



Secondary 5 CST Math

2019-2020

Teachers: Mr. D. Degano **Voice Mail:**(514) 486-1101 ext. 644 **Email:** deganod@loyola.ca

Textbook: There will be no textbook or workbook for the course. Instead, students will have access to an interactive online software, Math Help Services <http://math-help-services.org/>

Supplies: Loose-leaf, graph paper, Duo-Tang or 3-ring binder, 2 notebooks (graph or lined paper, 40 – 80 pages), pencils, eraser, ruler, scientific calculator (non-graphing). iPads may be used in class to complete homework.

<u>Evaluation:</u>	Term 1	Term 2	Term 3
Competency 1 → 30% “Solves a Situational Problem”	End of Term Evaluation	In-class evaluations	In-class Exam (10%)
			Final Project (20%)
Competency 2 → 70% “Uses Mathematical Reasoning”	Homework and Assignments (10%)	Homework and Assignments (10%)	Homework and Assignments (10 %)
	Quizzes (10%)	Quizzes (10%)	Quizzes (10%)
	Class Tests (50%)	Class Tests (50%)	Class Tests (50%)

The overall grade for the course will be calculated as follows:

Term 1 → 20%

Term 2 → 20%

Term 3 → 60%

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

Assignments: Assignments will be given throughout each term and posted on the course Moodle site. Assignments must be completed and submitted to the teacher on time at the beginning of classes. **NO LATE ASSIGNMENTS** will be accepted. Students who do not submit an assignment on time will receive a grade of 0%.

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

Tests: There are approximately 3 tests given each 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 will receive a grade of 0%. Students who miss tests regularly will be asked to provide a doctor's note upon return to class.

Resubmission: Students will be allowed will be permitted to resubmit all unsatisfactory work in order to obtain a satisfactory grade (60%). This work must be done, in school, under the teacher's supervision. This can be done during specifically allotted class time or after school.

Extra help: Extra help is offered after school or by appointment. Extra help schedule may change throughout the year due to coaching commitments or school events.

Course Content:

Linear Programming (Term 1)

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

Geometric Optimization (Term 1)

- Surface Area and Volume of Solids
- Optimizing Area
- Optimizing Volume

Financial Mathematics (Term 2)

- Exponential Growth/Decay

- Basic Properties of Logarithms
- Compounding Interest

Probability (Term 2)

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

Graph Theory (Term 3)

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

The remainder of the third term will be spent on a final project, exploring one of the content areas in more depth. Details for this project will be posted on Moodle as the year progresses.

Any questions or concerns regarding this course outline should be brought up with Mr. Degano as soon as possible. I'm looking forward to a great year with you all. Thank you and best of luck during this academic year!