

SCIENCE

<u>COURSE OFFERINGS</u>	<u>SEMESTERS</u>	<u>GRADE LEVEL</u>	<u>PAGE</u>
Physical Science	2	9	39
Biology	2	10	39
Chemistry I	2	11, 12	40
Anatomy & Physiology	2	11,12	40
Honors Chemistry II	2	12	40
Physics	2	12	41
Conceptual Chemistry	2	11, 12	41
Popular Science	1	11, 12	41
Forensic Science	1	11, 12	42
Astronomy	1	11, 12	42

****FEES SUBJECT TO CHANGE**

PHYSICAL SCIENCE - 201

Prerequisites: None

Length of Course: 2 semesters

Credit: 1

Course Fee: \$15.00

For: Grade 9 - Required

Description: This is an introductory science course covering a variety of topics. One semester each will be spent on chemistry and physics. Continuing themes in the class include scientific method, scientific thinking and technology in science. The course provides a foundation for all high school science courses.

BIOLOGY - 211

Prerequisites: None

Length of Course: 2 semesters

Credit: 1

Course Fee: \$23.00

For: Grades 10, 11, 12

Description: (Lab Science) this course is intended to give the student a general biological background so he/she can better appreciate and understand the living world. The course includes a progressive study of microorganisms through man, a study of the functions and structures of different life systems and an ecological study of plants and animals within their environment. Students will also dissect various specimens during lab.

CHEMISTRY I - 212

Prerequisites: "C" Average or better in Algebra I and Biology I

Length of Course: 2 semesters

Credit: 1

Course Fee: \$17.50

For: Grades 11, 12

Description: (Lab Science) This course is designed to introduce the student to the behavior of atoms through laboratory observation and to lay the groundwork for further scientific study. It is a comprehensive study in the basic structure of matter, chemical bonding, periodicity of the elements, mechanics of chemical reactions, and the concept of the mole. The student should come to understand why substances behave as they do. The objectives of the course are general enough to give the student a basic background in as many fields of endeavor as possible.

ANATOMY & PHYSIOLOGY - 214

Prerequisites: C or better in Biology and Chemistry; or C or better in Biology and permission of teacher if student is concurrently enrolling in Chemistry I

Length of Course: 2 semesters

Credit: 1

Course Fee: \$25.00

For: Grades 11, 12

Description: (Lab Science) This course will offer a detailed look at the composition and location of the structures of the human body as well as the processes that keep the body functioning. The body will be studied at both the microscopic and macroscopic level. Students will learn about the systems of the body individually as well as how they work together. Rabbit dissection is a mandatory part of the class.

HONORS CHEMISTRY II - 219

Prerequisites: B average or better in Chemistry I AND recommendation of Chemistry teacher

Length of Course: 2 semesters

Credit: 1

Course Fee: \$17.50

For: Grade 12

Description: (Lab Science) This course is designed to promote further exploration and inquiry into topics presented in Chemistry I. Chemical bonding, kinetics, and equilibrium will be studied in depth. Independent lab work will comprise a large portion of the class work. The coursework will be very demanding and will require a highly dedicated student.

Students enrolled in this class may apply to take the Advanced Placement examination if a written request is submitted to the guidance office. The cost of the exam shall be the student's responsibility. Upon notifying the guidance office of intent to test, students will be contacted by the guidance counselor regarding specific details and deadlines.

PHYSICS - 215

Prerequisites: Recommendation of chemistry teacher

Length of Course: 2 semesters

Credit: 1

Course Fee: None

For: Grade 12

Description: This course explores the world around us in the four basic areas: mechanics and heat; waves (sound/light); electricity; nuclear. It seeks relationships between the various facets of the observed behavior of nature. Experiments are designed so that the results can be interpreted and the experiment is incomplete unless analyzed. Any student with interest in further science training should consider this an integral part of his/her curriculum.

CONCEPTUAL CHEMISTRY - 207

Prerequisites: Physical Science, Biology

Length of Course: 2 semesters

Credit: 1

Course Fee: TBD

For: Grade 11, 12

Description: An alternative to the traditional chemistry course using a broader approach to the chemistry content. This course is designed to meet the third year science requirement. This course is not intended to be part of a college prep curriculum.

POPULAR SCIENCE – 208

This course not offered for 2011-2012

Prerequisites: Physical Science, Biology, & Chemistry/Conceptual Chemistry

Length of Course: 1 semester

Credit: 1/2

Course Fee: TBD

For: Grade 11, 12

Description: This course uses popular media (books, movies, television shows, etc) to explore a variety of scientific topics. A variety of experiments, projects, and assignments are used to complement each piece of media used in the classroom.

FORENSIC SCIENCE - 209

Prerequisites: Physical Science, Biology, & Chemistry/Conceptual Chemistry

Length of Course: 1 semester

Credit: 1/2

Course Fee: \$9.00

For: Grade 11, 12

Description: This course will look at the science behind solving a crime. Physics, chemistry, and biology skills will be utilized in this course. Scientific investigative skills, critical thinking, and analysis skills will be developed and utilized.

ASTRONOMY – 210

Prerequisites: Physical Science, Biology, & Chemistry/Conceptual Chemistry

Length of Course: 1 semester

Credit: 1/2

Course Fee: TBD

For: Grade 11, 12

Description: This course will look at energy and matter outside our own earth. The course will cover a broad scope of topics including the motion of the earth, moon, and sun through space, planets in our solar system, constellations, stellar life cycles, and galaxies.