

**General Electives**  
**Full Year Electives**

**132 CP Introduction to Business via Entrepreneurship (1 Cr.)**

**Grades 11 and 12**

This course takes a look at starting your own business. Students will learn how to start, operate, and maintain a business encouraging creativity, innovation, critical thinking and problem solving. Areas of concentration include entrepreneurship characteristics, idea generation, forms of business ownership, budgeting and accounting, ethics, human resource management, and marketing. This class is a great start for anyone considering a business program at the post-secondary level.

**134 CP Accounting I (1 Cr.)**

**Grades 10, 11 or 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 11 or 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 accessible from any computer. 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.

**312 CP French I (1 Cr.)**

**Grades 11 or 12**

Emphasis is given to the study of basic grammar and vocabulary as learners interact and negotiate meaning in the spoken, signed, or written conversations to share information, reaction, feelings, and opinions. Students will learn to present information, concepts, and ideas to inform, explain, persuade, and narrate on a variety of topics. Acquire information and diverse perspectives in order to use the language to function in academic and career-related situations. Learners also access and evaluate information and diverse perspectives that are available through the language and its culture.

**334 CP World Diversity (1 Cr.)**

**Grade 11 & 12**

This world language humanities course will provide an insight for understanding the diversity and similarities of many cultures of our world. It is intended to raise students' sensitivity towards other ways of life and awareness of viewpoints different from the students' culture. Several projects will be assigned in addition to tests and quizzes.

**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 or 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, and 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 \$100.** Prerequisite: A qualifying PSAT or SAT score; Department approval

**541 H Physics (1 Cr.) Virtual****Grade 12**

This 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. In addition, 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, the cardiovascular system, and the skeletal and muscular systems. 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 include 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