyze primary and secondary sources. Additionally, AP World History will prepare students for using evidence to make plausible arguments, while allowing ample practice in identifying point of view, context, and bias within historical documents and text.

Prerequisite: Teacher or Counselor Recommendation.

A student cannot drop without a consultation with the Principal who will consider extenuating circumstances after the normal add/drop period.

ALL STUDENTS TAKING THIS COURSE WILL TAKE THE A.P. EXAM.

Introduction to the Sociology of Race & Ethnicity SOC457 .5 Credits Grades 9-12

This course centers on the behavior of people in groups. Topics included are socialization, institutions, social interaction, social change, collective behavior, and competition in society. Students will be introduced to the basics of Sociology and dive deeper into the study by focusing on stratifications, specifically race and ethnicity. It focuses on the origins, consequences, and the perpetuation of this social stratification. Students will be able to understand the internationalization and globalization of the U.S. and the world and its relationship to current social problems that are related to or are a consequence of racial and ethnic stratification.

Criminal Justice SOC453 .5 Credit Grades 9 - 12

This class is an introduction to the purpose and functions of the criminal justice system. The course includes descriptions of the police, courts, and corrections on the local, state, and federal levels. The introduction to criminal justice is available to all students who want to understand better the aim of criminal law and how the criminal justice system operates.

Semester Course

Historical Conspiracy Theories SOC454 .5 Credits Grade 9 - 12

This course takes a close look at conspiracy theories in American history- some recent, some from the past. Our learning objectives include examining 1) evidence and logic behind different theories 2) events that gave rise to theories and 3) theories that scholars have offered to explain the prevalence of conspiracy theories in modern American culture. It is designed as a project-based class; rooted in research, presentation skills, and public speaking. It will be broken down into five units: Deaths & Disappearances, Sports, Science & Technology, Economics & Society, and Government, Politics, & Conflict.

Semester Course

Terrorism in the 20th & 201st Centuries SOC902 .5 Credit Grades 9 - 12

This 1 semester course examines the history of state and non-state terrorism in the 20th and 21stcenturies. Students will study the major terrorist motives, political ideology, nationalism, and religion, the groups associated with them, the tactics they have employed, and the methods that may alleviate terrorism.

Semester Course

Technology and Engineering

ELECTIVES

App Creator

TECH648

.5 Credit

Grades 9 - 12

App Creators introduces students to the field of computer science and the concepts of computational thinking, through the creation of mobile apps. Students are challenged to be creative and innovative, as they collaboratively design and develop mobile solutions to engaging, authentic problems. Students experience the positive impact of the application of computer science to society as well as other disciplines, particularly biomedical science. The unit provides students opportunities for self-expression. Teams identify a personal or community problem of interest to them that can be solved with a mobile app solution. The problem can address issues such as health and wellness, the environment, school culture, emergency preparedness, education, community service—the options are endless!

Semester Course

Intro to Programming

TECH643

.5 Credit

Grades 9 - 12

This course is designed for students who want to explore an interest in programming. It aims to provide students with an understanding of the role computation can play in solving problems. Students will be introduced to basic concepts, principles, and skills of programming using different programming languages such as C/C++, Java and Python. Students who complete this course should be able to transition to AP Computer Science **Semester Course**

AP Computer Science Principles

TECH647

1 Credit

Grades 10 - 12

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for both self-expression and problem solving. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science.

The course prepares the students to take the AP Computer Science Principles exam.

A student cannot drop without a consultation with the Principal who will consider extenuating circumstances after the normal add/drop period.

ALL STUDENTS TAKING THIS COURSE WILL TAKE THE A.P. EXAM.

AP Computer Science A

TECH646

1 Credit

Grade 11 - 12

This college level course emphasizes the design issues that make programs understandable, adaptable, and, when appropriate, reusable. Other areas of study will include the development and analysis of algorithms, data structures and standard algorithms and typical applications. This course is intended to serve as an introductory course for people wishing to pursue a degree in computer science and as a course for people who will major in other disciplines that require significant involvement with technology.

The course prepares the students to take the AP Computer Science A exam.

Prerequisite: Completion of Intro to Programming, 90 or above.

89 or below requires Teacher or Counselor Recommendation

A student cannot drop without a consultation with the Principal who will consider extenuating circumstances after the normal add/drop period.

ALL STUDENTS TAKING THIS COURSE WILL TAKE THE A.P. EXAM.

Civil Engineering and Architecture**STEM02****1 Credit****Grades 10 - 12**

A high school level specialization course in the PLTW Engineering Program. In CEA students are introduced to important aspects of building and site design and development. They apply math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3D architectural design software. Utilizing the activity-project-problem-based (APB) teaching and learning pedagogy, students will progress from completing structured activities to solving open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills.

Engineering Design I**STEM06****.5 Credit****Grade 9**

Ever tried to design something new or draw up an idea you wanted to share with your friends and wondered how you could communicate your idea? Or, have you wondered how someone designed that new MP3 player or sleek new phone? The Introduction to Engineering Design is the course for you. The major focus of the course is learning how to take an idea through a design process that will eventually be manufactured or produced. As you learn about various aspects of engineering and engineering design, such as how engineers communicate through drawing, you will apply what you learn through various activities, projects, and problems. For example, after learning about the different techniques engineers use in determining how to design a product, you and your teacher will have the flexibility to explore the design and engineering processes to solve problems that are of interest to you. The course covers the following:

- Engineering Design Process (the role of an Engineer, the design process)
- Technical Sketching and Drawing and measurement
- Product Design
- Modeling
- Sketching
- Presentation Design and Delivery
- Engineering Drawing Standards
- CAD Drawings

In addition, you will use OnShape, which is a 3D design cloud software, to help you design solutions to different design projects. Working in teams, you will learn about documenting your solutions, solving problems, and communicating your solutions to other students and members of the professional community of engineering and engineering design.

Engineering Design is a required course for Grade 9 students.

Engineering Design II**STEM05****1 Credit****Grades 10 – 12**

This course develops student problem solving skills, with emphasis placed upon the concept of developing a 3-D model rendering of an object. Students focus on the application of visualization processes and tools provided by modern state of the art computer hardware and software. This computer-based process replaces the traditional hand-drawing methods. The course will emphasize the design development process of a product and how a model of that product is produced, analyzed and evaluated, using a Computer Aided Design system (CAD). Various design applications will be explored with discussion of possible career opportunities. Students are introduced to the fundamentals of engineering design and drafting through AutoCAD Inventor, a 3-D solid modeling software package. Topics include problem-solving techniques, documentation, working drawings, prototyping, and manufacturing considerations.

Topic List Course of study includes:

- Geometric Shapes and Solid, (measurement, statistics and applied geometry)
- Dimensions and Tolerances
- Advanced Modeling Skills and Advanced Designs
- Reverse Engineering – Visual Analysis, Functional Analysis and Structural Analysis
- Product Improvement By Design Marketing
- Graphic Design
- Engineering Ethics
- Engineering Design Ethics
- Design Teams Virtual Design Teams

Innovation Project Design**STEM08****.5 Credits****Grades 10-12**

This course will allow students to explore real world problems in a topic of personal interest, by creating, applying, and communicating solutions. The course involves the completion of independent projects that develop and refine 21st Century Learning skills.

Theology

Theology I

THG13

1 Credit

Grade 9

Part 1: Scripture

The purpose of this course is to give an overview of Sacred Scripture with an introduction to the basic principles for understanding and interpreting the Bible. Because of the extent of the scriptural material, this outline will not try to cover the vast content but rather offer comments about Scripture's purpose and religious significance. Given the limits of a semester of study, it will not be possible to introduce all the books of the Bible here. But every effort is made to project a sense of the unity of the narrative for the divine plan of salvation, the presence of God's action in this record of his Revelation, and his desire to share his merciful love with us.

Part 2: Christology (The Study of Christ)

The purpose of this course is to introduce students to the mystery of Jesus Christ, the living Word of God, the 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.

Theology II

THG23

1 Credit

Grade 10

Part 1: Ecclesiology (The Study of the Church)

The purpose of this course is to help the students understand that in and through the Church they encounter the living Jesus Christ. They will be introduced to the fact that the Church was founded by Christ through the Apostles and is sustained by him through the Holy Spirit. The students will come to know that the Church is the living Body of Christ today. This Body has both divine and human elements. In this course, students will learn not so much about events in the life of the Church but about the sacred nature of the Church.

Part 2: Sacraments

The purpose of this course is to help students understand that they can encounter Christ today in a full and real way in and through the Sacraments, and especially through the Eucharist. Students will examine each of the Sacraments in detail so as to learn how they may encounter Christ throughout life.

Theology III

THG33

1 Credit

Grade 11

Part 1: Morality

The purpose of this course is to help students understand that it is only through Christ that they can fully live out God's plans for their lives. Students look at the different components of making a moral decision. Students are to learn the moral concepts and precepts that govern the lives of Christ's disciples, specifically the Ten Commandments and the Beatitudes.

Part 2: Social Catholic Teaching

The purpose of this course is to introduce students to the Church's social teaching. In this course, students are to learn how Christ's concern for others, especially the poor and needy, is present today in the Church's social teaching and mission.

Theology IV – Applied Catholic Ethics THG44 .5 Credit Grade 12

The purpose of this course is to help the students understand and recognize the value and dignity of the human person. The course first looks at the gift of life and focuses on an integral humanism. After studying current threats to human dignity and the solutions offered by Christ and His Church, the course concludes by applying the principles of the Church’s Social Doctrine to specific bioethical questions.

Theology IV ACC - General Philosophy THG46 .5 Credits Grade 12

This course is a comprehensive overview of the birth and development of philosophy from the early insights of Socrates, to the writings of Aquinas, Kant, and Descartes. We will explore the process of thinking philosophically, why it is important, and how we make use of it today, culminating in a study of the benefits of philosophy to Catholicism and the pursuit of God in our everyday lives.

Theology IV ACC – Ecumenism and Interreligious Dialogue THG41 .5 Credit Grade 12

In this class, we will be studying the meaning of ecumenism and the importance of interreligious dialogue through looking at a variety of Religions from around the world with a focus on what they share in common but also celebrating and discussing their differences in light of Catholic Church teaching. Religion is a key element to all societies as humankind searches for meaning in life and longs for spiritual satisfaction. Through a comparative study of Christianity, Judaism, Islam, Buddhism, and Hinduism (and others if time permits), we hope to gain a greater appreciation for all faiths and all people who strive for holiness.

Theology IV ACC - Catholic Leadership in Society THG42 .5 Credit Grade 12

The purpose of this course is to guide students in their understanding of society through the example and message laid before us in Jesus Christ. They will examine how the Catholic Church calls us to respond to current day trends, laws, technologies, media and dogma. They will bear witness to our obligation to fully live out the gospel message while answering the call to be leaders in society. They will grow in greater appreciation for the importance of the timeless message of Jesus Christ in an ever-changing societal landscape.

Theology IV ACC - Peace and Justice in the Modern World THG45 .5 Credit Grade 12

The overall goal of this course is to have the students recognize the importance of working toward peace and justice in their daily lives by taking time to study the examples of injustice in the modern world. Using the seven themes of Catholic Social Teaching as a foundation, students will observe the state of peace and justice in the world through the examination of both fictional and historical case studies. Jesus said, “Love one another as I have loved you” (John 13:34). Through the lens of Jesus Christ, who is the source of all peace and justice, and His example of selfless love on the Cross, students will analyze social justice and peace as it exists in the world and as it applies to their own lives. **Semester Course** *“If you want peace, work for justice”*

- Pope Paul VI

VIRTUAL HIGH SCHOOL (VHS)

To review the course catalog go to VHSlearning.org and click on View Course Catalog

Virtual High School

VHS001

Grades 11 - 12

Students wishing to explore the wide variety of course options available through VHS should make an appointment with their Counselor.

All classes will be credited at the level that is stated under the course listing in the Virtual High School course catalog. Semester courses for Honors and Standard classes selected will be 1 credit. Full year AP Courses selected will be 2 credits.

STUDENTS AND PARENTS WILL BE REQUIRED TO SIGN A CONTRACT REGARDING COST REIMBURSEMENT IF A STUDENT FAILS OR WITHDRAWS FROM THIS COURSE.

St. Mary's High School Core Curriculum

Freshman Curriculum – Required to take a minimum of 7 credits

Algebra I (Honors, ACC) or Geometry (Honors)
Biology (Honors, ACC)
English I (Honors, ACC)
Engineering I
Theology I (Honors, ACC)
Spanish I or II (Honors, ACC)
World Civilization (Honors, ACC)

Sophomore Curriculum – Required to take a minimum of 7 credits

Geometry (Honors, ACC) or Algebra II (Honors, ACC)
Chemistry (Honors, ACC)
English II (Honors, ACC)
Theology II (Honors, ACC)
Spanish I, II (Honors, ACC)
U.S. History I (Honors, ACC)

Junior Curriculum – Required to take a minimum of 6.5 credits

Algebra II (Honors, ACC) or Pre-Calculus (Honors, ACC)
American Literature (Honors, ACC) or AP English Composition
Physics (Honors, ACC)
U.S. History II (Honors, ACC) or AP U.S. History
Spanish II, III, IV (Honors, ACC) optional, but recommend third year of Foreign Language
Theology III

Senior Curriculum – Required to take a minimum of 6 credits

British & World Literature (Honors, ACC) or AP English Literature
Statistics & Probability (Honors), Pre-Calculus (Honors, ACC) or Calculus (AP, Honors)

Required to take 2 Theology IV classes - .5 each

Theology IV-Applied Catholic Ethics H, Theology IV-Ecumenism-Interreligious Dialogue,
Theology IV-General Philosophy, Theology IV-Catholic Leadership in Society
Theology IV-Peace & Justice the Modern World

Advanced Placement Courses

Biology
Calculus
Chemistry
Computer Science Principles, Computer Science A
English Language, English Literature
Spanish
U.S. Government & Politics
U.S. History
World History
Other AP Courses are also available through Virtual High School

Graduation requirement of 26.5 credi