École Secondaire LAURIER MACDONALD High School
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COURSE STANDARDS AND PROCEDURES

COURSE: Mathematics 226

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

COURSE DESCRIPTION: Secondary 2 Math

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 - Ratios and Proportions** ● Rate and unit rate ● Ratios and equivalent rates ● Comparison of ratios and rates ● Proportion and proportional situations ● Ratio of proportionality ● Inversely proportional situation ● Solving a proportional situation ● Percentage of a number ● Calculating the one hundred percent **Topic 2 – Algebraic expressions** ● Term/coefficient/like terms ● Constructing an algebraic expression ● Algebraic expressions - addition/subtraction ● Monomials and degree of a monomial ● Algebraic expressions - multiplication/division
MYP Course Aims	**MEES Course Objectives**
● Knowing and understanding ● Investigating patterns ● Communicating ● Applying mathematics in real-life contexts	**TERM 2** **Topic 3 – Solving equations** ● Equation ● Solving equations ● Equivalent equations ● Transforming arithmetic equalities ● Rules for transforming equations ● Solving equations using the balancing equalities method **Topic 4 – Representation of a situation** ● Types of representations of a situation ● Representation of a situation by a graph ● Minimum and maximum values ● Switching from one type of representation to another
MYP Course Aims	**MEES Course Objectives**
● Knowing and understanding ● Investigating patterns ● Communicating	**TERM 3** **Topic 5 – Circles** ● Circle

● Applying mathematics in real-life contexts	● Circumference ● Central angle ● Arc of a Circle ● Disk/Sector **Topic 6 – Regular Polygons** ● Classification of polygons ● Sum of angles of a polygon ● Exterior angles of a convex polygon ● Apothem of a regular polygon ● Area of a regular polygon and a decomposable polygon **Topic 7 – Solids** ● Prisms and Pyramids ● Polyhedron nets ● Height ● Apothem of a regular pyramid ● Area of bases, lateral area and total area of a prism and pyramid ● Right circular cylinder ● Lateral or total area of a cylinder ● Area of a decomposable solid ● Finding unknown measurements **Topic 8 – Dilatations and Similar Figures** ● Dilatation ● Similar figures ● Ratio of similarity **Topic 9 – Probability** ● Random experiment ● Enumerating ● Experimental and theoretical probability ● Events and types of events ● Probability of an event ● Complementary events ● Compatible and incompatible events ● Random experiments with or without replacement ● Dependent and independent events ● Random experiments with or without order **Topic 10 – Statistics** ● Surveys ● Qualitative, discrete and continuous quantitative variables ● Reading bar graphs, broken-line graphs and circle graphs ● Distribution table: frequencies and relative frequencies ● Samples ● Sampling methods: random, systematic

	● Sources of bias ● Constructing graphs: circle graph

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 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.

Communicators, Inquirers/Thinkers, Caring

FORMATIVE & SUMMATIVE ASSESSMENT INCLUDING MYP ASSESSMENT:

Term 1 (20% of School Course Grade)		
Competencies targeted	*Evaluation methods*	*Timeline*
Competency 1: Solves a situational problem (30% of term grade) Competency 2: Uses mathematical reasoning (70% of term grade)	May include but not limited to: - Tests - Quizzes - Assignments/HW and Pop-Quizzes - Situational Problem	***Term 1:*** ***Sept. 2, 2025 – Nov.6, 2025***

Communication to students and parents	*Materials required*
• Mozaik Parent Portal • Progress Report • First Term Report Card • Communication on an as needed basis	• Notebook or lined paper, graph paper, • Binder for handouts and evaluations • Ruler, pencils, and eraser • Scientific calculator • Internet Access (Outside of the classroom: Home/Library)
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 - Situational Problem

Term 2 (20 % of School Course Grade)		
Competencies targeted	*Evaluation methods*	*Timeline*
Competency 1: Solves a situational problem (30% of term grade) Competency 2: Uses mathematical reasoning (70% of term grade)	May include but not limited to: - Tests - Quizzes - Assignments - Situational Problem	***Term 2:*** ***Nov. 7, 2025*** ***- Feb. 6, 2026***
Communication to students and parents	*Materials required*	
• Mozaik Parent Portal • Second Term Report Card • Communication on an as needed basis • Google Classroom	• Notebook or lined paper, graph paper, • Binder for handouts and evaluations • Ruler, pencils, and eraser • Scientific calculator • Internet Access (Outside of the classroom: Home/Library)	
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 - Situational Problem	

Term 3 (60 % of School Course Grade)		
Competencies targeted	*Evaluation methods*	*Timeline*
Competency 1: Solves a situational problem (30% of term grade) Competency 2: Uses mathematical reasoning (70% of term grade)	May include but not limited to: - Tests - Quizzes - Assignments - Situational Problem - Final Exam	***Term 3: Feb. 7, 2026*** ***June 17, 2026***
Communication to students and parents	*Materials required*	
• Mozaik Parent Portal • Third Term Report Card • Communication on an as needed basis • Google Classroom	• Notebook or lined paper, graph paper, • Binder for handouts and evaluations • Ruler, pencils, and eraser • Scientific calculator • Internet Access (Outside of the classroom: Home/Library)	
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 - Situational Problem	

Additional Information/Specifications

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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 20% 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 school course grade and 50% of the MEES exam. Please note that the final course grade is subject to MEEs moderation.