

## **Grade 9 IB Preparatory**

---

### **ENG1DB - English, Grade 9, Academic IB Prep**

This IB preparatory course emphasizes analytical reading, writing, oral communication and thinking skills. Students will analyze a variety of texts from multiple perspectives. They will study and interpret texts from contemporary and historical periods, including short stories, poems, and short essays, and will investigate and create media works. An important focus will be the correct and effective use and appreciation of spoken and written language. The course includes an investigation and creation of media around current social issues. This course is an extension of the ENG1D course and is designed to prepare students who are on the IB Diploma Pathway.

### **HZB3MB - Global Citizenship: Perspectives, Purpose and Action, IB Prep**

This IB Preparatory course is committed to the principle of developing the whole person. Through inquiry-based and experiential learning, including service-learning projects, students will explore issues of global significance and examine links between the local and the global. Students will consider the contexts and views of others and they will think about their own values and actions, coming to understand their rights and responsibilities in the world. Students will develop the necessary knowledge and skills to be informed, engaged and purposeful citizens. In addition, students will develop the foundational skills needed to prepare them for the IB Core (Theory of Knowledge, Creativity, Activity and Service, and the Extended Essay).

### **MTH1WB - Principles of Mathematics, Grade 9, Academic IB Prep**

This IB Preparatory course enables students to develop an understanding of mathematical concepts related to algebra, analytic geometry, and measurement and geometry through investigation, the effective use of technology, and abstract reasoning. Students will investigate relationships, which they will then generalize as equations of lines, and will determine the connections between different representations of a linear relation. They will also explore relationships that emerge from the measurement of three-dimensional figures and two-dimensional shapes. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course is an extension of the MPM1D course and is designed to prepare students who are on the IB Diploma Pathway. The use of the Graphing Calculator and technology is woven throughout the course.

**SNC1WB - Science, Grade 9, Academic IB Prep**

This IB Preparatory course enables students to develop their understanding of basic concepts in biology, chemistry, earth and space science, and physics. In addition, students will relate science to technology, society, and the environment. Throughout the course, students will develop their skills in the processes of scientific investigation. Students will acquire an understanding of scientific theories and conduct investigations related to sustainable ecosystems; atomic and molecular structures and the properties of elements and compounds; the study of the universe and its properties and components; and the principles of electricity. This course is designed to prepare students who are on the IB Diploma Pathway.

**\*in grade 9, CGC 1D (geography) is a compulsory credit**

**\*in grade 9, FSF1D (French academic) or FSF1P (French applied) is a compulsory credit**

## Grade 10 IB Preparatory

---

### **ENG2DB - English, Grade 10, Academic IB Prep**

This IB Preparatory course extends the range of analysis, reading, writing, oral communication, and thinking skills that students need for success in the Diploma Programme's Language and Literature course. Students will study and interpret challenging texts from contemporary and historical periods, including novels, poems, plays and opinion pieces, and will analyse and create effective media works. An important focus will be the thoughtful use of spoken and written language while analyzing work from multiple perspectives. This course is an extension of the ENG2D course and is designed to prepare students who are on the IB Diploma Pathway.

Prerequisite: ENG1DB (strong learning skills and a mark above 68% are recommended)

### **FSF2DB (optional) - French, Grade 10, Academic IB Prep**

This IB preparatory course provides opportunities for students to communicate in French about personally relevant, familiar, and academic topics in real-life situations with increasing independence. Students will exchange information, ideas, and opinions with others in guided and increasingly spontaneous spoken interactions. Students will develop their skills in listening, speaking, reading, writing, and grammar. They will also increase their understanding and appreciation of diverse French-speaking communities, and will develop skills and competencies necessary for the IB Diploma Programme's Standard Level French.

Prerequisite: FSF 1D (strong learning skills and a mark above 75% are recommended)

### **MPM2DB - Principles of Mathematics, Grade 10, Academic IB Prep**

This IB Preparatory course enables students to broaden their understanding of relationships and extend their problem-solving and algebraic skills through investigation, the effective use of technology, and abstract reasoning. Students will explore quadratic relations and their applications; solve and apply linear systems; verify properties of geometric figures using analytic geometry; investigate the trigonometry of right and acute triangles; introduce the idea of a function as a model for real-world relations, and explore exponential models and their application. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course is an extension of the MPM2D course and is designed to prepare students who are on the IB Diploma Pathway. The use of the Graphing Calculator and technology is woven throughout the course.

Prerequisite: MTH1WB (strong learning skills and a mark above 70% are recommended)

### **MCR3UB - Grade 11, Functions, IB Prep for SL Mathematics**

This IB Preparatory course continues with the mathematical concept of the function by extending students' experiences with linear, quadratic and exponential relations. Students will investigate properties of discrete and continuous functions, including trigonometric and logarithmic functions; represent functions both numerically, algebraically, and graphically; solve problems involving applications of functions; and develop facility in simplifying polynomial and rational expressions and functions. Students will reason mathematically, and use technology to think critically to analyze the dynamic relationships that mathematics is used for in making sense of real-world applications. This course is an extension of the MCR3U course and is designed to prepare students who are on the IB Diploma Pathway. The use of the Graphing Calculator and technology is woven throughout the course.

Prerequisite: MPM2DB

*Note this course is taken in the second semester of Grade 10 and is required for the IB DP Mathematics SL: Analysis and Approaches course OR Mathematics SL: Analysis and Interpretation course*

### **SNC2DB - Science, Grade 9, Academic IB Prep**

This IB Preparatory course enables students to enhance their understanding of concepts in biology, chemistry, earth and space science, and physics, and of the interrelationships between science, technology, society, and the environment. Students are also given opportunities to further develop their scientific investigation skills. Students will plan and conduct investigations and develop their understanding of scientific theories related to connections between cells and systems and animals and plants; various types of chemical reactions, with a particular focus on acid-base reactions; forces that affect climate and climate change; and the interaction of light and matter. This course is preparation for success in the HL/SL IB Diploma Programme science courses.

Prerequisite: Science, Grade 9, IB Preparatory (strong learning skills and a mark above 70% are recommended)

**\*in Grade 10 CHC 2D (history) is a compulsory credit**