# Our Lady of Mercy Catholic High School



2019 - 2020 COURSE DESCRIPTION CATALOG

# **OLM Course Description Catalog**

# INTRODUCTION

These pages contain brief descriptions of each of the courses offered at Our Lady of Mercy Catholic High School (OLM). Preceding the course descriptions the OLM Vision and Mission are stated followed by the Academic Policies, Graduation and Christian Service requirements, and general information about our Academic Program. For a complete description of the Academic Program, please refer to Academic Policies section of the Student Handbook.

# VISION

As an archdiocesan high school, Our Lady of Mercy will be a national model of excellence in Catholic, college-preparatory, diverse education, challenging students to reach their full potential in mind, body and soul.

# **MISSION**

Our Lady of Mercy, a college preparatory school rooted in the Tradition of the Catholic Church, transforms students by providing opportunities to excel as Christian leaders through rigorous academics, inclusive extracurricular programs, and Christ-centered activities.

# **ACADEMIC POLICIES**

All graduates of OLM must earn a minimum of 24 credits. Minimum requirements for graduation are in line with local and state requirements. Theology is required each year of attendance. A full credit is awarded for successful completion of a full year course and a half credit is awarded for successful completion of a one semester course or of one semester of a full year course.

The school's curriculum provides all the necessary courses for admission to any college in the University System of Georgia. The 16 credits required in the College Preparatory Curriculum (CPC) are included in the graduation requirements for OLM.

Please note that the entrance requirements for colleges other than those in the University System of Georgia do not necessarily coincide with the courses required for graduation from OLM. It is the responsibility of the student, with the help of our Guidance Office, to be sure that all necessary courses are taken for admission to the college of choice.

Advanced Placement (AP) courses are offered in American History, World History, Calculus (AB and BC), Biology, Statistics, Chemistry, Physics 1, Computer Science A, Economics, Government, Psychology, Spanish Language and Culture, French Language and Culture, English Language and

Composition, English Literature and Composition, and Art. AP test fees of \$97.00 will be collected before the first day of school. Students who register for AP courses may not drop after classes begin and are required to take AP tests in May. Failure to take an AP test will result in a failing grade for the course.

# **Graduation Requirements**

<u>Credits</u>	<u>Subject</u>
4	English
4	Mathematics
4	Science
4	Theology (or 0.5 per semester at OLM)
3.5	Social Studies
2	Foreign Language (must be in one language)
.5	Technology/Business
1	Fine Arts
1	Physical Education

**24** Total Credits

# **GRADUATION REQUIREMENTS**

Required courses and the number of credit hours for graduation follow:

**THEOLOGY** – 4 credits are required or 0.5 credits for every semester enrolled at OLM.

**ENGLISH** – 4 credits are required including English 9, 10, 11 or AP English Language and Composition and 12 or AP English Literature and Composition. Elective courses do not count toward the English requirement.

**MATHEMATICS** – 4 credits are required including Algebra 1, Geometry, Algebra 2 and one or two additional courses that have these courses as prerequisites. Students who complete Algebra 1 and/or Geometry in middle school must still take four credits at OLM.

**SCIENCE** – 4 credits are required and must include Biology, Chemistry, Physics/Physical Science, and one elective science course.

**SOCIAL STUDIES** - 3.5 credits are required including a semester of World Studies, Government and Economics, and the full year courses of World History and United States History. Elective courses do not count toward the Social Studies requirement.

**FOREIGN LANGUAGE** – 2 credits are required from the same language. Students who complete one or two years of a foreign language in middle school must still take two credits at OLM.

**FINE ARTS** – 1 credit is required from the areas of dance, drama, art or music. Journalism courses offered through the English Department may be taken to fulfill the Fine Arts requirement.

**PHYSICAL EDUCATION** – 1 credit is required and must include Health and Personal Fitness. Elective courses do not count toward the Physical Education requirement.

**TECHNOLOGY/BUSINESS** – .5 credit is required and must include a semester of Computer Applications for students who first enroll as a freshman.

# **CHRISTIAN SERVICE**

All students are required to contribute two hours of volunteer service per month beginning in August and ending in May (twenty hours total per year) to service organizations that are specified on the Campus Ministry webpage. A maximum of four of the twenty hours can be completed at OLM and a maximum of four of the twenty hours can be completed at the student's church. Students may earn up to ten hours of service during the summer prior to the start of the school year. Hours may be carried over from month to month, but may not be retroactively applied to previous months.

# INFORMATION ABOUT THE ACADEMIC PROGRAM

OLM operates on an eight period schedule that permits students to take seven classes each day with one period for lunch.

Courses are offered on multiple levels: College Prep, Honors and Advanced Placement. Students are not necessarily placed in the same level in all subject areas. Placement in a particular level is based on the student's aptitude, performance in the various disciplines, and teacher recommendations. While the curriculum is parallel, in that each level of the course has similar goals and objectives, the level of instruction varies by methodology, degree of difficulty and volume of information presented.

College Prep courses at OLM are rigorous programs of study which prepare the students for the demands of competitive colleges.

Honors/AP level courses are designed to meet the needs of students who want an advanced college preparatory curriculum, who are highly motivated, and who have a high level of responsibility, aptitude and achievement. Principles and concepts are explored in greater depth and more independent work is expected of the student.

# THE CATALOG

On the pages that follow are the descriptions of each course offered at OLM. The listings are by academic department. The first line of each course description has the academic department, course number, course level and name. Each course is a full year (Y) unless designated as a semester course (S). If the course name does not indicate Advanced Placement or Honors, then it is at the College Prep level. Placement requirements, if any, are listed after the course description.

# NOTICE CONCERNING HONORS, AP, AND OTHER UPPER LEVEL COURSES:

Teacher recommendations and discussion within the department will determine the final placement in all courses. The department will review all placements to determine whether

students have continued to demonstrate the ability, skills, work habits and motivation that justified the original placement. Appropriate adjustments will be made at that time. Students who wish to be considered for placement in an honors or an AP course typically are expected to exhibit behavior befitting work in an upper level course.

Honors and AP courses are weighted. For Honors courses, the grade appearing on the report card and transcript has four additional points added to the actual earned grade. For AP courses, the report card and transcript have an eight-point addition. Therefore, the maximum grade that a student can earn is 100 in a Standard or Advanced level course, 104 in an Honors course, and 108 in an Advanced Placement course. However, no weight is added to a grade less than 70. That is, weight cannot change a failing grade to passing.

#### NOTICE CONCERNING ELECTIVE COURSES:

Some elective courses are not offered every semester or every year. These elective courses are identified with the note of "Elective Rotation" after the course title.

# **COURSES**

# <u>ENGLISH</u>

# English-23.0610713 English 9 (Y)

# Required of 9th grade students

For the student who has good language arts skills, this course enriches vocabulary, develops reading ability, and introduces basic literary terms describing elements of the short story, novel, poetry and drama. Writing instruction emphasizes sentence maturity, paragraph development, and essay introduction. Grammar study includes basic concepts of analysis of clauses and verbals.

# English-23.0610711 Honors English 9 (Y)

# Required of 9th grade students with Department approval

This course is designed for the student who demonstrates a high degree of language arts skills. Literature vocabulary study emphasizes wide reading, critical thinking, and the beginnings of analysis; writing instruction emphasizes organization, variety and style; grammar study is individualized and independent.

# English-23.0620723 English 10 (Y)

# Required of 10th grade students

This course is an introduction to World Literature. Outside novels and plays are read and students practice forms of writing that include narrative, descriptive, expository, and persuasive paragraphs and essays. Grammar and vocabulary are studied. A short research paper is required.

# English-23.0620721 Honors English 10 (Y)

# Required of 10th grade students with Department approval

This course provides wide reading in world literature, organized around literary genres and the patterns of romance, tragedy, comedy and satire. Writing includes narrative, descriptive, expository and persuasive essays; creative, critical and research skills are developed. Grammar and vocabulary are studied. Outside novels, plays, and poetry are read throughout the year. A research paper is required.

# English-23.0510733 English 11 (Y)

# Required of 11th grade students

This course is a chronological survey of the themes of many writers of American Literature drawn from varied traditions. Students write expository papers on literary and general topics, and creative writing is included. There is a review of grammar and a study of vocabulary.

# English-23.0610731 Honors English 11 (Y)

# Required of 11th grade students with Department approval

This course is a chronological survey of the development of American Literature drawn from various traditions. Themes and major writers are analyzed in depth with extensive expository writing on literary and general topics. Creative writing is also included, as are vocabulary study and a review of grammar and usage as necessary.

# English- 23.0430743 Advanced Placement English Language & Composition 11 (Y)

# Required for 11th grade students with Department approval

Students in this college-level course will have previously demonstrated strong writing and analytical skills. Students explore the standard American literature curriculum with an emphasis on how language works and the rhetorical choices writers make. Major American authors, outside novels, plays, and non-fiction prose are analyzed in depth with extensive expository and persuasive writing on literary topics. Creative writing is also included, as are vocabulary study and a review of grammar and usage as necessary. All students must take the Advanced Placement test in May.

# English-23.0520741 English 12 (Y)

# Required of 12th grade students

This course combines major works of English Literature with a development of more mature writing skills. Writing includes techniques of exposition, argumentation and literary criticism with attention to mechanics and usage. The goal is to develop clear expression and logical organization and to read and analyze challenging works of literature from the British Tradition. Outside novels and vocabulary are part of the curriculum.

# English-23.0650741 Advanced Placement English Literature & Composition 12 (Y)

#### Required of 12th grade students with Department approval

This course has been designed for the student who has acquired skill in analyzing literature and writing well and who wishes to attempt to receive college credit through the AP exam. The course includes a study of major British writers, outside novels and plays, critical writing, research and creative writing. All students must take the Advanced Placement test in May.

# English-23.0320706 Journalism/Yearbook (Elective) (Y)

# Offered to 10th-12th grade students with permission of instructor

The journalism course teaches hands-on production in the design and publishing of the school yearbook, *Jubilium*. Through the practical experience of producing the yearbook, students learn and develop the basic journalism skills of reporting, writing, editing, layout design, photography and the business skills of organization, planning, marketing, finance and distribution. Students are expected to spend some time outside of class to complete their assignments.

# English-35.06600 Scholastic Assessment Test (SAT) Preparation (Elective Rotation) (S)

# Offered to Second Semester Juniors only

SAT Prep is a course designed to help prepare students for the SAT test. In addition to reviewing the basic verbal and mathematical skills assessed on the SAT test, students have access to test-taking strategies to the exam, real student work samples with explanations, grading rubrics for peer and self-assessment, practice tests with complete multiple-choice assessments, essays prompts, and study resources. Instruction, followed by collaborative, guided, and independent practice, provides the foundation for the course. Upon successful completion, students will possess the tools necessary to complete the SAT to the best of their ability.

# English-35.0610759 Student Support (Y)

# Offered 9th – 12th grade students based on Counselor Recommendation

This course is designed to help students improve their effectiveness, attitudes, and motivation focusing on the specific needs of each student. Particular attention is given to skills like time management, concentration, note taking, textbook study methods, test taking strategies, and critical thinking.

# **FINE ARTS**

# Fine Arts- 50.0211711 Survey of the Visual Arts (Elective Rotation) (S)

#### Offered to 9th-12th grade students

Introduction to visual art through the application of artistic media and techniques that emulate movements in art history. Students will be introduced to the elements and principles of art and color theory. They will learn vocabulary related to visual art and will learn to evaluate artwork through critique.

# Fine Arts- 50.0911711 Art Appreciation (Elective Rotation) (S)

#### Offered to 9th-12th grade students

This is an introductory course designed to acquaint the student with the greatest achievements of world painting, sculpture, and architecture, with works that have inspired people of all cultures throughout time. Art Appreciation will encourage students to question the nature of art and its relevance to daily life; it will introduce students to the elements and principles of design, focusing their attention through thematic projects and research. *Prerequisite: none* 

# Fine Arts-50.0212711 Drawing and Painting I (Elective) (S)

# Offered to 9th-12th grade students

This class has been structured to emphasize the technical and logistical aspects of drawing and painting, in order to give each student the tools to be able to explore their personal thematic approach. It will reinforce the foundation of visual art: the elements and principles of design and visual vocabulary.

The beginning of the semester emphasizes drawing techniques that investigate line, value, shape, texture, color and composition color theory and basic technical aspects of drawing and painting (use of medium, emphasis on palette work, mark making). The remainder of the semester emphasizes instruction in more sophisticated methods of development of the painting, preparatory drawings completed in a larger format that help expand how to use subject matter from various sources, and presentations on both historical and contemporary artists that inform and empower each students towards recognizing the myriad ways that painting can be used to communicate an idea or philosophy. Students describe, analyze, interpret and evaluate artwork during written and verbal critiques. The course synthesizes previous knowledge and challenges students to think creatively, and critically, and develops confidence in visual problem solving and communication.

Prerequisite: none

# Fine Arts-50.0213711 Drawing and Painting II (Elective) (S)

# Offered to 10th-12th grade students

This course further explores the elements and principles of design and visual vocabulary, composition, drawing, and painting as a unique form of communication. Students will develop a suite of images that communicate a connecting theme or concept. Each student needs to complete extensive research and preliminary drawings before beginning any of their studio paintings. Drawing is a major part of this class, and work done on drawings is a major part of the semester grade. Drawing is emphasized because this is where each student works through all the important foundational aspects of their work – more sophisticated conceptual development, technical and perceptual drawing problems, allowance for exploration, growth and communicating the concept over the entire suite of images. Regular group critiques and discussions are conducted in order to emphasize a more sophisticated understanding the media and how to use that media to communicate their ideas. Students describe, analyze, interpret and evaluate artwork during written and verbal critiques.

Prerequisite: Art I/ Drawing and Painting I

# Fine Arts – 50.0211712 Multiples: Introduction to Digital Photography and Printmaking (Elective Rotation) (S)

#### Offered to 10th-12th grade students

This course will introduce students to digital photography basics: lighting, settings, effects, and editing in Adobe Photoshop. Students will explore the visual media and identify the elements of art and principles of design as they apply to photography. Digital images are presented and compared during critiques in order better understand how to communicate their ideas. The purpose of this course is to enable students to develop a basic understanding of photographic imagery by demonstrating proficiency in photographic techniques and processes. The second part of the semester explores major printmaking methods: monotype, dry point, collagraph, linoleum and stencil prints. Activities include carving wood blocks, cutting, collage, and painting as part of the printmaking process. Use of technology and mixed-media work is encouraged during this course. Students will produce a book of images by the end of the semester. *Prerequisite: none* 

# Fine Arts – 50.0211713 Exploring 3-D Forms (Elective Rotation) (S)

#### Offered to 9th-12th grade students

This course will introduce students to the basics of three-dimensional forms using wood, stone, clay, wire, and a variety of media. Students will explore design in three dimensions with emphasis on form, space and concept. The projects in this class focus on the use of modeling/manipulation, additive, subtractive, and substitution sculpting techniques. Study of culture and the historical and contemporary creation of three-dimensional art will be accomplished through projects, classroom discussion and lectures. *Prerequisite: none* 

# Fine Arts – 50.0213711/50.08130711 AP Advanced Studio Art: Portfolio Development (Elective) (Y)

#### Offered to 10th-12th grade students with Department Approval

This course is provided for students who show a high proficiency in visual art. It provides an intensive, interdisciplinary approach to contemporary art that is born out of ideas and employs the materials, practices, and processes required to express them. Emphasis is placed on artistic research, the development of ideas, and the exploration of materials and processes, and meanings as conveyed through them. The course includes a writing component and integrates the generation of a student's body of work with an awareness of the context in which the work will be presented.

Students are encouraged to use whatever media works best for their concept. Regular group critiques and discussions are conducted in order to emphasize a more sophisticated understanding of the media and how to use that media to communicate their ideas.

Prerequisite: Art II, Drawing and Painting II, or teacher recommendation

# Fine Arts-50.0000711 Dance I (Elective) (Y)

# Offered to 9th-12th grade students

This course teaches the fundamental dance technique and vocabulary used in classical ballet and modern dance. The class develops strength, flexibility, coordination, and promotes dance as part of a healthy lifestyle. Students will perform for the public, create choreography, learn proper theatre etiquette, and develop an appreciation for the art of dance.

# Fine Arts-50.0000721 Dance II (Elective) (Y)

#### Offered to 9th-12th grade students with Department approval

The second level of dance is designed for students with a basic knowledge of dance technique. This course continues study in ballet and modern dance with an emphasis on body placement, expanding dance vocabulary, and developing creative self-expression skills. Students participate in performances, create choreography, acquaint themselves with dance history, and develop artistic expression skills through a variety of dance styles.

# Fine Arts-50.0000731 Dance III (Elective Rotation) (Y)

# Offered to 10th-12th grade students with Department approval

This course is designed for the dancer with an intermediate level of dance training and an interest in further development of dance skills. Students will strive towards a professional level of dance technique to prepare for professional goals in dance, theatre, dance education, or related fields. Students will work to increase their creative and choreographic abilities, perform in solo and group forms, study injury prevention, and learn audition skills and techniques.

# Fine Arts-52.0210711 Drama I Introduction to Acting (Elective) (Fall)

# Offered to 9th-12th grade students

An Introduction to Acting facilitates a basic understanding of the principles of theatre as an art form, as well as its function within society and culture. The student will learn beginning level acting skills in movement, voice, and improv, and will perform scenes and monologues. In addition to onstage work, students will read an important American play together, discussing basic character development and script analysis. Prepared, memorized scenes will be performed in the evening for the student's final project at the end of the semester. \*prerequisite to all other theatre classes

# Fine Arts-52.0210712 Drama I Theatre Styles and Genres (Elective) (Spring)

#### Offered to 9th-12th grade students

Theatre Styles and Genres focus on the student learning about the history, styles, and genres of theatre in different cultures throughout time, using active games, projects, and scene work. Theatre history, from Greek to modern, will be explored, as well as puppetry, ensemble collaborative theatre, oral interpretation/spoken word, reader's theatre, storytelling, playwriting, clowning/circus, stand-up comedy, film, performance art, voice-over/commercials, stage combat, musical theatre. In addition to onstage work, students will read an important American play together, discussing basic script analysis in relation to the playwriting unit. A basic understanding of the technical side of theatre will also be discussed and used in a final project, to be presented for a final grade at the end of the semester.

\*prerequisite to all other theatre classes

# Fine Arts-52.0210721 Drama II Advanced Acting (Elective) (Fall)

#### Offered to 10th-12th grade students

Advanced Acting will focus on developing the student's acting skills involving comedy, drama, monologues, and scene work. We will study various methods, techniques, and approaches to acting. There will be two performance afternoons required for the collaborative piece created by the students, as well as their fully-developed final scene performance at the end of the semester. In addition to onstage work, students will read an important play for character development, as well as watch a taped Broadway performance. The students in Drama Two level classes are encouraged to be a part of Drama Club, though it is not required. \*Prerequisite: Drama I

# Fine Arts-52.0210722 Drama II Theatre Production and Performance (Elective) (Spring)

# Offered to 10th-12th grade students by permission of the instructor

Theatre Production and Performance will focus on the student's acting skills and techniques within a final performance and show setting. This class is an advanced class for performers and technicians that will produce fully realized works of theatre together, under the direction and supervision of the teacher. Depending on the semester offered, students could have the chance to perform a mystery dinner theatre, a classical theatre piece, a children's theatre piece, student directed scenes, and performing in the fall or spring fine arts festivals. The students in Drama Two level classes are encouraged to be a part of Drama Club, though it is not required. \*Prerequisite: Drama I

# Fine Arts-53.0361711 Band (Elective Rotation) (Y)

# Offered to 9th-12th grade students

This course will focus on individual and ensemble instrumental instruction for wind, brass, and percussion. Students will have opportunities to perform in small and large group ensembles in concert settings. Individual and group performances will be enhanced by the study of music theory, music history and music appreciation. Student of all levels are welcome.

# Fine Arts-53.05610701 Orchestra (Elective Rotation) (Y)

# Offered to 9th -12th grade students

This course will focus on individual and ensemble instruction for stringed instruments. Individual and group performances will be enhanced by the study of music theory.

# Fine Arts-54.0211701 Chorus (Elective Rotation) (Y)

# Offered to 9th-12th grade students

This course will focus on individual and ensemble instructions and the proper use of voice. Individual and group performances will be enhanced by the study of music theory. *Prerequisite: None* 

# Fine Arts- 53.0841795 Guitar (Elective Rotation) (Y)

# Offered to 9th-12th grade students

This course is designed for students who wish to further develop their guitar skills in high school, as well as possibly progressing to the collegiate level. Students are required to be responsible learners and have all materials daily for class. In order to be proficient and both meet and exceed the required standards we will be studying fundamental guitar pedagogy which includes but is not limited to: scales, etudes, concert literature, music theory, and music history.

*Prerequisite: None* 

# Fine Arts-53.0371701 Percussion (Elective Rotation) (S)

# Offered to 9th -12th grade students

This course is for students who wish to learn to play percussion instruments. All traditional western and some non-western percussion instruments will be taught. Basic and advanced rudiments, scales, stick techniques, fundamental and advanced rhythms, musicality, cadences and various musical genres will be taught throughout the course. Students who wish to perform with the band or orchestra will also be provided an opportunity to join those ensembles. Students will be required to purchase their own materials for the course, including texts, drum sticks, mallets, stick bag, and practice pads.

Prerequisite: None

# Fine Arts- 53.014711 Music Appreciation (Elective Rotation) (S)

# Offered to 9th-12th grade students

This one semester course will emphasize the development of listening skills and the history of music. Students will be exposed to music starting with the Middle Ages and continue throughout all the time periods: Renaissance, Baroque, Classical, Romantic and Contemporary. Along with the examination of music history, students will perceive and understand fundamental music elements as heard through a variety of music styles. The goal of this course is for students to go beyond the one or two genres they currently appreciate, and learn to appreciate all music.

Prerequisite: None

# **FOREIGN LANGUAGE**

# Foreign Language-60.0110711- French I (Y)

#### Offered to 9th-12th grade students

French I is designed to introduce the French language to beginning language students. At the end of the course, students will be able to converse about themselves, their activities, the weather, and their family. They will be able to use present and past tenses in speaking and writing.

# Foreign Language-60.0120720- French II (Y)

# Offered to 9th – 12th grade students with Department Approval

French II is designed to continue the study of language begun in French I. At the end of the course, students will review the structures of French I they learned, including the past and future tenses. Students will be able to converse in simple conversations about themselves, their school life, and family and will continue to develop reading and writing skills.

# Foreign Language-60.0130731- Honors French III (Y)

# Offered to 10th-12th grade students with Department Approval

Honors French III continues the study of language begun in French I and II. At the end of the course, students will have reviewed the past grammatical structures of French II, refined their use of the two primary past tenses, learned the future, conditional and subjunctive tenses, and refined their use of object and relative pronouns and reflexive verbs. Students will be able to discuss authentic text, film, and art. Students will prepare projects and oral presentations on artists, French history, geography, and literature.

# Foreign Language-60.0140741- Advanced Placement French Language and Culture (Y)

#### Offered to 11th-12th grade students with Department Approval

In this course students develop a strong command of the French language, with proficiency in integrating language skills and synthesizing written and aural materials. Also, they will refine their formal writing process, and participate in extensive interpersonal and presentational speaking and writing practices as well as develop their aural comprehension skills through quality authentic, and level appropriate audio and video recordings. They are further exposed to the world of literature and current events of French-speaking countries through authentic written texts, including newspapers and magazine articles, literary texts and other nontechnical writings that develop students' reading and comprehension abilities. Class is conducted completely in French and includes frequent writing and integration of skills with a rigorous review of grammatical structures. Advanced organizational and analytical strategies are taught. An array of resources is used to facilitate the learning. All students must take the Advanced Placement test in May.

# Foreign Language-60.0710711- Spanish I (Y)

# Offered to 9th-12th grade students

Spanish I is an introduction to basic Spanish vocabulary, grammar and syntax. A variety of methods and materials are used to provide cultural awareness and to build elementary reading and writing skills.

# Foreign Language-60.0720720- Spanish II (Y)

# Offered to 9th-12th grade students with Department Approval

Spanish II continues the study of language introduced the previous year, with emphasis on vocabulary development, more proficient reading, conversational skills, writing, and grammar skills. Students are introduced to the geography and culture of the Spanish-speaking world.

# Foreign Language-60.0720721- Honors Spanish II (Y)

#### Offered to 9th-12th grade students with Department Approval

Honors Spanish II students will study language and culture on a more advanced level and at an accelerated pace. Students must exhibit enthusiasm for the study of Spanish and a desire to communicate in Spanish during class at all times. Emphasis is placed on communicative proficiency (speaking and writing) as well as interpretive proficiency (listening and reading); students engage in regular group discussions in Spanish. Technology is integrated, and audio and print materials serve to build and reinforce listening comprehension, speaking, reading, and writing skills. The course is taught mostly in Spanish.

# Foreign Language-60.0730731- Honors Spanish III (Y)

# Offered to 10th-12th grade students with Department Approval

Students in Honors Spanish III will build intermediate to high communicative proficiency in reading, writing, listening, and speaking skills by offering a thorough review of Spanish grammar and syntax at a more advanced level. An emphasis is placed on the application of grammar to various thematic units. Short informal and literary texts are introduced to teach both grammar and culture. Students must exhibit enthusiasm for the study of Spanish and a desire to communicate in Spanish during class at all times. Students engage in regular group discussions in Spanish. Technology is integrated, and audio and print materials serve to build and reinforce listening comprehension, speaking, reading, and writing skills. The course is taught entirely in Spanish.

# Foreign Language-60.0770701- Advanced Placement Spanish Language and Culture (Y)

# Offered to 11th – 12th grade students with Department approval

In this course students develop a strong command of the Spanish language, with proficiency in integrating language skills and synthesizing written and aural materials. Also, they will refine their formal writing process and participate in extensive interpersonal and presentational speaking and writing practices. They will develop their aural comprehension skills through quality authentic, and level appropriate audio and video recordings. They are further exposed to the world of literature and current events of Spanish-speaking countries through authentic written texts, including newspapers and magazine articles, literary texts and other nontechnical writings that develop students' reading and comprehension abilities. Class is conducted completely in Spanish and includes frequent writing and integration of skills with a rigorous review of grammatical structures. Advanced organizational and analytical strategies are taught. An array of resources is used to facilitate the learning. All students must take the Advanced Placement test in May.

# Foreign Language-61.0410711- Latin (Elective Rotation) (Y)

# Offered to 9th-12th grade students

A beginning Latin I course will help students acquire basic Latin grammar concepts and vocabulary, develop good language study habits, see the relationship between Latin and other languages, especially English, and explore Roman culture. Latin I is an elective and may not be used to fulfill the Foreign Language graduation requirement.

Prerequisite: None

# **MATH**

# MATH-27.0550711 Math Strategies (Elective Rotation) (Y)

#### Offered to selected 9th grade students in conjunction with Algebra I

This course introduces algebraic and geometric concepts emphasizing a hands-on approach of modeling concepts of addition, subtraction, multiplication and division, evaluating expressions, solving equations and inequalities, and exploring characteristics of geometric figures. Math Strategies is taught concurrently with Algebra I.

# MATH-27.0621711 Algebra I (Y)

# Required of 9th grade students

This course is designed for students who need reinforcement of analytical and Pre-algebra skills and introduces students to the Algebra skills necessary for future math courses. Students learn to add, subtract, multiply and divide polynomials and radical expressions. They apply these skills to solve linear equations, systems of linear equations and quadratic equations. Additional topics include graphing in the coordinate plane and solving word problems.

# MATH-27.0621712 Honors Algebra I (Y)

# Required of 9th grade students with Department Approval

This advanced course provides the foundation of Algebra skills necessary for future math courses. Topics covered include algebraic concepts: emphasizes the theory and application of variables, graphing, linear equations and inequalities, radical expressions, and quadratics.

# MATH-27.0622713 Geometry (Y)

# Required of 9th-10th grade students with Department Approval

Goals of the Geometry course include improvement in logical thinking skills and a deeper appreciation of mathematical structure. Algebraic problems and Geometric proofs are used in the study of congruent triangles, similar figures, parallel lines, right triangles, circles, area, volume, polygons, and the coordinate plane.

Prerequisite - Algebra I

# MATH-27.0622715 Honors Geometry (Y)

# Required of 9th-10th grade students with Department Approval

Honors Geometry is a course for students who have a deeper sense of logical development. The course uses deductive proofs and Algebraic problems to study the coordinate plane, congruent triangles, similar figures, parallel lines, right triangles, circles, area, volume, and polygons. The problems and proofs are more difficult than those in MATH 27.0630713.

Prerequisite – Algebra I/Honors Algebra I

# MATH-27.0623721 Algebra II (Y)

# Required of 10th -11th grade students with Department Approval

This course ensures the students an understanding of absolute value equations, radical equations, linear equations, quadratic equations, the coordinate plane, systems of equations including calculator driven matrices, complex numbers, functions, and many word problems of different types.

Prerequisite – Geometry/Honors Geometry

# MATH-27.0623723 Honors Algebra II (Y)

# Required of 10th-11th grade students with Department Approval

This course ensures the students a deeper understanding of absolute values, radicals, linear equations, quadratic equations, functions, the coordinate plane, right triangle trigonometry, systems of equations including calculator driven matrices, complex numbers, and a variety of word problems, both linear and quadratic. The problems are more difficult than those in MATH 27.0640721.

Prerequisite – Geometry/Honors Geometry

# MATH-27.0890731 Algebra III (Y)

# Offered to 11th - 12th grade students with Department Approval

This course consists of a review of selected topics from Algebra and Geometry, preparation for the SAT, and brief studies of topics that include linear programming, matrices, logarithms, functions, and right triangle trigonometry.

Prerequisite – Algebra II/Honors Algebra II

# MATH-27.0624741 Pre-Calculus (Y)

# Offered to 10th-12th grade students with Department Approval

Pre-Calculus is designed to review the higher-level math skills in preparation for Calculus at OLM and in College. The topics to develop these skills include logarithmic and exponential functions, quadratic equations, matrices, and an in-depth study of Trigonometry. Some new topics include the study of higher-level polynomial functions, vectors, polar coordinates, and conic sections.

Prerequisite – Algebra II/Honors Algebra II

#### MATH-27.0624743 Honors Pre-Calculus (Y)

#### Offered to 10th-12th grade students with Department Approval

Honors Pre-Calculus is designed to review the higher-level math skills in preparation for AP Calculus AB and AP Calculus BC at OLM and in order to receive college credit for Calculus. The topics to develop these skills include higher-level polynomial functions, logarithmic and exponential functions, quadratic equations, matrices, sequences and series, conic sections, and an in-depth study of Trigonometry including De Moivre's Theorem, polar coordinates, and word problems involving right triangles and non-right triangles (using the law of sines and cosines). *Prerequisite – Algebra II/Honors Algebra II* 

# MATH-27.0780743 Calculus (Y)

# Offered to 11th – 12th grade students with Department Approval

Calculus is designed to bring the topics previously learned in mathematics to life. The topics include a study of functions, limits, differentials with application in maxima and minima problems, area and volume, and numerical methods of equation solving.

Prerequisite – Pre-Calculus/Honors Pre-Calculus

# MATH-27.0720745 Advanced Placement Calculus AB (Y)

# Offered to 12th grade students with Department Approval

AP Calculus is an advanced study of functions, limits and differentials with application in maxima and minima problems, area and volume, differential equations, and numerical methods of equation solving. The student will be prepared for the AP Calculus AB exam which is taken with the possibility of earning college credit. All students must take the Advanced Placement test in May. *Prerequisite-Honors Pre-Calculus* 

# MATH-27.0730701 Advanced Placement Calculus BC (Y)

# Offered to 12th grade students with Department Approval

AP Calculus BC includes all of the elements covered in AP Calculus AB as limits, differentiation and applications, graph theory, integration and applications and slope fields. In addition to AB concepts, BC concepts covered are integration and applications, differential equations, sequences and series and parametric functions.

Prerequisite - Honors Pre-Calculus

# MATH-27.0720751 Advanced Placement Statistics (Y)

#### Offered to 10th-12th grade students with Department Approval

AP Statistics is designed to draw connections between all aspects of statistical process, including design, analysis, and conclusions; to teach students how to communicate methods, results, and interpretations using the vocabulary of statistics; to teach students to use graphing calculators and demonstrates the use of computers and/or computer output to enhance the development of statistical understanding through exploring and analyzing data, assessing models, and performing simulations. All students must take the Advanced Placement test in May.

Prerequisite – Algebra II/Honors Algebra II.

# PHYSICAL EDUCATION AND HEALTH

# Physical Education-17.0110711 Health (S)

#### Required of 9th grade students

Health is a course designed to introduce students to a variety of health related issues that are important to each student. Besides a basic knowledge in these issues, Health is aimed at providing students with a sound basis of healthy decision making that promotes life-long fitness. Students will learn through various forms of discussion and numerous writing assignments.

# Physical Education-36.0510711 Personal Fitness (S)

#### Required of 9th grade students

Personal fitness is a course designed to introduce students to a variety of anaerobic exercises and cross-training routines in order to improve overall fitness. Besides providing a basic knowledge in these areas, Personal Fitness is aimed at providing students with an overall improved state of being at the conclusion of the course with the ultimate goal being to promote life-long fitness.

# Physical Education-36.0540715 Weight Training (Elective) (S)

# Offered to 9th-12th grade students

This course is designed to use weightlifting to develop a positive mental and physical self. The focus will be on safety and proper technique. Both upper and lower body core lifts will be worked each day of class. The core lifts are bench press, parallel squat, and power clean. On the 3-day a week block, an explosive day with lighter percentages will be included. Students will work auxiliary lifts to complement the basic core lifts. Cardiovascular fitness will also be a component of the class.

# Physical Education-36.0150714 Principles of Athletic Training/Sports Medicine (Elective Rotation) (S)

# Offered to 10<sup>th</sup>-12<sup>th</sup> grade students with Department approval

This class will cover injury management, both acute and chronic. Students will learn basics of injury recognition, management, rehabilitation, modality usage, taping, splinting, and bandaging techniques. In addition, the course will cover ethical and legal issues healthcare professionals encounter in Sports Medicine and Athletic Training. Students will be involved in working with one of the sports teams at Our Lady of Mercy.

# Physical Education-36.0210711 Team Sports (Elective Rotation) (S)

# Offered to 10<sup>th</sup>-12<sup>th</sup> grade students with Department approval

This course introduces students to a variety of team sports. The goal of the course is to promote the intellectual, physical, and spiritual development of students. The class promotes the intellectual development of each student through learning terminology, rules, history, and basic strategies of each sport. The course promotes physical development through the learning of the basic skills of each activity. Finally, the course promotes the spiritual development of each student through the learning of sportsmanship and moral responsibilities through cooperative skills inherent in each activity.

# **SCIENCE**

\*Advanced Placement Track for Science: The earliest opportunity to take AP Chemistry is the junior year because a Chemistry course is pre-requisite. Students do not take AP Physics until the senior year because the Physics course is pre-requisite. It is possible for students to take either one, two, or three AP science classes. To be able to take both AP Physics and AP Chemistry, the student must take two science classes in 11<sup>th</sup> grade. Teacher recommendation and department approval are required before a student is allowed to double any science classes. Students who double science classes are expected to continue to take science every year. AP Biology may be taken in 11<sup>th</sup> or 12<sup>th</sup> grade, after completion of 10<sup>th</sup> grade Chemistry.

# Science-26.0120715 Biology (Y)

# Required of 9th grade students

This is an introductory course in which students study the fundamental concepts of biology. The unity and diversity of life are emphasized through the studies of cells, the chemistry of life, classification, genetics, evolution, ecology, and the structure and function of all life forms from bacteria to man.

# Science-26.01207161 Honors Biology (Y)

#### Required of 9th grade students with Department Approval

Biology is the study of living things. The goal of biology is to gain a better understanding of living organisms, how they work, and how they interact with their environment. Through study, students will learn and apply basic concepts and assumptions to describe a broad range of phenomena in the world of living things. Our studies in this course will include a comprehensive look at cells, heredity, ecology, taxonomy, and evolution. As an honors course, we will emphasize a strong laboratory component as well as cover information in greater depth than the regular course. Students who succeed in Honors Biology will be eligible to continue on to Honors Chemistry at the conclusion of the year.

# Science-260140702 AP Biology (Y)

# Offered to 11th-12th grade students with Department Approval

AP Biology is a two-semester course designed to be taken by juniors and seniors who have successfully completed high school level biology and chemistry. Topics to be covered include but are not limited to biochemistry, cell regulation, mechanisms of heredity, adaptation, ecology, and biodiversity. Within each of these topics, AP Biology will focus on the concepts of science as a process, evolution, energy transfer, continuity and change, relationship of structure and function, regulation, interdependence in nature, and science technology in society. In addition to exams and homework, inquiry-based laboratory exercises will make up at least a quarter of the coursework. AP Biology is designed to be the equivalent of a college-level introductory biology course and students may be able to receive college credit based on a successful AP Exam score.

Prerequisite: Biology/Honors Biology and Chemistry/Honors Chemistry

# Science- 26.0730752 Anatomy (Y)

# Offered to 11th – 12th grade with Department Approval

The goal of this course is to provide students with a basic understanding of the structure and functions of the human body with an emphasis on homeostasis. Students begin their study with the chemical, cellular, and tissue levels of organization of the human body before learning the various body systems. Students work cooperatively in lab groups. Microscopes and prepared slides are used to investigate histology. Laboratory work includes dissections of a sheep brain, sheep heart, sheep eye, and fetal pig.

Prerequisite – Biology/Honors Biology and Chemistry/Honors Chemistry

#### Science-40.0510711 Chemistry (Y)

# Required of 10th grade students

This traditional course in chemistry uses experimentation, observation, and problem solving to reinforce a study of atomic theory, bonding, chemical periodicity, metric measurement, chemical reactions, and the primary states of matter. Students use mathematical skills to analyze and synthesize quantitative data and to solve problems in chemistry. Emphasis is also placed on developing problem solving skills, a disciplined approach to study, and skills in writing reports through the critical thinking and analytical reasoning required in the scientific method. An important aspect of this work is learning to apply safety skills and the ability to work in groups. Students must submit lab reports and are responsible for keeping up with assignments. *Prerequisite – Biology/Honors Biology* 

# Science-40.0510712 Honors Chemistry (Y)

#### Required of 10th grade students with Department approval

This course provides a comprehensive coverage of principles of general chemistry. It differs from the regular chemistry course in that more topics are covered, the topics are covered in greater depth, and a more quantitative approach is followed. In this laboratory-based course, students will explore the topics covered in Chemistry 40.0510711, and additionally cover the following topics: thermochemistry, thermodynamics, and nuclear chemistry. Students who perform well in this course may be eligible to take AP Chemistry.

\*Prerequisite - Biology/Honors Biology\*\*

# Science – 40.0530740 Advanced Placement Chemistry (Y)

# Offered to 11th – 12th grade students with Department approval

Students who have already completed an introductory chemistry course learn and apply the basic principles, concepts, and operations of college chemistry. Topics include atomic theory, bonding, periodicity, acid-base chemistry, oxidation-reduction, equilibrium and thermodynamics. Students use computers with interactive learning software, maintain a laboratory notebook, and use scientific calculators to solve problems. The course requires extensive home preparation that must be done nightly. Students are required to take the Advanced Placement examination in May.

Prerequisite – Chemistry/Honors Chemistry

# Science – 40.0810711 Conceptual Physics (Y)

#### Offered to 11th and 12th grade students with Department Approval

Conceptual Physics is an introductory physics course which places emphasis on the comprehension of concepts which describe a broad range of phenomena in the physical world. Students perform laboratory activities to investigate these concepts, collect and interpret data, and write detailed laboratory reports to demonstrate understanding. Students are also required to use their skills in Algebra Trigonometry, and problem-solving. *Prerequisite- Chemistry/Honors Chemistry* 

# Science - 40.0820711 Physics (Y)

#### Offered to 11th – 12th grade students with Department Approval

This class is an introductory college preparatory course in physics. Emphasis is placed on learning and understanding the principles and concepts of physics as well as the solution of problems. Students apply these concepts in laboratory activities. Students are required to write detailed lab reports on these activities. Students are also required to use their skills in Algebra, Trigonometry, vector analysis and graphing in their problem solving, so Pre-Calculus is a recommended prerequisite or co-requisite for the course. This physics class qualifies as a prerequisite course for Advanced Placement Physics.

Prerequisite – Chemistry/Honors Chemistry

# Science – 40.0831711 Advanced Placement Physics 1 (Y)

#### Offered to 12th grade students with Department approval

This course covers a broad range of physics principles with an emphasis on problem solving and an insight to real-world applications. Topics in classical and 20th century physics include mechanics, thermodynamics, vibrations and waves, electricity and magnetism, light and optics, and modern physics. Advanced Placement Physics 1 is modeled after a one – year college level physics class designed for students majoring in the life sciences, pre-medicine, and some applied sciences, as well as other fields not directly related to science. The class assumes prior knowledge of trigonometry. Students participate in lab activities and write detailed lab reports. Students are required to take the Advanced Placement examination in May.

Prerequisite - Physics

Co-requisite: Advanced Algebra

# Science-26.0611711 Environmental Science (Elective Rotation) (Y)

# Offered to 11th-12th grade students with Department Approval

This course provides students with the scientific principles and concepts that enable them to understand the earth's interconnected systems, to identify and analyze environmental problems, both natural and manmade, and to evaluate the risks associated with these problems. Method of instruction includes substantial laboratory and field components that focus on student data collection and analysis. Biology, chemistry, physics, mathematics, and technology concepts will be integrated throughout the course. The major topics to be emphasized include flow of energy and cycling of matter, interconnection of all life, the stability and change in an ecosystem, conservation and resource allocation, evaluation of human activity and technology.

Pre-requisites: Chemistry or Honors Chemistry

# Science-40.0410711 Meteorology (S)

#### Offered to 11th-12th grade students with Department Approval

Meteorology is a one (1) semester course covering the basic principles of meteorology. Topics covered include: the structure and characteristics of the atmosphere, the dynamic processes that contribute to small- and large-scale weather patterns, satellite and radar meteorology, meteorological data collection, analysis of weather data and maps, climate and climate change, synoptic meteorology and weather prediction.

Prerequisites: Chemistry/Honors Chemistry

# Science-40.0710711 Oceanography (S)

# Offered to 11th-12th grade students with Department Approval

Oceanography is a one (1) semester course designed to give students a better understanding of the concepts of the geology, chemistry, physics, and biology of the world's oceans. Topics covered include: the formation and structure of the ocean basins, marine sediments, salinity, biogeochemical cycles, ocean structure, currents, waves, tides, primary production, marine ecology, pollution, and global-warming.

Prerequisites: Chemistry/Honors Chemistry

# **SOCIAL STUDIES**

# Social Studies- 45.0711712 World Studies (S)

# Required of 9th grade students

The World Studies course provides students with an introduction to both physical and cultural geography. After an introduction to geography, students study each major region of the world. For each region, students learn about the importance of the physical geography and its impact on the region's development. Students study cultural aspects of each region and examine the influence of geography on the cultural development of each region. Students will learn how to analyze historical documents and data.

# Social Studies-45.0830712 World History (Y)

# Required of 10th grade students

This course is an in-depth study of the major world civilizations from 1000 to the present. Emphasis will be placed on the evolution of the political, social, cultural and economic heritage of the major world regions, with the major emphasis on Western Civilization. Students will study the rise of conflict, both economic and territorial, and its effect on the advancement of civilization in these regions. Students will learn how to analyze historical documents and data. Research will be required.

# Social Studies-45.0811701 Advanced Placement World History (Y)

# Required of 10th grade students with Department Approval

The content of this course will emphasize a more global, non-western approach to World History by tracing the development of civilizations and the interactions among people in those civilizations from approximately 1000 C.E. (Common Era) to the present. College preparatory outside reading is required and is discussed in class. Considerable time will be devoted to helping students develop their analytical and writing skills through the evaluation of primary and secondary sources of historical information. All students must take the AP World History Exam in May.

# Social Studies-45.0810702 American History (Y)

#### Required of 11th grade students

This course is a survey of the rise of America from colonization to the present. Special emphasis will be placed on the contributions of the various ethnic groups and cultures that make up the American character. Students will write a major research paper as part of the course requirements.

# Social Studies-45.0820721 Advanced Placement American History (Y)

#### Required of 11th grade students with Department Approval

This course is designed to provide a college-level experience and preparation for the Advanced Placement (AP) Examination in May. A seminar approach is used to cover major historical figures and events in our nation's history from colonization to the present. Emphasis will be placed on interpreting primary and secondary source documents, mastering quantitative historical data, and writing historical essays. All students must take the AP U.S. History test in May.

# Social Studies-45.0610711 Principles of Economics (S)

# Required of 12th grade students

The purpose of this course is to present a survey of economic theory and basic economic systems and concepts. Students will analyze their roles as both producers and consumers within society. Focus will be on strategies and concepts to help the students become more knowledgeable consumers and citizens.

# Social Studies-45.0530751 Advanced Placement Macroeconomics (S)

# Required of 12th students grade with Department Approval

This course is designed to provide a college-level experience and preparation for the Advanced Placement Examination. This course places emphasis on the study of national income and price determination, economic performance measures, economic growth, and international economics. The basic concepts of supply, demand, and elasticity, as well as specific macro concepts such as trade, fiscal policy, monetary policy, and supply side theory will be covered. All students must take the AP Economics exam in May.

Prerequisite: Economics

#### Social Studies-45.0570712 American Government: The Political Process (S)

# Required of 12th grade students

This is a basic study about how the American political system works. There is an extensive examination of the Constitution as well as the executive, legislative, and judicial branches of our government. The rights and responsibilities of citizenship will be emphasized and the policy-making process explored. Students will examine how a government resolves issues and conflict in a way that enhances a nation's values and purposes.

# Social Studies-45.0530740 Advanced Placement United States Government and Politics (S)

# Required of 12th grade students with Department Approval

This course is designed to provide a college-level experience and preparation for the Advanced Placement (AP) Examination. Emphasis will be placed on interpreting documents and statistics, analysis of political theory, and writing analytical essays. The topics that will be covered include constitutional underpinnings of the U.S. government, political beliefs and behaviors, political parties and interest groups, institutions of the national government, and civil rights and liberties. All students must take the AP U.S. Government test in May.

#### Social Studies-45.0150711 Introduction to Psychology (Elective) (S)

# Offered to 10th – 12th grade students

In this course the student is introduced to the scientific analysis of human behavior. Students learn to differentiate and discuss theories of learning, personality development, mental illness, and therapy. Students also study human motivations, emotions, and group psychology. A research paper is required.

# Social Studies-45.0160711 Advanced Placement Psychology (Elective) (S)

#### Offered to 10th – 12th grade students with Department Approval

This course conforms to the College Board topics for Advanced Placement Introductory Psychology Examination. Covers methods, approaches and the history of psychology as a science, biological bases for behavior, sensation and perception, states of consciousness, learning, cognition, motivation and emotion, developmental psychology, personality, testing and individual differences, abnormal psychology, treatment of psychological disorders and social psychology.

Prerequisite: Psychology

# Social Studies-45.0810759 Modern U.S. History: 1960 - present (Elective Rotation) (S)

# Offered to 10th – 12th grade students

In this course the student will have the opportunity to learn, discuss, and investigate the recent events of U.S. History in depth. Students examine the political, economic and social trends of post WWII America. Each decade is studied in depth. The focus of the course is on the escalation of the Cold War, the Civil Rights movement, the impact of the Great Society, the Reagan Era, terrorism in America and various cultural phenomena. Further, students consider the role of the Catholic Church in these historical trends and current events facing America as a result of the last half century.

# Social Studies-99.00000795 Senior Project (Elective Rotation) (S)

# Offered to 12th grade students

The Current Events curriculum introduces students to issues that influence our life in this global, multicultural society. Students will research and current economic, political, social, and cultural problems, and explore how ongoing conflicts affect groups as well as individuals. Emphasis is upon America as a dynamic society in the 21st century, witnessing changes involving community, state, nation, and world. Some of the pressing problems facing our rapidly changing society will be examined in detail using a variety of media. Critical thinking skills and technology related research is emphasized. Speaking and listening skills are reinforced through class discussions and oral presentations. The study of interdisciplinary connections relates current events to history, economics, politics and the social world thereby enabling students to grasp the interrelationship between and among them. The use of a variety of technologies is integrated throughout the curriculum.

# Social Studies- 450560702 Law and the Citizen (Elective Rotation) (S)

# Offered to 9th-12th grade students

Law and the Citizen is an elective designed to enable students to explore issues related to law, justice, and the American legal system. The following topics are included in this course: introduction to the law and the legal system, criminal law and the juvenile justice system, torts, consumer law, family law, housing law, and individual rights and liberties.

# **TECHNOLOGY/BUSINESS**

# **Technology-7.4411711 Computer Applications (S)**

# Required of 9th grade students

This course offers students the opportunity to investigate all aspects of the computer. Students will become proficient in their skill of basic computer software through the various projects that they will have to complete throughout this course. Multidisciplinary projects will involve using various applications such as word processing, spreadsheets, databases, graphics, web page editors and presentation software. Students will also have an opportunity to conduct research on the Internet, explore new technological innovations, examine technology-related careers and speculate about future computer applications.

# Technology-11.4520759 Web Design (Elective Rotation) (S)

#### Offered to second semester 9th – 12th grade students

This course is an introduction to web authoring skill development, including use of basic html tags and tables. Students will learn web content development and design using the Adobe Web Collection, Macromedia Flash5, and Microsoft FrontPage. Included in the course will be an introduction to the basics of copyright in print, audio, and visual mediums, especially as it relates to web content.

Prerequisite - Computer Applications

# Technology-11.4280759 Robotics: Hardware & Software Design & Development (Elective Rotation) (S)

# Offered to second semester $9^{th} - 12^{th}$ grade students

This class builds upon the foundations of Computer Applications. It extends the fundamentals of programming and robotics including using a variety of programming languages, hardware safety, hardware design, hardware construction, research skills, and teamwork. Students will build various robotics to demonstrate these basic principles. The design process of testing and modification will be implemented to show the fundamentals of engineering and electronics. Students' knowledge will be tested using an engineering notebook, projects and other assessments appropriate for the material.

Prerequisite - Computer Applications

# Technology-11.4720759 Application Software Development (Elective Rotation) (S)

# Offered to 11<sup>th</sup> – 12<sup>th</sup> grade students with permission of instructor

This class builds on the fundamentals of application programming and design introduced in Computer Applications. Using the Java language and interactive design environments like Applnventor and Eclipse, students will learn object-oriented programming and design and apply the concepts to create working software applications, including smart phone apps. Prerequisite – AP Computer Science

# Technology-110160741 AP Computer Science A (Elective) (Y)

# Offered to 10th – 12th grade students with permission of the instructor

NOTE: This course can be used to satisfy the Science Elective graduation requirement.

AP Computer Science A is an elective, equivalent to a first-semester, college level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structure), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language.

Prerequisite – Computer Applications

# Business 7.42650701 – Personal Finance (Elective Rotation) (S)

# *Offered to 9th – 12th grade students*

This course is designed to teach students to challenge the current trends in such areas as debt and spending while learning about the positive benefits of budgeting, saving, and investing. This course encourages students to take a fresh and simple approach to finance by using the highly successful *Financial Peace for the Next Generation* program developed by Dave Ramsey. This program, based on biblical principles, teaches students to recognize that all things belong to God and that we as stewards should be faithful to how God wishes us to manage what he blesses us with. This course requires the student and parent to work together throughout the semester on a variety of financial activities using the parent's financial information. Activities include such things as making a budget with the parents, balancing the family checkbook, creating a shopping list, etc.

# **THEOLOGY**

# Theology-99.0000701 Introduction to Catholicism / Fall semester (S)

#### Required of 9th grade students

The course will focus on the theology of the Catholic Church. It will introduce the students to the principal Catholic beliefs, rituals, and values, as handed over by the Tradition, and taught by the Magisterium. Special attention will be given to the following topics: the universal call to holiness, prayer, the Holy Trinity, the Church, the Blessed Virgin Mary, the Bible, and the Revelation.

# Theology-99.0000701 Sacraments and Prayer / Spring semester (S)

#### Required of 9th grade students

This course will provide a basic understanding of the Catholic Liturgy and sacramentality. It will explore in detail each of the seven Sacraments, so that the students may participate more fully in the celebration and reception of them. In addition, there will be an initiation to the various schools of prayer (such as Benedictine, Ignatian, or Carmelite) within the Tradition of the Church.

# Theology-99.0000721 Old Testament / Fall semester (S)

#### Required of 10th grade students

This course teaches an historical and theological overview of the Old Testament. Students will study the Jewish people, their covenant with God, and how the events of the Old Testament prepared us for the coming of Jesus Christ. Themes covered will include Creation, the Patriarchs, the Mosaic Law, the rise and fall of the kingdom of Israel, the prophets, worship and sacrifice. Students will also learn the differences between Catholic and other Christian canons. The course approaches the teaching and interpretation of Scripture from the Catechism of the Catholic Church.

# Theology-99.0000721 New Testament / Spring semester (S)

#### Required of 10th grade students

This course teaches the scriptural root of our faith as found in the New Testament, with a special emphasis on the Gospels. Topics to be studied in the course include Jesus' Incarnation, His teachings on the Kingdom of God and His use of parables, the miracles Jesus performed as a sign of the Kingdom's coming, the Paschal Mystery and the birth of the Church. Students will also learn how the covenant of Jesus Christ is the fulfillment of the Old Testament prophecies. The course approaches the teaching and interpretation of Scripture from the Catechism of the Catholic Church.

# Theology-99252371 Theology Seminar (Alternative Course) (Y)

# Offered to 9th grade students by Department Approval

Theology Seminar will be offered as an alternative course in the Theology Department directed at freshmen and/or sophomore students who have a strong background in Catholic education and a sound familiarity with the foundations of Catholicism. In addition to a preliminary review of Creedal and Sacramental theology, the seminar-structured course will have a particular focus on selected Catholic literature, writings of Church Doctors and Fathers, Magisterial documents, Mariology and particular Catholic perspectives on modern culture. Students will be selected to explore themes from these sources and will work toward an advanced understanding and application of progressive theological ideas and concepts.

# Theology-99.0000731 Catholic Morality / Fall semester (S)

# Required of 11th grade students

This course will give the student the knowledge of how we are to live based on our Christian beliefs. It will discuss principles for living a morally upright life based on the belief that the human person is made in the image and likeness of God. Upon completion of the course, the student will have a thorough grasp of key moral concepts, such as natural law, free choice, grave and slight matter, sufficient knowledge and freedom, charter, conscience, sin, moral absolutes, virtue, human fulfillment and the Principle of Double Effect. This will provide the necessary foundation to a discussion of specific moral principles. Students will be offered the scriptural, theological and philosophical principles that will enable them to make correct moral choices from the light of the Catholic Faith.

# Theology-99.0000731 Church History / Spring semester (S)

#### Required of 11th grade students

This course will examine Church History from the death of Christ to the present, seen as a history of salvation—God at work among His people. This course will also stress the contribution of Catholic faith to civilization, as seen variously in art, architecture, music, and the Church's saints.

# Theology-99.0000741 World Religions / Fall semester (S)

# Required of 12th grade students

This course invites students to re-examine their personal faith in more depth by opening doors to the spiritual riches and specificities of the major world religions. It also gives them tools to better understand today's world and to prepare for tomorrow's encounters and challenges in which religion is to play a decisive part. First, the course examines the key elements of religion in general. The second part examines Islam, Hinduism, Buddhism, Taoism, Confucianism, and Shintoism.

# Theology-99.0000741 Personal Vocation / Spring semester (S)

#### Required of 12th grade students

The Catholic Theoretical views on vocation will emphasize the study of key concepts and views pertaining to the doctrine of vocation in the Catholic tradition: the universal call to holiness, the universal vocation of love, and the types of vocation. The course will also offer the students the time and tools to reflect on their personality, their aspirations, their potentialities and limits, all aspects of a person through which the call of God is incarnated and knowledgeable. This invitation to a better self-knowledge will go along with a reflection on its concrete consequences for a vocational choice.

# Theology-99.00007445 Christian Outreach (Elective Rotation) (S)

# Offered to 10th – 12th grade students

This class provides a formation in and practical initiation into Catholic social teachings and initiatives. Students are guided through research into specific areas of Catholic social teachings, the history of social justice movements, and the current activities of those who pursue Catholic social teachings.