

# MARIAN CATHOLIC HIGH SCHOOL ... to Jesus through Mary

# Course Selection Booklet

2020 - 2021



## To the student:

This site provides you with a list of course offerings and descriptions. Prior to making any choices, you are encouraged to read carefully through the descriptions, requirements, and expectations. Your parents, teachers, and guidance counselor can help you with your choices. When making decisions, be realistic and consider your extracurricular activities also.

Several courses have a minimum average grade requirement and certain electives must be approved by the department chairperson or a teacher. Consultation with teachers is important, especially regarding continuity of a program and level of difficulty. Marian offers honors courses to students who are above average in ability and who can achieve success in that area of study. This program stimulates creativity, research, and communication skills while expecting the student to demonstrate a personal commitment to excellence with some independent work. Students are placed in these courses by virtue of their past performances with teacher/department/administration approval. College Preparation courses are available along with requested electives, AP courses and Dual Enrollment courses for seniors. Some departments also offer basic courses. You will need teacher/department approval to be placed in this course.

PLEASE NOTE THAT THE STUDIES DIRECTOR AND DEPARTMENT CHAIRPERSONS ARE RESPONSIBLE FOR THE FINAL DECISION FOR STUDENT PLACEMENT IN A COURSE.

# **COURSE CHANGES:**

Changes made after the return of the Course Selection Forms will require the approval of the Department Chairperson and the Studies Director.

Changes requested after rosters have been completed will incur a \$25.00 fee and will be made by appointment only.

No changes will be made after the first full cycle of classes unless requested by the Department Chairperson in consultation with the subject teacher and parent.

# **GRADUATION REQUIREMENTS**

SOPHOMORE YEAR

Graduation from Marian Catholic High School requires the satisfactory completion of the following required courses mandated by the Commonwealth of Pennsylvania and the Diocese of Allentown.

Theology	4 units	Mathematics	3 units
English	4 units	Physical Ed/Health	1 unit
Social Studies	4 units	Humanities	2 units
Science	3 units	Electives	4 units

Required Electives 3.8 units

#### FRESHMAN YEAR

Theology Theology **English English** Algebra Geometry

**Biology** Physical Science **American Cultures** World Cultures Foreign Language Foreign Language

Drivers' Education Theory Music Appreciation

Library Research Skills Health

**Physical Education Physical Education** 

PASS – Pathway to Student Success Standardized Test Prep Course

# **JUNIOR YEAR**

**SENIOR YEAR** Theology Theology **English English** 

Mathematics **US** Government Chemistry Electives (3) 20th Century America Research Paper Electives (1) **Physical Education** 

**Speech Communication Physical Education** 

Career & Finance Management

# **QUALITY POINTS AND CUMULATIVE RANK** (Weighted GPA)

Weighted Grade Point Average is calculated according to the level of the course and the grade earned. Cumulative rank is determined by the Quality Grade Point Average per year.

#### VALEDICTORIAN AND SALUTATORIAN

The Valedictorian and the Salutatorian are generally the top two students of the senior class after the third quarter grades are issued. To qualify for this honor, students must have attended Marian for three full years.

# COURSE OFFERINGS

# Theology Department

# **Community Service Program**

Since we believe that we are to live the lessons learned in Theology classes, students at Marian Catholic are required to perform varying hours of community service for the school and out into the community. This service is a graduation requirement and is performed at each grade level supervised by the Theology department.

O11 H Theology I (1 Cr.) Grade 9

012 CP Theology I (1 Cr.)

## First Semester - Old Testament - The Revelation of Jesus Christ in Scripture

The purpose of this course is to give students a general knowledge and appreciation of the Sacred Scriptures. Through their study of the Bible they will come to encounter the living Word of God, Jesus Christ. In the course they will learn about the Bible, authored by God through Inspiration, and its value to people throughout the world. If they have not been taught this earlier, they will learn how to read the Bible and will become familiar with the major sections of the Bible and the books included in each section. The student will pay particular attention to the Gospels, where they may grow to know and love Jesus Christ more personally.

#### Second Semester - New Testament - Who is Jesus Christ?

The purpose of this part of the 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.

This honors course will direct students to participate in self-reflection through extended writing and research. College Prep Theology classes will share their ideas through group projects.

021 H Theology II (1 Cr.) Grade 10

022 CP Theology II (1 Cr.)

# First Semester - Jesus Christ's Mission Continues in 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 its sustained by 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.

#### Second Semester- The Mission of Christ - The Paschal Mystery

The purpose of this course is to help students understand all that God has done for us through His Son, Jesus Christ. Through this course of study, students will learn that, for all eternity, God has planned for us to share eternal happiness, which is accomplished through the redemption Christ won for us. Student will learn that they share in their redemption only in and through Jesus Christ. They will also be introduced to what it means to be a disciple of Christ and what life as a disciple entails, especially in our modern world. Living justice and peace

This honors course will direct students to participate in self-reflection through extended writing and research. College Prep Theology classes will share their ideas through group projects.

# Theology Department (continued)

O31 H Theology III (1 Cr.) Grade 11

032 CP Theology III (1 Cr.)

#### First Semester - Sacraments as Privileged Encounters with Jesus Christ

This course examines how Christianity found its expression in Roman Catholicism. It includes an overview of the Church, its influence on the Western Hemisphere and the Church's relationship with other religious groups. This course will discuss major developments and key persons who shaped the Church. The content relies heavily on Sacred Scripture, Catechism of the Catholic Church and teachings of Vatican II as witnessed by the Pontificate of Pope St. John Paul II. Students will be expected to work with research relating to the material presented.

## Second Semester: Life in Jesus Christ/Morality

This course covers the Catholic Church's position on social ethics as part of Christ's command to live in the world, yet apart from it. Several encyclicals will be studied, along with Sacred Scripture, Catechism of the Catholic Church and Catholic Social Teachings. This course will discuss the economic issues of today, the reign of God's goodness and the compassionate way of Jesus. Research work will be required.

This honors course will direct students to participate in self-reflection through extended writing and research. College Prep Theology classes will share their ideas through group projects.

041 H Theology IV (1Cr.) Grade 12

042 CP Theology IV (1Cr.)

#### First Semester - Apologetics

The students will be prepared to articulate religious beliefs as they transition to the next level of their education. It includes an overview of essential Church teachings as outlined in the Catechism of the Catholic Church; Salvation History, the teachings of Christ and all important topics of the faith.

# Second Semester - Marriage and Christian Vocations

Vocations to the married, single, priestly, and religious life will be studied. A discernment model will be provided to assist the students in recognizing their unique and graced vocation. Students will be expected to study pertinent documents and encyclicals and report their findings to the class.

The honors course will include intensive writing and discussion with individual group projects, and examination of great works of the Catholic literature.

The college prep class will include writing, discussion and group projects.

Prerequisite for all Honors Theology Courses: 90 average in an Honors Theology course

or a 93 average in a College Prep Theology course

046 Global Ethics (.5 Cr.)

Grades 11 and 12

This one-semester course engages students to develop a clear understanding of moral ethics. Through the discovery of Catholic moral principles, students will be applying them to current world issues. Class discussions are a major focus of the course as well as developing a strong moral ethic for their lives. <u>Class is limited.</u>

# **Business Education Department**

#### 130 Career and Financial Management (.5 Cr.) Required

Grade 11

This course will offer students an opportunity to evaluate themselves in decisions regarding life after high school. Students will evaluate the income of planned career goals and the cost of education to pursue it. Financial topics covered include payroll and taxes, band services, savings and investment opportunities, budgeting, proper credit usage and available insurances for health, auto, life, etc.

# 132 CP Introduction to Business (1 Cr.)

# Grades 11 and 12

This course introduces students to the business and economy which they face every day. It will be taught to encourage creativity, innovation, critical thinking, and problem solving. Skills that will help people to work with others in a professional manner, manage and organize their work, and manage other employees, will be taught. Areas of concentration include various forms of business ownership, business ethics, management, human resources, marketing and advertising products and finance. This class is geared to the student considering any degreed business program including international business, accounting, business administration, and finance.

# 134 CP Accounting I (1 Cr.)

#### Grades 11-12

The aim of this course is to provide students with an exposure to the basic skills needed to provide accounting for a sole proprietorship and corporation. Students with an interest in pursuing a career in business or accounting will be taught to record transactions in journals, post to ledgers, prepare financial statements, write and endorse checks, and prepare bank reconciliations. The calculation and recording of a company's payroll will also be covered. On-line working papers are used enabling each student to access assignments from any computer.

#### 144 CP Accounting II (1 Cr.)

#### Grade 12

This course is an extension of the principles acquired in Accounting I. It is a valuable course for the college-bound student seeking a business, financial, or accounting degree. A corporate business environment is used to teach the recording of uncollectible accounts, inventory valuation, accruals, deferrals, and depreciation of assets. Specialized journals, ledgers, and financial statements are taught using online working papers and an automated accounting package.

Prerequisite: Accounting I

# **Technology Department**

# 110 PASS – Pathway to Academic Student Success (.25 Cr.) Grade 9

This quarter course is designed to provide students with A. an understanding of Google Drive, including Docs, Sheets, Slides, Forms, Drawings, and Sites B. introduce the correct planning process C. communicate skills to ensure success throughout all of high school, strengthen study skills, and understand academic assistance.

All freshmen are required to take this course.

#### 246 Photo-Journalism (.75 Cr.)

#### Grade 12

This three-quarter course covers facets of digital yearbook production including developing and carrying out a theme, arranging and designing layouts, writing copy, captions, and headlines, as well as perfecting photography skills to enhance the theme. Students who work on the yearbook must realize that is a published document and thus must meet prior approval by the advisor and the school administration. This course is limited to ten *students* who are creative thinkers and writers as well as responsible, persevering individuals capable of working compatibly with others. Students need a working knowledge of basic word processing or desktop publishing. (*Underclass students may participate in yearbook production on a non-credit independent basis.*)

Participation is based on the approval of the vearbook moderator and a review of your English grades.

#### 922 CP STEM (.5)

#### Grade 9 and 10

This is a semester elective for students to be introduced to basic STEM projects working individually and collaboratively gaining "hand-on" experiences. This course is designed to enhance individual leaning styles. This course may be scheduled in place of an APP – Academic Prep Period.

#### 932 CP STEM (1 Cr.)

#### Grade 11 or 12

In this year-long course, students will be fully engaged in in-depth projects working individually and collaboratively in a variety of STEM project experiences which focus on "hands-on" learning. They will participate in activities such as building and engineering, introductory coding and programming, designing and testing drones and utilizing 3D printing technology. This course is designed to be a student centered experience to enhance individual learning styles through self-discovery. Students will be expected to complete a portfolio and website of their experience.

# 942 CP STEM (.5 Cr.)

#### Grade 11 or 12

In this semester course, students will work on both individual and collaborative "hands-on" projects teaching them the importance of STEM in the 21<sup>st</sup> century. They will participate in activities such as building and engineering, introductory coding and programming, designing and testing drones and utilizing 3D printing technology. This course is a compressed course designed to be a student centered experience to enhance individual learning styles through self-discovery. Students will be expected to complete a portfolio of their projects.

# English Department

# 210 Research and Writing Skills (.25 Cr.)

#### Grade 9

This quarter course introduces students to the basic types of skills needed to research information in most reference materials including the state research data base, POWER LIBRARY. The students will then produce a formal research paper.

All freshmen are required to take this course.

#### 211 H English I (1 Cr.)

#### Grade 9

This survey course focuses in depth on the various literary genres: novel, short story, essay, report, biography, autobiography, poetry, drama, and epic. Students learn to recognize and analyze literary elements. They read and write in persuasive, expository, descriptive, and narrative modes, distinguishing between subjective personal expression and objective accurate writing. The writing process strives to promote correctness in grammar, diction and usage. The course requires reading of a variety of literary works to supplement knowledge and to encourage personal reading.

## 212 CP English I (1 Cr.)

#### Grade 9

This survey course presents a variety of international selections of literary works and authors. By reading and responding to various genres of literature, including novels, short stories, essays, reports, biographies, poems, and drama, students develop an appreciation of literature and improve their oral and written communication skills. Vocabulary development, grammar, the writing process, and research skills are also stressed.

## 220 Standardized Test Prep Course (STPC) (.25 Cr.)

#### Grade 10

This course, being offered by the Math and English Departments, will help students develop the skills and test taking strategies needed to prepare for standardized testing, focusing on the PSAT and SAT tests. A calculator will be required for the Math classroom days.

All sophomores are required to take this course.

#### 221 H World Literature (1 Cr.)

#### Grade 10

This course is designed to engage students in the careful reading and critical analysis of literature from the 16th to the 21<sup>st</sup> centuries. Students will do close readings of works from several genres and periods to deepen their understanding of the way writers use language. Students will work to develop and organize ideas in clear, cohesive, and persuasive language.

Prerequisite- a grade of 87 in Honors English I 92 in CP English I

#### 222 CP World Literature (1 Cr.)

# Grade 10

This course includes a survey of world literature from Classical Greek literature to the 21st Century. Students are introduced to major themes reflecting man's moral, spiritual, intellectual, and emotional development. Students are required to express themselves through written and oral presentations. Vocabulary development, as well as correct grammar and usage, provide the basis for competency in writing. Skills fundamental to writing short reaction essays, technical analysis, and creative application are stressed.

# 230 Speech Communication (.25 Cr.)

#### Grade 11

This course will stress the impact of communication on one's life and the significance of one's role as a communicator. Speech communication will help students develop their listening and speaking skills by introducing them to communication theory, a variety of public-speaking categories, and peer critiques.

# 231 H British Literature (1 Cr.)

# Grade 11

This course includes an in-depth study of English literature from the Anglo-Saxon Period to Modern Times. Students are expected to analyze poems, prose works, and novels of English authors. Included are the study of vocabulary and grammar and their application to writing. Strong emphasis is placed on the writing process and the use of outside sources to document research. Additional assignments include reading of various novels and completion of literary projects.

Prerequisite- a grade of 87 in Honors English II or a 92 in CP English II

# English Department (continued)

# 232 CP British Literature (1 Cr.)

#### Grade 11

This course is designed to introduce students to the different types of English literature from the Anglo-Saxon Period to Modern Times. Students are guided in reading and discussing major works of this period. The writing process and its application to various types of essays are emphasized along with the rules of grammar. The study of vocabulary and the reading of novels give students a well-rounded background in English.

#### 291 H English IV – American Literature (1 Cr.) (Dual Enrollment)

Grade 12

To gain further insight into American heritage and present culture, this course provides students with an in-depth chronological study of American literature from the Colonial Period to the Contemporary Period. Supplementary novels, quarterly projects, and class presentations are assigned on a regular basis to help expand vocabulary and improve comprehension. Grammar, composition, and research skills are reinforced through detailed application of the writing process to the student's individual work. This course may be taken as Dual Enrollment with LCCC if all requirements are met. A fee is involved.

Pre-Requisite- a grade of 87 in Honors English III 92 in CP English III

#### 292 CP English IV – American Literature (1 Cr.)

#### Grade 12

To provide further insight into American heritage and present culture, this course provides students with a chronological survey of American literature from the Colonial Period to the Contemporary Period. Supplementary novels, serving as a basis for semester projects and class presentations, are assigned for independent reading to help expand vocabulary and improve comprehension. Grammar, composition, and research skills are reinforced through an in-depth application of the writing process to the student's individual work.

#### 240 Research Paper (.25 Cr)

#### Grade 12

Through a guided, systematic approach to research and writing, the student gains the skills and hands-on experience necessary to produce a five-to-seven page research paper. This is accomplished by using library resources, the writing process, and a designated research format appropriately. In addition, concepts such as narrowing a topic, developing a thesis statement, collecting and documenting sources, and taking notes effectively will be addressed.

All seniors will be required to take this course.

# 251 AP English IV (1 Cr.) (Dual Enrollment)

#### Grade 12

This course is designed to engage motivated, disciplined students in the careful reading and critical analysis of literature from the 16th to the 20th centuries. Students will work to develop and organize ideas in clear, cohesive and persuasive writing and they are expected to be active participants in discussions in preparation for the AP exam in English Literature and composition offered in May of senior year. This course may be taken as Dual Enrollment with LCCC if all requirements are met. A fee is involved. The College Board exacts a fee of approximately \$95 for this exam.

Prerequisites: Qualifying grades in previous English courses, a qualifying PSAT or SAT score; Department approval.

# 236 CP Introduction to Journalism (.5 Cr.)

# Grade 11 or 12

This course will introduce students to the interview process, newswriting (both online and print), ethics (including libel and plagiarism) photography and stylebooks. This course is a prerequisite for Journalism/Photo-Journalism.

#### 246 CP Journalism/Photo-Journalism (1 Cr.)

#### Grade 12

This Journalism/Photo-Journalism course is a full year course that will create the monthly Blue and Gold Insider, the Yearbook, and Student Column for the local newspaper while generating updates for Marian social media. Students will be introduced to the evolving balance between print and online news and ways they can complement each other to report different kinds of news and stories.

# Foreign Language Department

## 315 H Spanish I (1 Cr.)

#### Grades 9

Emphasis is given to the study of basic grammar and vocabulary plus the development of conversational skills. Students learn to read and to express themselves in writing. The course introduces students to the culture and civilizations of the Spanish-speaking world.

# 316 CP Spanish I (1 Cr.)

#### Grades 9

Emphasis is placed on the development of listening and speaking skills. Basic grammar and vocabulary are taught and reinforced through written practice. The course introduces the student to the culture and civilizations of the Spanish speaking world.

# 324 CP Language and Culture (1 Cr.)

## Grade 10

This world language course will provide an insight for understanding the Spanish and Latin American cultures and to help to develop sensitivity toward other ways of life and viewpoints different from the students' culture. This course will emphasize the Spanish culture, history, traditions, vocabulary, and geography. Minimal amount of grammar will be introduced. Several projects will be assigned in addition to tests and quizzes.

The members of the department will decide enrollment in this class.

# 325 H Spanish II (1 Cr.)

#### Grades 10

Students engage in conversations and written assignments in Spanish expressing their feelings, emotions, and exchange of ideas. Study of grammar and vocabulary is continued. Study of Hispanic culture continues with emphasis on native writers, artists, etc. The use of technology to teach the target language is enhanced.

Prerequisite: 85 in Honors Spanish I: 90 in CP Spanish I: approval of Spanish I teacher

## 326 CP Spanish II (1 Cr.)

#### Grades 10

Students engage in conversations and express themselves on a variety of topics in Spanish. The study of grammar and vocabulary is continued. Students interpret written and spoken Spanish and use technology to develop their language skills and cultural awareness of the Hispanic world. Study of Hispanic culture continues with emphasis on native writers, artists, and geography.

#### 331 H French III (1 Cr.) (Virtual)

#### Grades 11

French III builds upon what was presented in French I and II. Students will work with the French language through in-depth lessons, participate in thoughtful forum discussions, and learn to interpret and produce the language in both written and oral form. New verb tenses and grammar concepts are presented and students are challenged to write and speak on their own.

# 332 CP French III (1 Cr.) (Virtual)

#### Grade 11

The study of vocabulary and grammar is continued. More emphasis is placed on the development of writing and conversation skills. Students will be using the language to learn about history, art, literature, music, social concerns, and civic responsibilities.

# 335 H Spanish III (1 Cr.) (Virtual – TBA)

# Grades 11

Students acquire information and recognize the distinctive viewpoints that are available through the study of the language and it's culture. Students study the works of native Hispanic authors. Emphasis is placed on continuing the knowledge of the language, the correct use of grammar and oral communication skills using Internet sources and technology.

Prerequisite: 85 in Honors Spanish II; 90 in CP Spanish II; approval of Spanish II teacher

# 336 CP Spanish III (1 Cr.) (Virtual - TBA)

#### Grades 11

Students continue the study of grammar and vocabulary. There is an increased emphasis on the development of writing and conversation skills. Knowledge of the Hispanic world is expanded through the use of technology and Internet sources.

Prerequisite for Spanish III: approval of Spanish III teacher

# Foreign Language Department (continued)

# 341 H French IV (1 Cr.) (Virtual)

#### Grade 12

Students continue to increase their proficiency in the basic language skills of listening, speaking, reading, and writing through intensified review of grammar and vocabulary and the continued development of writing skills. Literary classics are read and discussed. French books, magazines, newspaper, and Internet sources are used to continue the study of French civilization and culture.

# 351 H Spanish IV (1 Cr.) (Virtual)

#### Grade 12

Students continue to increase proficiency in the basic language skills and in the knowledge of Hispanic culture and civilization. An intensified review of grammar, writing original paragraphs, and the study of vocabulary are emphasized. Reading selected articles from Hispanic newspapers and magazines plus the use of Internet sources increase student awareness of current events and contemporary issues in the Hispanic world. Movies and videos from Spain, Latin America, and the United States are shown to supplement the textbook and to encourage class conversation in Spanish. Reading the novel El Cid in Spanish is required to complete the course.

# Mathematics Department

For all Freshmen: Placement test, standardized testing, and prior scores will determine placement in Math classes.

# 402 CP Algebra I (1 Cr.)

#### Grade 9

This course helps students develop a solid foundation in basic algebra skills and concepts. It challenges students to develop their mathematic ability through problem solving strategies, critical thinking, and reasoning activities. Topics include real numbers, algebraic equations with one and two variables, inequalities, polynomials, relations/functions and variation, radicals, quadratic equations, an introduction to statistics and probability, and graphing linear equations. *A calculator is required.* 

#### 411 H Algebra II (1 Cr.)

#### Grade 9

This course is designed to help students become independent thinkers. It is an in-depth study of the concepts of equalities and inequalities, linear equations and functions, polynomials, rational expressions, complex numbers, quadratic equations, exponential and logarithmic functions, probability and statistics, and trigonometry. Students will expand their skills to prepare for higher level mathematics.

A graphing calculator is required.

#### 412 CP Algebra II (1 Cr.)

#### Grades 9 or 11

The goal of this course is to build a solid foundation of algebraic skills and concepts that can be applied in a systematic manner to solve problems. Concepts presented include real numbers, equations, inequalities, functions and their graphs, polynomials, rational expressions, complex numbers, trigonometric functions, and probability and statistics. At the end of each section, skills are applied to concepts in the real world and related disciplines. *A graphing calculator is required.* 

#### 414 Algebra II (1 Cr.)

#### Grades 9

This course builds on the foundation developed in the basic algebra course. Emphasis is placed on the study of real numbers, solving equations, functions and their graphs, probability and statistics, and rational expressions. Students will solve problems analytically and support the solutions graphically. Concepts are utilized that demonstrate that algebra has a relevant connection to students' daily lives. A graphing calculator is required.

#### 421 H Geometry (1 Cr.)

#### Grade 10

This course includes plane, solid, transformational, and coordinate geometry with particular attention given to lines, planes, angles, polygons, circles, and geometric solids with applications of their related concepts to problem solving and real life situations. Emphasis is placed on inductive and deductive reasoning to complete proofs to develop a sequential manner of applying definitions, postulates, and theorems.

# A calculator and geometer are required.

Prerequisite: 85 in Honors Algebra II; 93 in CP Algebra II; Department approval

# 422 CP Geometry (1 Cr.)

#### Grade 10

This course provides students with an exposure to plane, coordinate, transformational, and spherical geometry. Students will explore basic geometric figures focusing on the properties of sides, angles, triangles, polygons, circles, and three dimensional solids. The concepts will be applied to various disciplines and careers. Students are introduced to inductive and deductive reasoning, problem solving, geometric probability, coordinate geometry, and practical applications. *A calculator and geometer are required.* 

# 424 Geometry (1 Cr.)

# Grade 10

This course provides the student with knowledge of the basic foundations of plane geometry. Emphasis is placed on the study of basic geometric figures with definitions, theorems, transformations, problem solving strategies, and calculator activities. The concepts of perimeter, area, sides and angles as related to polygons and circles will allow students to experience real life situations in various disciplines and careers. *A calculator and geometer are required.* 

# Mathematics Department (continued)

# 220 Standardized Test Prep Course (STPC) (.125 Cr.)

Grade 10

This course, being offered by the Math and English Departments, will help students develop the skills and test taking strategies needed to prepare for standardized testing, focusing on the PSAT and SAT tests. A calculator will be required for the Math classroom days. *All sophomores are required to take this course.* 

# 431 H Pre-Calculus (1 Cr.)

Grade 11

This course balances the algebraic, numerical, graphical, and verbal methods of representing problems and allows students to encounter ideas that foreshadow calculus. Throughout the course explorations provide students with critical thinking and problem-solving skills. This course also covers functions and graphs; polynomial, power and rational functions; exponential, logistic, and logarithmic functions; trigonometric functions; analytic trigonometry; applications of trigonometry; derivatives; and probability and statistics. A graphing calculator is required. Prerequisite: 85 in Honors Algebra II; 93 in CP Algebra II; Department Approval

# 432 CP Pre-Calculus (1 Cr.)

#### Grades 11 and 12

This course is designed to develop techniques to represent real world problems as mathematical models. Students learn to communicate mathematically, improve critical thinking skills, connect and integrate mathematics in real-life situations, and use technology to enhance their understanding of mathematics. Topics include functions and graphs, probability and statistics, applications of trigonometric functions, polynomial equations, exponential and logarithmic functions. A graphing calculator is required.

Prerequisites: successful completion of Algebra II

# 441 H Calculus (1 Cr.) (Dual Enrollment)

#### Grade 12

This challenging course brings students to an understanding of the structure of mathematics and the real number system. The course is invaluable to students who plan to major in math or science-related fields in college. The topics considered are polynomials, exponential, logarithmic, and trigonometric functions. Students also study advanced graphing, limits, derivatives, and integrals. Applications relate to the physical sciences and engineering, business, economics, and the life sciences. This course may be taken as a dual enrollment course with LCCC. Students must meet LCCC requirements to qualify. A fee is required to register at LCCC. A graphing calculator is required.

Prerequisites: 85 in Honors Pre-Calculus; 93 in CP Pre-Calculus; Department approval

#### 442 CP Calculus (1 Cr.)

Grade 12

This course is designed to build on skills introduced in the Pre-Calculus course. The topics considered are limits, derivatives of a polynomial, rational, logarithmic and exponential functions, integrals, graphing and applications of these topics. Applications include business, economics, life sciences, and general interest. *A graphing calculator is required.* 

Prerequisites: successful completion of Pre-Calculus; Department approval

# 444 CP Math and Reasoning Applications (1 Cr.) Grades 11 and 12

This course includes inductive and deductive reasoning, estimation, mathematical models, problem solving, set operations, Venn Diagrams, survey problems, arguments and truth tables, number bases in positional systems and computations, Investment topics and strategies, cost of home ownership, voting methods, apportionment methods, statistical study.

#### A calculator is required.

Prerequisites: successful completion of Algebra II; Department approval

# 451 AP Calculus (1 Cr.) (Dual Enrollment)

#### Grade 12

Senior students who have demonstrated the self-motivation necessary to succeed in challenging courses, and who have department approval are eligible for this course. Following the curriculum prescribed by the College Board, the course includes elementary functions, limits, derivatives and their applications, antiderivatives, techniques of integration, the definite integral, and applications of the integral. Students approved for this course are required to take the AP Calculus exam. Satisfactory grades in this exam may qualify students to receive college credit for a semester course and to receive advanced placement in college. This course may be taken as a dual enrollment course with LCCC. Students must meet LCCC requirements to qualify. A fee is required to register at LCCC. A graphing calculator is required. The College Board exacts a fee for the exam of approximately \$95.

Prerequisite: A qualifying PSAT or SAT score; Department approval

Mathematics Department (continued)

453 H Introduction to Probability and Statistics (.5 Cr)

Grade 12

Dual Credit offered with LCCC - LCCC requirements must be met. If taking this course for credit a fee is involved.

This course is for students who plan to enter a profession where measurements and predictions are made. Topics include tabulation of data, measures of central tendency and dispersion, sampling, types of distribution, probability, hypothesis-testing, and elementary aspects of correlation. The course may be taken by Marian students as an elective and not as a credited course with LCCC. All students planning to take this course for credit must take a placement test administered by LCCC. For credit through LCCC, a student must meet the eligibility requirements set forth by Academic Services of LCCC for acceptance into the program. A graphing calculator is required.

Prerequisites: A qualifying PSAT or SAT score; Department approval

454 CP College Algebra (1Cr.)

Grade 12

Dual Credit offered with LCCC - LCCC requirements must be met. If taking this course for credit a fee is involved.

This course is designed for students planning on continuing their education in a non-mathematical/non-science field. It will build on Algebra skills and include a comprehensive treatment of topics needed for the mathematics placement test for college and a basic college mathematics course required for all four-year programs. The course balances theory, application, modeling and drill, covering a wide variety of disciplines.

A graphing calculator is required.

Prerequisite: Successful completion of Pre-Calculus; department approval

# Science Department

# 511 H Biology I (1 Cr.)

#### Grade 9

This course is designed for the above average student and covers an in-depth sequence of topics including the diversity of life, heredity and genetics, cellular anatomy and physiology, and kingdom classification. Along with other laboratory activities, dissection of various specimens will be performed.

#### 512 CP Biology (1 Cr.)

#### Grade 9

This course presents a general survey of biological topics including the diversity of life, heredity and genetics, cellular anatomy and physiology, and kingdom classification. Along with other laboratory activities, dissection of various specimens will be performed in class.

# 521 H Physical Science (1 Cr.)

#### Grade 10

This course introduces and explores many scientific principles that students will encounter in future science courses. A handson approach is utilized to demonstrate and explain topics involving energy, matter, motion, light and sound, as well as other topics in chemistry and physics. Students will be challenged with problem-solving techniques and critical thinking application.

90 in Honors Biology and Honors Math; 93 in CP Biology and Math; Department Approval

# 522 CP Physical Science (1 Cr.)

#### Grade 10

This course is an introduction to the study of matter and energy with an emphasis on everyday application of physical laws. Topics include matter, energy, motion, sound and light. Student involvement in classroom demonstrations and discussions are encouraged.

#### 531 H Chemistry I (1 Cr.)

#### Grade 11

This course is designed to introduce students to the science that deals with the composition, structure, and properties of substances, and of the transformations that these substances undergo. This is a college level chemistry class with problems and labs that reflect that. Students learn the use of the metric system, basic lab equipment and techniques, and laboratory safety methods.

Prerequisites: 90 in Honors Physical Science and Honors Math; 93 in CP Physical Science and CP Math

# 532 CP Chemistry I (1 Cr.)

#### Grade 11

This course is designed to introduce students to the science that deals with the composition, structure, and properties of substances, and of the transformations that these substances undergo. Students learn the use of the metric system, basic lab equipment and techniques, and laboratory safety methods.

# 534 Chemistry

#### Grade 11

This course is designed to introduce the student to chemical principles. Students learn the theory behind chemical principles, and application of said principles. Basic math skills are required. The course concentrates on the theory as opposed to the math but some is required. Students will also learn the metric system and how to use lab equipment incorporating lab safety.

# 541 H Physics (1 Cr.) (VIRTUAL)

# Grade 12

**First Semester** - This part of the course delves into the interactions of matter and energy, from the subatomic level of quarks and leptons to the astronomical level of the Big Bang and black holes. The first part of the course focuses on the ordinary interactions seen in our everyday world, including Newton's Laws. This course examines these topics in an in-depth manner applying quantitative methods and analyzing the implications of physical forces.

**Second Semester-** This part of the course investigates the energy of waves and their fields, electromagnetism, nuclear reactions and subatomic physics. The course takes you into the world of the very small to see how physicists discovered that the laws that govern tiny things explain how larger masses act while making connections to the everyday world.

Prerequisites: 87 in Honors Chemistry; 87 in Honors Math; 93 in CP Chemistry and Math; Department

# Science Department (continued)

# 542 CP Physics (1 Cr.) (VIRTUAL)

#### Grade 12

This courses covers a broad knowledge base including Newtonian laws of mechanics, gravitation, vectors, basic trigonometry, forces, motion, acceleration, energy, heat, and waves. The student will keep a reflective journal in which research and investigations will be included to enrich the topics covered. The student will also have the opportunity to locate current news articles that reflect physics in everyday life as it applies to the concepts presented.

#### 545 H Anatomy and Physiology (1 Cr.)

#### Grade 12

This course is designed for students interested in a medical/health related career and examines the interrelationship between human anatomy and physiology. Emphasis is placed on terminology, the study of cells and some of their processes including protein synthesis, tissues, and the cardiovascular system. Examination of the skeletal and muscular systems is supplemented with a cat dissection in the second semester. Additional supplements include videoconferences of an autopsy, live knee replacement and a kidney transplant.

Prerequisites: 90 in Honors Biology; 93 in CP Biology; Teacher approval

#### 546 CP Biology II (1 Cr.)

#### Grade 12

This course is designed for students interested in general biology. It is a continuation of Biology I. Topics includes all the systems of the human body and disease control. *Approval of Biology I teacher is required.* 

#### 547 H Organic Chemistry (1 Cr.)

#### Grade 12

This course, a survey course of general organic chemistry principles, will cover the nomenclature and reactions of all the major kinds of organic molecules, from Alkanes to Polymers. The last part of the course will focus on biochemistry.

Prerequisites: 87 in Honors Chemistry; 93 in Regular Chemistry; approval of Chemistry I teacher

# 922 CP STEM (.5)

#### Grade 9 and 10

This is a semester elective for students to be introduced to basic STEM projects working individually and collaboratively gaining "hand-on" experiences. This course is designed to enhance individual leaning styles. This course may be scheduled in place of an APP – Academic Prep Period.

#### 932 CP STEM (1 Cr.) Grade 11 or 12

In this year-long course, students will be fully engaged in in-depth projects working individually and collaboratively in a variety of STEM project experiences which focus on "hands-on" learning. They will participate in activities such as building and engineering, introductory coding and programming, designing and testing drones and utilizing 3D printing technology. This course is designed to be a student centered experience to enhance individual learning styles through self-discovery. Students will be expected to complete a portfolio and website of their experience.

# 942 CP STEM (.5 Cr.) Grade 11 or 12

In this semester course, students will work on both individual and collaborative "hands-on" projects teaching them the importance of STEM in the 21st century. They will participate in activities such as building and engineering, introductory coding and programming, designing and testing drones and utilizing 3D printing technology. This course is a compressed course designed to be a student centered experience to enhance individual learning styles through self-discovery. Students will be expected to complete a portfolio of their projects.

# Social Studies Department

#### 611 H American Cultures (1 Cr.)

#### Grade 9

This course is an in-depth evaluation of the history and development of the nation. It examines the period of early exploration, colonial times, links to and freedom from Great Britain, Sectionalism, and the Civil War and Reconstruction eras. Topics include major political, economic, social, and foreign problems that faced the United States from pre-Columbian time to the 1900's. Students are required to write short papers, participate in class discussions, evaluate printed materials characteristic of the era, and demonstrate a working knowledge of events that contribute to understanding our modern society. Emphasis is placed on critical thinking skills.

## 612 CP American Cultures (1 Cr.)

#### Grade 9

The purpose of this course is to give students an understanding of the nation's social and economic growth, the development of political equality, the Intellectual basis of American life, and sectional differences in the United States from pre-Columbian time to the 1900's. Emphasis is placed on critical thinking skills.

#### 621 H World Cultures (1 Cr.)

#### Grade 10

This course is an in-depth study of the development of Western Civilization. Topics include the cultural, historical, social, and geographical backgrounds of these people and their influence on the development of Western Civilization.

Civilizations of ancient man and the effects of the Scientific, Industrial, and Social Revolutions on the development of Western Culture are discussed. Students are required to write short papers, participate in class discussions, evaluate printed materials and various media, and to evaluate current event topics for an understanding of modern society.

Prerequisites: 85 in Honors American Cultures: 93 in Regular American Cultures: Department approval

#### 622 CP World Cultures (1 Cr.)

#### Grade 10

This course aims to develop an understanding of the attitudes, problems, and culture of modern society. The study includes the development of the civilization of man, the formation of the first true civilization, the great cultures of ancient man and their influence on modern society, and the effect of the Scientific, Industrial, and Social Revolutions.

# 631 H 20th Century America and Beyond (1 Cr.) Grade 11

This course provides students with an in-depth study of the United States in the 20th Century. Emphasis is placed on the development of the political process, involvement in World War I and II, the 20's, causes and consequences of the Depression, Korea, Vietnam, and the 60's. Independent assignments will be given throughout the year.

Prerequisites: 85 in Honors World Cultures; 93 in Regular World Cultures; Department approval

# 632 CP 20th Century America and Beyond (1 Cr.) Grade 11

This course provides students with an in-depth study of the United States in the 20th Century. Emphasis is placed on the development of the political process, involvement in World War I and II, the 20's, causes and consequences of the depression, Korea, Vietnam, and the 60's.

#### 641 H U.S. Government (1 Cr.)

#### Grade 12

The U.S. Government course will engage students four major areas. Included will be the U.S. Governmental system, Economics, the Judicial System, and Political Science. U.S. Government will include an in-depth study of the Federal System and the branches of Government and a students' role in the government. Economics will include and introduction to both Micro and Macro Economics and the organization and decision making process in the economy system. Students will be expected to apply the principals of economics to everyday life. The study of the Judicial System will include the national, state and local systems emphasizing the Supreme Court and cases throughout history local to Pennsylvania. Political Science will be addressed by a focus on citizenship and involvement in political parties, campaigning, elections, socialization and the role the media plays in these areas. All sections will include a focus on current events which is essential to understanding.

Assessments for the Honors Course will be more in-depth and projects will be more challenging.

Prerequisites: 85 in Honors 20th Century; 93 in R 20th Century; Department approval.

# Social Studies Department (continued)

#### 642 CP U.S. Government (1 Cr.)

#### Grade 12

The U.S. Government course will engage students four major areas. Included will be the U.S. Governmental system, Economics, the Judicial System, and Political Science. U.S. Government will include an in-depth study of the Federal System and the branches of Government and a students' role in the government. Economics will include and introduction to both Micro and Macro Economics and the organization and decision making process in the economy system. Students will be expected to apply the principals of economics to everyday life. The study of the Judicial System will include the national, state and local systems emphasizing the Supreme Court and cases throughout history local to Pennsylvania. Political Science will be addressed by a focus on citizenship and involvement in political parties, campaigning, elections, socialization and the role the media plays in these areas. All sections will include a focus on current events which is essential to understanding.

#### 636 CP Sociology (.5 Cr.)

#### Grades 11 and 12

This course offers a study of the structures of society and the role they play in the way people live and act. Students will explore, discuss and analyze culture, roles in society, social norms, as well as social structures and institutions and social problems today. The class encourages participation of students through class discussion.

#### 638 CP History of Women in America (1 Cr.)

#### Grades 11 and 12

This year-long course is a general introduction to the role and experiences of women in American history. It will examine broad themes from the Colonial Period to the present. While tracing larger trends and identifying common experiences, the course will pay close attention to the specific experiences of individual women. Evaluation in this course will be based primarily on projects and tests with specific *required readings* from the Internet. Class participation and group assignments will be major requirements of this course. Several short research assignments and one long term paper will be required in the course.

#### 639 CP The American Civil War (1 Cr.)

#### Grades 11 and 12

This course will summarize and present the major events and battles related to the Civil War in chronological order. It will set forth the major political issues and philosophies that set the stage for the Civil War, sustained the conflict, and continue to linger on to the this day. It will discuss life on the home front and its effects on today's society. Finally, the reconstruction of the country will be discussed and it's after effects.

#### 646 CP World Geography (.5 Cr.)

#### Grades 11 and 12

This semester course will enable students to examine all aspects of geography, providing students with a concrete understanding of major geographic locations, world economic activities, historical and cultural aspects of societies, and an understanding of geographic tools and themes. This material will be explored using lesson presentations and the student text as well as supplemental readings, map studies, and current events.

#### 648 CP Pennsylvania Heritage (.5 Cr.)

#### Grades 11 and 12

In this course, students explore historic, geographic, economic, and political aspects of the Commonwealth of Pennsylvania. Emphasis is placed on Schuylkill, Carbon, and Luzerne counties, and the "Coal Region." Map skills, current events, and appreciation of Pennsylvania's role in the United States are incorporated. Materials include a text, the Pennsylvania Manual, various magazines, and available literature. Multi-media resources are widely implemented into the curriculum. Course enrollment is limited to 15 students.

# Visual and Performing Arts Department

#### 701 Music Performance BAND and/or CHORUS

#### Grades 9 to 12

This course number is used to choose Concert Band and/or Chorus. New for the 2019-2020 school year, Band and Chorus will be offered during the school day in a specific period that will change day to day between Chorus and Band. After the schedule is established students will be assigned course codes for the ensemble(s) they are a participant.

#### 710 Music Appreciation (.25 Cr.)

#### Grade 9

Beginning with basic fundamentals, this class is designed to allow students to develop the necessary skill to listen carefully, identify the building blocks of all music, and understand how music is related to human culture today. Basic notation, instrument families, various music styles and genres, Western and non-Western music, and time periods of music will be discussed. *All freshmen are required to take this course* 

# 712 Music Sectionals (.25 Cr.) Grades 9 to 12

This is a sectional/lesson that needs to be scheduled with the Music Director at the beginning of the school year. A certain number of meeting times and assignments need to be completed to acquire credit for this course.

#### 716 Choral Music (.5 Cr.)

#### Grades 9 to 12

This year long course, which focuses on proper vocal techniques, introduces students to a variety of musical styles culminating with a formal performance. Students gain a better understanding of basic sight-singing techniques, warm ups, stretches, proper singing posture, and vocal accuracy. This course has 3 concert requirements. No previous vocal experience is necessary.

#### 718 Marching Band (.5 Cr.)

#### Grade 9 to 12

Starting in early August with band camp in August and ending in early November, this course allows any student the opportunity to participate in a marching band. This class meets during the Music Performance period and Tuesdays after school from 3:00 to 5:00 PM. Students who do not play an instrument will have the opportunity to participate in either the honor guard or the silk section. Students will learn to cooperate with one another and to work as a team. They will have a chance to play different styles of music and become overall better musicians.

# 726 Concert Band (.5 Cr.)

#### Grades 9 to 12

This group performs three times during the school year, at Christmas, in the spring, and at graduation. The class will help students to play as a group and to become better overall musicians. Anyone interested in playing his or her instrument is welcome.

# 734 CP Music in Film & Media (.5 Cr.)

#### Grades 11 and 12

This course is designed to help students to become aware of the role that music plays in a film and other media. Students will be expected to analyze and describe mood, style, and intention using proper industry terminology. Students will learn about the history of the music in film and the technologies used in the past as well as modern devices.

# 736 Music Theory (.5 Cr.)

#### Grades 11 and 12

This course is offered for any student who would like a better understanding of the theory behind music. The class is for both intermediate and advanced musicians. This class is intended to make the student an all-around better musician. *Department approval is needed.* 

# 738 CP Introductory Art (.5 Cr.)

#### Grades 11 and 12

This semester course presents a diverse program for beginners. It combines developing basic skills and creative thinking along with two-dimensional experiences with pen and ink. As part of the course requirements the students will be responsible for the senior play scenery.

#### 746 CP Introduction to Drama (.5 Cr.)

#### Grades 11 and 12

This course will introduce the dramatic arts to students who will gain a greater understanding of drama—past, present, and future as they grow to appreciate the arts. *The course will* supply the student with a background of theatre history, musical theatre, acting, and hands-on activities. Students will be encouraged to participate in the school theatre and choral productions.

# 748 CP Theatre Production (.5 Cr.)

# Grades 11 and 12

This course will explore all areas of theatre production including interpreting drama and fundamentals of producing a play from beginning to end. Students will engage in hands-on activities and be encouraged to participate in all aspects of school theatre and choral productions. As part of the course requirements, students will help with the senior play in any capacity deemed appropriate. *Introduction to Drama is not required to take this course.* 

# Required Electives

# 815-845 Physical Education (.25 Cr.)

#### Grade 9-12

Through a variety of indoor and outdoor games, sports, and other athletic activities, students are provided with experiences which promote physical fitness, growth, and development.

#### 110 PASS - Pathway to Academic Student Success (.25 Cr.)

#### Grade 9

This quarter course is designed to provide students with A. an understanding of Google Drive, including Docs, Sheets, Slides, Forms, Drawings, and Sites B. introduce the correct planning process C. communicate skills to ensure success throughout all of high school, strengthen study skills, and understand academic assistance. *All freshmen are required to take this course.* 

#### 210 Research & Writing Skills (.25 Cr.)

#### Grade 9

This quarter course introduces students to the basic types of skills needed to research information in most reference materials including the state research data base, POWER LIBRARY. The students will then produce a formal research paper.

All freshmen are required to take this course.

#### 710 Music Appreciation (.25 Cr.)

#### Grade 9

Beginning with basic fundamentals, this class is designed to allow students to develop the necessary skill to listen carefully, identify the building blocks of all music, and understand how music is related to human culture today. Basic notation, instrument families, various music styles and genres, Western and non-Western music, and time periods of music will be discussed. *All freshmen are required to take this course* 

#### 220 Standardized Test Prep Course (STPC) (.125 Cr.)

#### Grade 10

This course, being offered by the Math and English Departments, will help students develop the skills and test taking strategies needed to prepare for standardized testing, focusing on the PSAT and SAT tests. A calculator will be required for the Math classroom days. *All sophomores are required to take this course.* 

#### 820 Drivers' Education Theory (.25 Cr.)

# Grade 10

This course consists of 30 hours of classroom theory according to the PA Dept of Ed. The content will provide students with the knowledge and skills that should enable them to become safe and informed members of the Highway Transportation System. The attainment of this expectation will allow students to safely use this system with greater confidence and higher skill levels. Students will receive a certificate of participation if they meet the classroom requirements.

All Sophomores are required to take this course.

# 823 Health (Boys) (.25 Cr.) 824 Health (Girls) (.25 Cr.)

#### Grade 10

This course covers the topics of general health, mental health, stress, stages within our life cycle, the reproductive system, communicable diseases with an emphasis on sexually transmitted diseases, nutrition, tobacco, alcohol, and illegal drugs.

#### 230 Speech Communication (.25 Cr.)

#### Grade 11

This course will stress the impact of communication on one's life and the significance of one's role as a communicator. Speech communication will help students develop their listening and speaking skills by introducing them to communication theory, a variety of public-speaking categories, and peer critiques. *All Juniors are required to take this course.* 

# 130 Career and Financial Management (.5 Cr.)

#### Grade 11

This course will offer students an opportunity to evaluate themselves in decisions regarding life after high school. Students will evaluate the cost of planned career goals and cost of education to pursue it. Job applications, resumes and interviewing will be reviewed along with payroll and taxes. Bank services, savings and investment opportunities, budgeting, proper credit usage and available insurances for health, auto, life, etc. will be reviewed.

All Juniors are required to take this course.

# 240 Research Paper (.25 Cr)

#### Grade 12

Through a guided, systematic approach to research and writing, the student gains the skills and hands-on experience necessary to produce a five-to-seven page research paper. This is accomplished by using library research resources and writing a research paper in MLA and APA formats, and a designated research format appropriately. In addition, concepts such as narrowing a topic, developing a thesis statement, collecting and documenting sources, and taking notes effectively will be addressed. *All seniors will be required to take this course.* 

# General Electives

# **Full Year Electives**

#### 132 CP Introduction to Business (1 Cr.)

#### Grades 11 and 12

This course introduces students to the business and economy which they face every day. All jobs and careers incorporate important business concepts. Skills that will help people to work with others in a professional manner, manage and organize their work, and manage other employees, will be taught. Areas of concentration include various forms of business ownership, business ethics, management, human resources, marketing and advertising products and finance. This class is geared to the student considering any degreed business program including international business, accounting, business administration, and finance.

# 134 CP Accounting I (1 Cr.)

#### Grades 11-12

The aim of this course is to provide students with an exposure to the basic skills needed to provide accounting for a sole proprietorship and corporation. Students with an interest in pursuing a career in business or accounting will be taught to record transactions in journals, post to ledgers, prepare financial statements, write and endorse checks, and prepare bank reconciliations. The calculation and recording of a company's payroll will also be covered. On-line working papers are used enabling each student to access assignments from any computer.

# 144 CP Accounting II (1 Cr.)

#### Grade 12

This course is an extension of the principles acquired in Accounting I. It is a valuable course for the college-bound student seeking a business, financial, or accounting degree. A corporate business environment is used to teach the recording of uncollectible accounts, inventory valuation, accruals, deferrals, and depreciation of assets. Specialized journals, ledgers, and financial statements are taught using working papers and an automated accounting package.

Prerequisite: Successful completion of Accounting I

#### 246 CP Journalism/Photo-Journalism (1 Cr.)

#### Grade 12

This Journalism/Photo-Journalism course is a full year course that will create the monthly Blue and Gold Insider, the Yearbook, and Student Column for the local newspaper while generating updates for Marian social media. Students will be introduced to the evolving balance between print and online news and ways they can complement each other to report different kinds of news and stories.

# 331 H French III (1 Cr.) (Virtual)

#### Grades 11

French III builds upon what was presented in French I and II. Students will work with the French language through in-depth lessons, participate in thoughtful forum discussions, and learn to interpret and produce the language in both written and oral form. New verb tenses and grammar concepts are presented and students are challenged to write and speak on their own.

# 332 CP French III (1 Cr.) (Virtual)

#### Grade 11

The study of vocabulary and grammar is continued. More emphasis is placed on the development of writing and conversation skills. Students will be using the language to learn about history, art, literature, music, social concerns, and civic responsibilities.

#### 335 H Spanish III (1 Cr.) (Virtual – TBA)

#### Grades 11

Students acquire information and recognize the distinctive viewpoints that are available through the study of the language and it's culture. Students study the works of native Hispanic authors. Emphasis is placed on continuing the knowledge of the language, the correct use of grammar and oral communication skills using Internet sources and technology.

Prerequisite: 85 in Honors Spanish II; 90 in CP Spanish II; approval of Spanish II teacher

# 336 CP Spanish III (1 Cr.) (Virtual – TBA)

# Grades 11

Students continue the study of grammar and vocabulary. There is an increased emphasis on the development of writing and conversation skills. Knowledge of the Hispanic world is expanded through the use of technology and Internet sources.

Prerequisite for Spanish III: approval of Spanish III teacher

#### 341 H French IV (1 Cr.) (Virtual)

#### Grade 12

Students continue to increase their proficiency in the basic language skills of listening, speaking, reading, and writing through intensified review of grammar and vocabulary and the continued development of writing skills. Literary classics are read and discussed. French books, magazines, newspaper, and Internet sources are used to continue the study of French civilization and culture.

Prerequisite: 80 in Honors French III; 85 in CP French III; approval of French III teacher

#### 351 H Spanish IV (Virtual) (1 Cr.)

#### Grade 12

Students continue to increase proficiency in the basic language skills and in the knowledge of Hispanic culture and civilization. An intensified review of grammar, writing original paragraphs, and the study of vocabulary are emphasized. Reading selected articles from Hispanic newspapers and magazines plus the use of Internet sources increase student awareness of current events and contemporary issues in the Hispanic world. Movies and videos from Spain, Latin America, and the United States are shown to supplement the textbook and to encourage class conversation in Spanish. Reading the novel El Cid in Spanish is required to complete the course. *Prerequisite – successful completion of Spanish III H.* 

#### 441 H Calculus (1 Cr.) Dual Enrollment

#### Grade 12

This challenging course brings students to an understanding of the structure of mathematics and the real number system. The course is invaluable to students who plan to major in math or science-related fields in college. The topics considered are polynomials, exponential, logarithmic, and trigonometric functions. Students also study advanced graphing, limits, derivatives, and integrals. Applications relate to the physical sciences and engineering, business, economics, and the life sciences. A graphing calculator is required.

Prerequisites: 85 in Honors Pre-Calculus; 93 in CP Pre-Calculus; Department approval

# 442 CP Calculus (1 Cr.)

#### Grade 12

This course is designed to build on skills introduced in the Pre-Calculus course. The topics considered are limits, derivatives of a polynomial, rational, logarithmic and exponential functions, integrals, graphing and applications of these topics. Applications include business, economics, life sciences, and general interest. *A graphing calculator is required.* 

Prerequisites: successful completion of Pre-Calculus; Department approval

# 444 CP Math and Reasoning Applications (1 Cr.)

#### Grades 11 & 12

This course includes inductive and deductive reasoning, estimation, mathematical models, problem solving, set operations, Venn Diagrams, survey problems, arguments and truth tables, number bases in positional systems and computations, Investment topics and strategies, cost of home ownership, voting methods, apportionment methods, statistical study.

A calculator is required.

Prerequisites: successful completion of Algebra II; Department approval

# 451 AP Calculus (1 Cr.) Dual Enrollment

#### Grade 12

Senior students who have demonstrated the self-motivation necessary to succeed in challenging courses, and who have department approval are eligible for this course. Following the curriculum prescribed by the College Board, the course includes elementary functions, limits, derivatives and their applications, antiderivatives, techniques of integration, the definite integral, and applications of the integral. Students approved for this course are required to take the AP Calculus exam. Satisfactory grades in this exam may qualify students to receive college credit for a semester course and to receive advanced placement in college. A graphing calculator is required. The College Board exacts a fee for the exam of approximately \$95.

Prerequisite: A qualifying PSAT or SAT score: Department approval

# 454 CP College Algebra (1Cr.) Dual Enrollment

#### Grade 12

This course is designed for students planning on continuing their education in a non-mathematical/non-science field. It will build on Algebra skills and include a comprehensive treatment of topics needed for the mathematics placement test for college and a basic college mathematics course required for all four-year programs. The course balances theory, application, modeling and drill, covering a wide variety of disciplines.

# A graphing calculator is required.

Prerequisite: Successful completion of Pre-Calculus; 93 in Math Applications; department approval

#### 541 H Physics (1 Cr.) Virtual

#### Grade 12

*First Semester* - This part of the course delves into the interactions of matter and energy, from the subatomic level of quarks and leptons to the astronomical level of the Big Bang and black holes. The first part of the course focuses on the ordinary interactions seen in our everyday world, including Newton's Laws. This course examines these topics in an in-depth manner applying quantitative methods and analyzing the implications of physical forces.

**Second Semester-** This part of the course investigates the energy of waves and their fields, electromagnetism, nuclear reactions and subatomic physics. The course takes you into the world of the very small to see how physicists discovered that the laws that govern tiny things explain how larger masses act while making connections to the everyday world.

Prerequisites: 87 in Honors Chemistry: 87 in Honors Math: 93 in Regular Chemistry and Math: Department approval

#### 542 CP Physics (1 Cr.) Virtual

#### Grade 12

This course covers a broad knowledge base including Newtonian laws of mechanics, gravitation, vectors, basic trigonometry, forces, motion, acceleration, energy, heat, and waves. The student will keep a reflective journal in which research and investigations will be included to enrich the topics covered. The student will also have the opportunity to locate current news articles that reflect physics in everyday life as it applies to the concepts presented.

# 545 H Anatomy and Physiology (1 Cr.)

#### Grade 12

This course is designed for students interested in a medical/health related career and examines the interrelationship between human anatomy and physiology. Emphasis is placed on terminology, the study of cells and some of their processes including protein synthesis, tissues, and the cardiovascular system. Examination of the skeletal and muscular systems is supplemented with a cat dissection in the second semester. Additional supplements include videoconferences of an autopsy, live knee replacement and a kidney transplant.

Prerequisites: 90 in Honors Biology; 95 in Regular Biology; department approval

# 546 CP Biology II (1 Cr.)

#### Grade 12

This course is designed for students interested in general biology; it is a continuation of Biology I. Topics includes all the systems of the human body and disease control. *Approval of Biology I teacher is required*.

#### 547 H Organic Chemistry (1 Cr.)

# Grade 12

This course, a survey course of general organic chemistry principles, will cover the nomenclature and reactions of all the major kinds of organic molecules, from Alkanes to Polymers. The last part of the course will focus on biochemistry.

Prerequisites: 87 in Honors Chemistry; 93 in Regular Chemistry; approval of Chemistry I teacher

#### 638 CP History of Women in America (1 Cr.)

#### Grades 11 and 12

This year-long course is a general introduction to the role and experiences of women in American history. It will examine broad themes from the Colonial Period to the present. While tracing larger trends and identifying common experiences, the course will pay close attention to the specific experiences of individual women. Evaluation in this course will be based primarily on projects and tests with specific *required readings* from the Internet. Class participation and group assignments will be major requirements of this course. Several short research assignments and one long term paper will be required in the course.

# 639 CP The American Civil War (1 Cr.)

# Grades 11 and 12

This course will summarize and present the major events and battles related to the Civil War in chronological order. It will set forth the major political issues and philosophies that set the stage for the Civil War, sustained the conflict, and continue to linger on to the this day. It will discuss life on the home front and its effects on today's society. Finally, the reconstruction of the country will be discussed and it's after effects.

# 932 CP STEM Virtual Engineering Lab (1 Cr.)

# Grade 11 or 12

In this year-long course, students will be fully engaged in in-depth projects working individually and collaboratively in a variety of STEM project experiences which focus on "hands-on" learning. They will participate in activities such as building and engineering, introductory coding and programming, designing and testing drones and utilizing 3D printing technology. This course is designed to be a student centered experience to enhance individual learning styles through self-discovery. Students will be expected to complete a portfolio and website of their experience.

# **Semester Electives**

#### 046 Global Ethics (.5 Cr.)

#### Grades 11 and 12

This one-semester course engages students to develop a clear understanding of moral ethics. Through the discovery of Catholic moral principles, students will be applying them to current world issues. Class discussions are a major focus of the course as well as developing a strong moral ethic for their lives. <u>Class is limited.</u>

#### 138 Desktop Publishing I (.5 Cr.)

#### Grades 11 and 12

In this semester course, students will use *Microsoft Publisher* and *Adobe Photoshop Elements* 12.0 to create school publications and projects. Students will demonstrate their ability to work independently and to produce high quality work that is properly constructed. Each student will develop a digital portfolio of his/her work. A \$10.00 lab fee is required.

Prerequisite: Department approval. Each class is limited to 15 students

#### 236 CP Introduction to Journalism (.5 Cr.)

#### Grade 11 or 12

This course will introduce students to the interview process, newswriting (both online and print), ethics (including libel and plagiarism) photography and stylebooks. This course is a prerequisite for Journalism/Photo-Journalism.

# 453 H Introduction to Probability and Statistics (.5 Cr)

#### Grade 12

Dual Credit offered with LCCC - LCCC requirements must be met. If taking this course for credit a fee is involved.

This course is for students who plan to enter a profession where measurements and predictions are made. Topics include tabulation of data, measures of central tendency and dispersion, sampling, types of distribution, probability, hypothesis-testing, and elementary aspects of correlation. The course may be taken by Marian students as an elective and not as a credited course with LCCC. All students planning to take this course for credit must take a placement test administered by LCCC. For credit through LCCC, a student must meet the eligibility requirements set forth by Academic Services of LCCC for acceptance into the program. A graphing calculator is required.

Prerequisites: A qualifying PSAT or SAT score; Department approval

# 648 CP Pennsylvania Heritage (.5 Cr.)

#### Grades 11 and 12

In this course, students explore historic, geographic, economic, and political aspects of the Commonwealth of Pennsylvania. Emphasis is placed on Schuylkill, Carbon, and Luzerne counties, and the "Coal Region." Map skills, current events, and appreciation of Pennsylvania's role in the United States are incorporated. Materials include a text, the Pennsylvania Manual, various magazines, and available literature. Multi-media resources are widely implemented into the curriculum. Course enrollment is limited to 15 students.

#### 646 CP World Geography (.5 Cr.)

#### Grades 11 and 12

This semester course will enable students to examine all aspects of geography, providing students with a concrete understanding of major geographic locations, world economic activities, historical and cultural aspects of societies, and an understanding of geographic tools and themes. This material will be explored using lesson presentations and the student text as well as supplemental readings, map studies, and current events.

# 636 CP Sociology (.5 Cr.)

#### Grades 11 and 12

This course offers a study of the structures of society and the role they play in the way people live and act. Students will explore, discuss and analyze culture, roles in society, social norms, as well as social structures and institutions and social problems today. The class encourages participation of students through class discussion.

Semester Electives (continued)

#### 734 CP Music in Film & Media (.5)

#### Grades 11 and 12

This course is designed to help students to become aware of the role that music plays in a film and other media. Students will be expected to analyze and describe mood, style, and intention using proper industry terminology. Students will learn about the history of the music in film and the technologies used in the past as well as modern devices.

# 736 Music Theory (.5 Cr.)

#### Grades 11 and 12

This course is offered for any student who would like a better understanding of the theory behind music. The class is for both intermediate and advanced musicians. This class is intended to make the student an all-around better musician. *Department approval is needed.* 

#### 738 CP Introductory Art (.5 Cr.)

#### Grades 11 and 12

This semester course presents a diverse program for beginners. It combines developing basic skills and creative thinking along with two-dimensional experiences with pen and ink, charcoal, and tempura painting. As part of the course requirements the students will be responsible for the senior play scenery.

# 746 CP Introduction to Drama (.5 Cr.)

#### Grades 11 and 12

This course will introduce the dramatic arts to students who will gain a greater understanding of drama—past, present, and future as they grow to appreciate the arts. *The course will* supply the student with a background of theatre history, musical theatre, acting, and hands-on activities. Students will be encouraged to participate in the school theatre and choral productions.

#### 748 CP Theatre Production (.5 Cr.)

#### Grades 11 and 12

This course will explore all areas of theatre production including interpreting drama and fundamentals of producing a play from beginning to end. Students will engage in hands-on activities and be encouraged to participate in all aspects of school theatre and choral productions. As part of the course requirements, students will help with the senior play in any capacity deemed appropriate. *Introduction to Drama is not required to take this course.* 

#### 922 CP STEM (.5)

#### Grade 9 and 10

This is a semester elective for students to be introduced to basic STEM projects working individually and collaboratively gaining "hand-on" experiences. This course is designed to enhance individual leaning styles. This course may be scheduled in place of an APP – Academic Prep Period.

# 942 CP STEM Virtual Engineering Lab (.5 Cr.)

# Grade 11 or 12

In this semester course, students will work on both individual and collaborative "hands-on" projects teaching them the importance of STEM in the  $21^{\rm st}$  century. They will participate in activities such as building and engineering, introductory coding and programming, designing and testing drones and utilizing 3D printing technology. This course is a compressed course designed to be a student centered experience to enhance individual learning styles through self-discovery. Students will be expected to complete a portfolio of their projects.

# **Vocational- Technical School Information**

The Vocational-Technical School is an extension of Marian Catholic High School for students in Schuylkill County or Hazleton School District. Students from Carbon County cannot participate in the Vo-Tech program. Disenrollment from Marian High School is necessary in order to enroll in the Public School. The Carbon County Career and Technical Institute is a comprehensive high school within itself.

The various programs offered are an integral part of the curriculum of Marian. Students who take the vocational-technical program continue to take their required academic subjects and physical education at Marian during one half of the school day and attend the Vocational-Technical School the other half day for their specialized program, with the exception of Schuylkill Co-Tech which is one half year over a full term.

Diplomas awarded at graduation are given only by Marian Catholic High School. The Vocational-Technical School does present a certificate to each graduate who has successfully met their standards. This certificate describes, for any future employer, the type and amount of instruction received by the student while enrolled at the Vocational-Technical School.

All Vo-Tech students must arrange their schedules with assistance from The Studies Director and the Guidance Counselor.

Course Offerings for Schuylkill County Vo-Tech as well as Hazleton Career Center can be found at the links featured below:

Schuylkill County Vo-Tech Hazleton Career Center

The following link is offered as a guideline to help plan for future education and/or careers.

**How to Choose High School Courses**