SCIENCE

SCIENCE 9 **SCIENCES NATURELLES 9 (FI)**	**MSC--09** **FSCF-09**	

The Science 9 (Sciences naturelles 9) curriculum consists of four Big Ideas, each of which touches on one component of this course: Biology; Chemistry; Physics; and Earth Science. Curricular and core competencies will be addressed on an ongoing basis throughout the teaching of this course.

SCIENCE 10 **SCIENCES NATURELLES 10 (FI)**	**MSC--10** **FSCF-10**	

The Science 10 curriculum consists of four Big Ideas, each of which touches on one component of this course: Biology; Chemistry; Physics; and Space Science. Curricular and core competencies will be addressed on an ongoing basis throughout the teaching of this course.

LIFE SCIENCES 11	**MLFSC11**	

The Life Sciences 11 curriculum consists of three Big Ideas each of which touches on one component of this course: Cell Biology; Evolution; and Taxonomy. Laboratory activities occur throughout the course to develop practical skills. In addition to the lab activities, the online learning experience will include digital lessons, videos, animations, simulations, and an e-text. Curricular and core competencies will be addressed on an ongoing basis throughout the teaching of this course. This course is highly recommended for students planning to take Anatomy and Physiology 12.

CHEMISTRY 11	**MCH--11**	

Chemistry 11 is a challenging course, serving as the main bridge between high-school science and the chemistry offered in first year at a post-secondary institution. Mathematical calculations and analyses are an integral part of this course, and whenever possible, lab work reinforces the concepts in practical situations. Curricular and core competencies will be addressed on an ongoing basis throughout the teaching of this course.

EARTH SCIENCES 11	**MESC-11**	

Do you ever wonder about Global warming or the interconnectedness of climate change and environmental systems? If so, this course is for you. Plate Tectonics, Astronomy, Meteorology, Oceanography and Geology are all components of this course. Curricular and core competencies will be addressed on an ongoing basis throughout the teaching of this course.

PHYSICS 11	**MPH--11**	

The Physics 11 curriculum is challenging and will require consistent commitment and perseverance if success is to be achieved. Physics 11 students will investigate how objects move (kinematics), why object move (dynamics), the energy contained within objects (potential and kinetic), conservation laws (energy and momentum), current electricity as well as waves and optics. Students will be asked to question their assumptions and predict outcomes, plan and conduct experiments to collect reliable data, process and analyze data and information, critically assess and evaluate outcomes, apply knowledge to novel situations and to effectively communicate understanding of the course content. Curricular and core competencies will be addressed on an ongoing basis throughout the teaching of this course.

ANATOMY AND PHYSIOLOGY 12	MATPH12	

The Anatomy and Physiology 12 curriculum focuses on the human body and the diversity of body systems. Laboratory activities occur throughout the course to develop practical skills. Curricular and core competencies will be addressed on an ongoing basis throughout the teaching of this course.

CHEMISTRY 12	MCH--12	

The Chemistry 12 curriculum consists of examining factors that influence reaction rates. The concepts of solubility, acids and bases and electrochemistry and how they relate to chemical equilibrium are topics of discussion and discovery in this course. Curricular and core competencies will be addressed on an ongoing basis throughout the teaching of this course.

PHYSICS 12	MPH--12	

Physics 12 is an extension of Physics 11 and will include the following units:
Vector Kinematics in Two Dimensions; Vector Dynamics and Momentum; Work, Energy and Power; Momentum and Impulse; Equilibrium; Circular Motion and Gravitation; Electrostatics and; Electromagnetism. Students will be asked to question their assumptions and predict outcomes, process and analyze data and information, critically assess and evaluate outcomes, apply knowledge to novel situations and to effectively communicate understanding of the course content. Curricular and core competencies will be addressed on an ongoing basis throughout the teaching of this course.