

## **COMMUNICATIONS TECHNOLOGY (TGJ3M)**

The course examines communications technology from a media perspective. Students will develop knowledge and skills as they design and produce media projects in the areas of live, recorded, and graphic communications. These areas may include TV, video, and movie production; radio and audio production; print and graphic communications; photography; digital imaging; broadcast journalism; and interactive new media. Students will also develop an awareness of related environmental and societal issues, and will explore college and university programs and career opportunities in the various fields communications technology fields.

## **INFORMATION TECHNOLOGY FOR THE SCHOOL OR WORKPLACE (BTA3O)**

Using a hands-on approach, individuals will develop information technology skills appropriate for the workplace or (post-secondary) school environments. Using Microsoft Office 2013 Word and Excel, individuals will learn to apply a variety of word processing and spreadsheet techniques to produce common business documents.

**No Prerequisite required; familiarity with computers and word processing, spreadsheet software suggested.**

## **CHALLENGE & CHANGE IN SOCIETY (HSB4U)**

### **University Preparation**

Students will critically analyse how and why cultural, social and behavioural patterns changes over time. They will explore the ideas of social theorists and use those ideas to analyse causes of and responses to challenges such as technological change, deviance and global inequalities. Students will explore ways in which social science research methods can be used to study social science.

**Prerequisite:** Any University, University/College preparation course in Social Sciences and Humanities, English, or Canadian & World Studies.

## **ENGLISH (ENG3C)**

### **College Preparation**

This course emphasizes the development of literacy, communication, and creative thinking skills. An important focus will be on using language with precision and clarity. **Prerequisite:** ENG2P

## **ENGLISH (ENG4C)**

### **College Preparation**

Students will analyse a variety of informational and graphic texts, as well as literary texts from various countries and cultures, and create oral, written, and media texts in a variety of forms. **Prerequisite:** ENG3C

## **ENGLISH (ENG4U)**

### **University Preparation**

Students will analyse a range of challenging literary texts from various periods, countries, and cultures; interpret and evaluate informational and graphic texts; and create oral, written, and media texts in a variety of forms. **Prerequisite:** ENG3U

## **ONTARIO SECONDARY SCHOOL LITERACY COURSE (OLC4O) ))**

This course is designed to help students acquire and demonstrate the cross-curricular literacy skills that are evaluated by the Ontario Secondary School Literacy test. Students who successfully complete the Literacy Course will meet the provincial literacy requirement for graduation.

## **MATHEMATICS – FUNCTIONS & APPLICATIONS (MCF3M)**

This course introduces basic features of the function by extending students' experiences with quadratic relations. It focuses on quadratic, trigonometric and exponential functions and their use in modeling real-world situations. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

**Prerequisite:** MFM2P or MPM2D

## **MATHEMATICS OF COLLEGE TECHNOLOGY (MCT4C)**

### **College Preparation**

Students will investigate and apply properties of polynomial, exponential, and trigonometric functions and continue to extend their knowledge of functions. **Prerequisite:** MCF3M

## **MATHEMATICS-DATA MANAGEMENT (MDM4U)**

### **University Preparation**

Students will apply methods for organizing large amounts of information, solve problems involving probability and statistics; and carry out a culminating project that integrates statistical concepts and skills. **Prerequisite:** MCR3U or MCF3M

## **MATHEMATICS - ADVANCED FUNCTIONS (MHF4U)**

### **University Preparation**

Students will investigate and apply properties of polynomial, rational, logarithmic, and trigonometric functions, broaden their understanding of rates of change, and develop facility in applying these concepts and skills.

**Prerequisite:** MCR3U or MCT4C

## **MATHEMATICS - CALCULUS & VECTORS (MCV4U)**

### **University Preparation**

This course builds on students' previous experience with functions and their developing understanding of rates of change. This course is intended for students who plan to study mathematics in university and who may choose to pursue careers in fields such as science, engineering, economics, and some area of business.

**Prerequisite:** MHF4U

## **BIOLOGY (SBI3C)**

### **College Preparation**

Students will learn concepts and theories as they conduct investigations in the areas of cellular biology, microbiology, genetics, the anatomy of mammals, and the structure of plants and their role in the natural environment.

**Prerequisite:** SNC2P or SNC2D

## **BIOLOGY (SBI3U)**

### **University Preparation**

Students will study theory and conduct investigations in the areas of biodiversity, evolution, genetic processes, the structure and function of animals, and the anatomy, growth and function of plants.

**Prerequisite:** SNC2D

## **BIOLOGY (SBI4U)**

### **University Preparation**

Students will study theory and conduct investigations in the areas of biochemistry, metabolic processes, molecular genetics, homeostasis, and population dynamics.

**Prerequisite:** SBI3U

## **CHEMISTRY (SCH3U)**

### **University Preparation**

Students will study the properties of chemicals and chemical bonds, chemical reactions and quantitative relationships in those reactions, solutions and solubility, and atmospheric chemicals and the behaviour of gases.

**Prerequisite:** SNC2D

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**CHEMISTRY (SCH4C)****College Preparation**

Students will study organic chemistry, electrochemistry, chemical calculations, and chemistry as it relates to the quality of the environment.

**Prerequisite:** *SNC2P or SNC2D*

**CHEMISTRY (SCH4U)****University Preparation**

The focus is on the study of organic chemistry, the structure and properties of matter, energy changes and rates of reaction, equilibrium in chemical systems, and electrochemistry.

**Prerequisite:** *SCH3U*

**PHYSICS (SPH3U)****University Preparation**

Students will explore kinematics, with an emphasis on linear motion, different kinds of forces, energy transformations, the properties of mechanical waves and sounds, and electricity and magnetism.

**Prerequisite:** *SNC2D*

**PHYSICS (SPH4C)****College Preparation**

Students will explore the concepts of physics with respect to motion; mechanical, electrical, electromagnetic, energy transformation, hydraulic, and pneumatic systems, and the operation of commonly used tools and machines.

**Prerequisite:** *SNC2P or SNC2D*

**PHYSICS (SPH4U)****University Preparation**

Students will continue their exploration of energy transformations and the forces that affect motion, and will investigate electrical, gravitational, and magnetic fields and electromagnetic radiation, the wave nature of light, quantum mechanics, and special relativity. Students will study the impact of technological applications of physics on society and the environment.

**Prerequisite:** *SPH3U*