



Loyola

HIGH SCHOOL

Secondary 5 CST Math 2021-2022

Teacher: Mr. M. Seccareccia

Email: seccarecciam@loyola.ca

Resources: Math Help Services (students need access to their accounts)
Google Classroom (class code to be provided in class)
Worksheets & handouts from class
Various apps (Desmos, etc.)

Supplies: Loose-leaf, graph paper, 3-ring binder (1"), pens, pencils, eraser, ruler, scientific calculator (non-graphing). Chromebooks may be used in class to complete homework.

Evaluation*:

	Term 1 (40%)	Term 2 (60%)
Competency 1: 30% <i>"Solves a Situational Problem"</i>	Midterm evaluation (10%) December exam (20%)	In-class exam (10%) Final project (20%)
Competency 2: 70% <i>"Uses Mathematical Reasoning"</i>	Homework, Quizzes, and Assignments (20%)	Homework, Quizzes, and Assignments (20%)
	Class Tests (50%)	Class Tests (50%)

*Final weightings are subject to change at the teacher's discretion.

Google Classroom: Most of the course material (notes, reminders, worksheets, assignments, review packages) will be available on our Google Classroom. Parents are encouraged to join.

Homework: The majority of homework will be completed during class time. Homework may be assigned as necessary to enrich or compliment in-class activities.

Assignments: Assignments will be given throughout each term and posted on Google Classroom. Assignments must be completed and submitted to the teacher on time at the beginning of classes. Late assignments are subject to a 20% penalty per day, and will not be accepted beyond 48 hours of the due date, resulting in a mark of 0%.

Quizzes: Quizzes are given weekly to evaluate concurrent understanding of the material.

Tests: There are approximately 5 tests given per term, at the teacher's discretion. Tests must be completed in pencil and occasionally may be required to be completed without the use of a calculator. If a student is absent for any quiz or class test because of an illness or unexpected reasons, **he must make arrangements to write the test on the first day back in school.** Otherwise, the student may receive a grade of 0%.

Extra help: Extra math help will be available after school daily in room 251. Google Meet tutorials and test reviews may also be set up on a group or individual basis as needed.

Course Content:

Linear Programming

- Review of Linear functions
- System of inequalities
- Polygon of constraints
- Optimization of a situation

Financial Mathematics

- Exponential Growth/Decay
- Basic Properties of Logarithms
- Compounding Interest
- Future Value, Present Value
- Basics of Income Tax
- Registered Savings Vehicles (TFSA, RRSP, RESP)
- Mortgage Calculations
- Annuities (Periodic Saving)

Probability

- Odds and Probabilities
- Venn Diagrams, Conditional Probability
- Mathematical Expectation
- Voting Procedures

Graph Theory

- Basic Definitions
- Paths and Circuits
- Trees
- Directed and Weighted Graphs

Figures and Solids (potentially)

The last stretch of the year will be spent on a final project, exploring one or more of the content areas in more depth. Details for this project will be posted on Classroom as the year progresses.

Any questions or concerns regarding this course outline should be brought up with Mr. Seccareccia as soon as possible.

Looking forward to a great year!