École Secondaire LAURIER MACDONALD High School
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COURSE STANDARDS AND PROCEDURES

COURSE: Math 426

CLASS RESOURCES: Math Help Services and MHS interactive workbook, Teacher notes, in-class handouts, Google Classroom

COURSE DESCRIPTION: Scientific Math course that is a pre-requisite for math 506. Students need a 75% average in sec 3 to be enrolled in this course.

MYP AIMS ADDRESSED BY THE COURSE: What are the aims/objectives of the course? How do these relate to the MEES competencies?

- Enjoy mathematics, develop curiosity and begin to appreciate its elegance and power
- Develop an understanding of the principles and nature of mathematics
- Communicate clearly and confidently in a variety of contexts
- Develop logical, critical, and creative thinking

MYP Course Aims	MEES Course Objectives
- Knowing and understanding - Investigating patterns - Communicating - Applying mathematics in real-life contexts	**TERM 1** **Topic 1 –Algebra** • Concept/properties of equivalent figures • Equivalent algebraic expressions • Multiplying algebraic expressions • Division of polynomials • Algebraic identities • Factoring polynomials • Rational expressions • Solving 2nd degree equations with one variable
- Knowing and understanding - Investigating patterns - Communicating - Applying mathematics in real-life contexts	**TERM 2** **Topic 2 – 2nd degree function** • Properties of various families of functions • Quadratic function – Patterns and properties • Quadratic function – Standard form • Parameters of a function • Quadratic function – General form • Role of parameters a, b and c • Zeros of the quadratic function • Quadratic function – Factored form • Solving a 2nd degree inequality with one variable

	• Inequalities with a quadratic function **Topic 3** - **Statistics** • Two-variable distribution • Contingency table • Scatter plot • Describing a qualitative correlation • Linear correlation coefficient • Regression line and its equation • Interpolating and extrapolating **Topic 4** – **Greatest Integer Function** • Transformed greatest integer function
-Knowing and understanding -Investigating patterns -Communicating -Applying mathematics in real-life contexts	**<u>TERM 3</u>** **Topic 5: Analytic Geometry** • Distance between two points • Slope of a line • Equation of a line in all 3 forms: Function, general, symmetric • Solving systems of equations: By comparison, be substitution, by elimination • Special systems of equations: No solution, 1 solution, 2 solutions • System of two equations – linear and quadratic • Inequalities in two variables • Solving inequalities in two variables • Half-planes **Topic 6 – Geometric reasoning/proofs** •Developing and communicating a proof •Congruent triangles •Similar triangles •Metric relations in right triangles **Topic 7** – **Trigonometry** • Trigonometric relations (SohCahToa) • Sine law • Cosine law • Area of a triangle Click here to enter text.

KEY INSTRUCTIONAL STRATEGIES/APPROACHES TO LEARNING:

Which ATLs will be addressed in the course and how?

Critical thinking skills

• Analyzing and evaluating issues and ideas

• Practice observing carefully in order to recognize problems

• Gather and organize relevant information to formulate an argument

• Practice visible thinking strategies and techniques

• Utilizing skills and knowledge in multiple contexts

• Apply skills and knowledge in unfamiliar situations

• Transfer current knowledge to learning of new technologies

How will the content be delivered to the students?

• Warm up questions, discussions allow students to reflect on previous classes concepts and learning experiences.

• Demonstrate proper mathematical notation within explanation of concepts.

• Formative assessments (pop quizzes, quizzes, homework assignments)

• Group discussions when faced with unfamiliar situations; students discuss appropriate strategies and situations.

• Students combine and apply their mathematical knowledge when solving summative Situational Problems.

IB MYP LEARNER PROFILE: Identify which profile attributes will be addressed in the course and how.

- Critical thinker, inquirer, communicators, caringClick here to enter text.

FORMATIVE & SUMMATIVE ASSESSMENT INCLUDING MYP ASSESSMENT:

Term 1 (20% of School Course GTerm 1: 20% of final grade		**e)**
Competencies targeted	*Evaluation methods*	*Timeline*
C1: Uses Mathematical Reasoning C2: Solves a Situational Problem	- Tests - Quizzes - Assignments/Pop-Quizzes - Situational Problem	Sept. 2, 2025 – Nov. 6, 2025
Communication to students and parents	*Materials required*	
Click here to enter text. ● Progress Report • Report card • Communication on an as needed basis.	• Notebook or lined paper, graph paper, binder for handouts and duo-tang for evaluations • Ruler, pencils, and eraser • Scientific calculator	

● Mozaik parent portal ● Google Classroom	• Internet Access (Outside of the classroom: Home/Library/etc)
IB MYP Criterion	*Examples of assessment/feedback both formative and/or summative*
A: Knowing and understanding *B: Investigating patterns* *C: Communicating* *D: Applying mathematics in real-life contexts*	- Tests - Quizzes - Assignments/Pop-Quizzes - Situational Problem

Term 2 (2Term 2: 20% of final grade0% of School Course Grade)		
Competencies targeted	*Evaluation methods*	*Timeline*
C1: Uses Mathematical Reasoning C2: Solves a Situational Problem	- Tests - Quizzes - Assignments/Pop-Quizzes - Situational Problem	Nov. 6, 2025 - Feb. 6, 2026
Communication to students and parents	*Materials required*	
• Report card • Communication on an as needed basis. ● Mozaik parent portal ● Google Classroom	• Notebook or lined paper, graph paper, binder for handouts and duo-tang for evaluations • Ruler, pencils, and eraser • Scientific calculator • Internet Access (Outside of the classroom: Home/Library/etc) Click here to enter text.	
IB MYP Criterion	*Examples of assessment/feedback both formative and/or summative*	
A: Knowing and understanding *B: Investigating patterns* *C: Communicating* *D: Applying mathematics in real-life contexts*	- Tests - Quizzes - Assignments/Pop-Quizzes - Situational Problem	

Term 3 (60Term 3: 60% of final grade% of School Course Grade)		
Competencies targeted	*Evaluation methods*	*Timeline*

C1: Uses Mathematical Reasoning C2: Solves a Situational Problem	- Tests - Quizzes - Assignments/Pop-Quizzes - Situational Problem	Feb. 6, 2026 - June 17, 2026
Communication to students and parents	*Materials required*	
• Report card • Communication on an as needed basis. ● Mozaik parent portal	• Notebook or lined paper, graph paper, binder for handouts and duo-tang for evaluations • Ruler, pencils, and eraser • Scientific calculator • Internet Access (Outside of the classroom: Home/Library/etc) Click here to enter text.	
IB MYP Criterion	*Examples of assessment/feedback both formative and/or summative*	
A: Knowing and understanding *B: Investigating patterns* *C: Communicating* *D: Applying mathematics in real-life contexts*	- Tests - Quizzes - Assignments/Pop-Quizzes - Situational Problem	

Additional Information/Specifications

Click here to enter text.

☐ This course does not have a final exam. The final course grade comes entirely from the school course grade.

☐ This course has a final exam administered by the English Montreal School Board. The final course grade is determined by taking 70% of the school course grade and 30% of the school board exam.

☒ This course has a final exam administered by the *Ministère de l'Éducation et de l'Enseignement Supérieur* (MEES). The final course grade is determined by taking 50% of the Ministry Exam mark and 50% of the school course grade.