



**JAMES LYNG**  
— HIGH SCHOOL —

|                             |                                                                                                                                                                                                           |                  |              |
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| <b>Course:</b>              | Mathematics 414                                                                                                                                                                                           |                  |              |
| <b>Teacher:</b>             | H. Ahn & L.P. Gumbs                                                                                                                                                                                       | <b>Room</b><br>: | 201 &<br>157 |
| <b>E-mail:</b>              | <a href="mailto:hahn@emsb.qc.ca">hahn@emsb.qc.ca</a> & <a href="mailto:lgumbs@emsb.qc.ca">lgumbs@emsb.qc.ca</a>                                                                                           |                  |              |
| <b>Texts/workbooks</b><br>: | In class notes                                                                                                                                                                                            |                  |              |
| <b>Course description:</b>  | This course will give a better understanding of linear function as well as quadratic, exponential function, etc. Students will also learn about trigonometric ratios, scatter plot and contingency table. |                  |              |

**TERM 1 – 20%**

| Topics covered                                                                                                                                                                                                                                      |                                | Competencies targeted                                                                                                                                        |
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| Points and segments in Cartesian plane, changes on the axes, slope of a segment, distance between two points, division point, equation of a line, parallel and perpendicular lines, systems of equations, particular cases of systems of equations, |                                | C2: Uses Mathematical Reasoning (100% of total)                                                                                                              |
| Evaluation methods                                                                                                                                                                                                                                  | Mark breakdown                 | Timeline                                                                                                                                                     |
| C2 – Evaluation of applications, evaluation of mastery of concepts, in class worksheets                                                                                                                                                             | C2<br>40% Quizzes<br>60% Tests | C2 – In class, worksheets almost every class, evaluation of mastery of concepts 1 to 3 times a chapter, evaluation of application at the end of each chapter |

**TERM 2 – 20%**

| Topics covered                                                                                                                                                                                                                                                                                                                                                        | Competencies targeted                                                                                 |
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| Real functions, families of functions and choosing a model, second-degree polynomial functions, exponential functions, step functions, periodic functions, piecewise functions<br><br>Single-variable distribution, measure of dispersion: mean deviation, stem-and-leaf plot, measures of position: percentile, two-variable distributions, correlation, contingency | C1: Solves a situational problem (30% of total)<br><br>C2: Uses Mathematical Reasoning (70% of total) |

| table, correlation coefficient, regression line, interpreting a correlation, factors in interpreting the correlation               |                                                                         |                                                                                                                                                                                                         |
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| <b>Evaluation methods</b>                                                                                                          | <b>Mark breakdown</b>                                                   | <b>Timeline</b>                                                                                                                                                                                         |
| C1 – Learning evaluation situations<br><br>C2 – Evaluation of applications, evaluation of mastery of concepts, in class worksheets | C1<br>100% LES<br><br>C2<br>32% Quizzes<br>48% Tests<br><br>20% Midterm | C1 – LES at the end of each chapter<br><br>C2 – In class, worksheets almost every class, evaluation of mastery of concepts 1 to 3 times a chapter, evaluation of application at the end of each chapter |

| <b>TERM 3 – 60%</b>                                                                                                                                                                        |                                                      |                                                                                                                                                                                                         |
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| <b>Topics covered</b>                                                                                                                                                                      |                                                      | <b>Competencies targeted</b>                                                                                                                                                                            |
| Congruent/isometric triangles, similar triangles, metric relations in right triangles<br><br>Trigonometric ratios, solving a right triangle, sine law, area of a triangle, Heron's formula |                                                      | C1: Solves a situational problem (30% of total)<br><br>C2: Uses Mathematical Reasoning (70% of total)                                                                                                   |
| <b>Evaluation methods</b>                                                                                                                                                                  | <b>Mark breakdown</b>                                | <b>Timeline</b>                                                                                                                                                                                         |
| C1 – Learning evaluation situations<br><br>C2 – Evaluation of applications, evaluation of mastery of concepts, in class worksheets                                                         | C1<br>100% LES<br><br>C2<br>40% Quizzes<br>60% Tests | C1 – LES at the end of each chapter<br><br>C2 – In class, worksheets almost every class, evaluation of mastery of concepts 1 to 3 times a chapter, evaluation of application at the end of each chapter |

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| <b>Online platform:</b>                                                                                 | Google Classroom |
| <b>Materials required for the course:</b><br><br>Notebook, pencil, eraser, scientific calculator, ruler |                  |

**Remediation schedule:**

|               |                        |
|---------------|------------------------|
| Ms. Ahn       | TBD                    |
| Ms. Gumbs     |                        |
| Day 2,4,7,8   | Lunch 11:40-12:10      |
| Day 1,2,3,4,5 | After-school 3:20-3:40 |
| Day 6         | After-school 3:20-3:35 |

**Communication with parents/guardians:****Progress report/Report card schedule:**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Email/progress reports/report cards | Progress report: October 2025 |
|                                     | Report cards: November 2025   |
|                                     | February 2026                 |
|                                     | July 2026                     |

**Additional information and specifications:****Final results:**

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| Term 1 | + | Term 2 | + | Term 3 | = | School mark | End-of-year exam mark |
| 20%    |   | 20%    |   | 60%    |   | 100%        |                       |
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\*Moderation affects Year Mark