



## Royal West Academy

### Course Outline

Course:	Mathematics 306		
Teacher:	T. Gordon	Room:	201
E-mail:	<a href="mailto:tgordon@emsb.qc.ca">tgordon@emsb.qc.ca</a>		
Texts/workbooks:	Math Help Services, Course Notes		
Course description:	Grade 9 Math cover the following topics: Numbers, Algebraic Expressions, Relations/Functions, System of Equations, Statistics, Probability, Area and Volume		
Remediation:	Day		

**Materials Required:** *Binder* (store notes and homework), pens, ruler, pencils, eraser, highlighter, scientific calculator (NOT GRAPHIC) (ideally with display).

**Communication with Students/Parents:** Communication via E-mail, google classroom and Mozaik. Announcements and grades will be posted on google classroom.

Parents and students are responsible for daily check to their email and google classroom.

To access google classroom students should add their parents as a “guardian” or parents can simply log into google classroom with their child’s login information.

**Evaluation**

<b>TERM 1 (20% of year-end grade):</b> August 29 <sup>th</sup> – November 4 <sup>th</sup>	Evaluation Methods	Timeline
Competency 1: Solves a situational problem	Situational problem tests and/or assignments	Generally, two to three per term
Competency 2: Uses mathematical reasoning	Class tests, quizzes, assignments and/or Math Help Services	Weekly to Bi-weekly

<b>TERM 2 (20% of year-end grade):</b> November 3 <sup>rd</sup> – February 2 <sup>nd</sup>	Evaluation Methods	Timeline
Competency 1: Solves a situational problem	Situational problem tests and/or assignments	Generally, two to three per term
Competency 2: Uses mathematical reasoning	Class tests, quizzes, assignments and/or Math Help Services  <b>Mid-Year Exam</b>	Weekly to Bi-weekly  <b>January 22<sup>nd</sup>-26<sup>th</sup></b> Worth 50% of C2 Subject to change

<b>TERM 3 (60% of year-end grade):</b> June 8 <sup>th</sup> – June 22 <sup>st</sup>	Evaluation Methods	Timeline
Competency 1: Solves a situational problem	Situational problem tests and/or assignments	Generally, two to three per term
Competency 2: Uses mathematical reasoning	Class tests, quizzes, assignments and/or Math Help Services  <b>Final Exam</b>	Weekly to Bi-weekly  <b>TBA</b>

*Note: Competency 1 is worth 30% of each term, Competency 2 is worth 70% of each term.*

*Evaluation methods, frequencies and values are subject to change.*

**End of the Year Results**

Competency 1 (30% of final math mark)					Competency 2 (70% of final math mark)				
Term 1	Term 2	Term 3	=	70% of Final C1 Mark	Term 1	Term 2	Term 3	=	100% of Final C2 Mark
20%	20%	60%			20%	20%	60 %		
Final Exam (June)			=	30% of Final C1 Mark				=	100% of Final C2

### Classroom Rules

1. **Missed Evaluations:** If a student is going to miss an evaluation, a parent must email me prior to the evaluation, confirming they are aware their child will be absent for the test/quiz. The student will take the test during the next class, so they must be prepared upon their return.
2. **Class Preparedness:** Students are expected to come to class prepared with necessary supplies, including pencils, calculators, and notes. Repeated failure to come prepared will result in a detention.
3. **Class Time Conduct:** Students are not allowed to leave the classroom during class time. They are encouraged to bring a reusable water bottle to stay hydrated and use the bathroom during passing times.
4. **Evaluation Retakes:** Retakes for evaluations will not be granted.
5. **End of Class Protocol:** Students must remain seated until the bell rings. There will be no gathering around the door before dismissal.
6. **Evaluation Guidelines:** Students are not allowed to use a pen on evaluations. Please use a pencil for all test and quiz responses.
7. **Cell phones:** Cell phones are not allowed during school hours. Refer to the agenda for more information.

### More Information

**Classwork:** Notes will be handed out by topic and to be stored in students’ folder/binders. Notes will also be posted on google classroom. Students are responsible for keeping track of assessments dates and deadlines. Students **may** be granted extensions in the event of extenuating circumstances if they request one from the teacher **at least 2** days in advance. Late submission of work will result in a 0%.

**Absent from class:** Students are responsible for all material covered when they are absent from class.

**Absent for a test:** Students must have a valid reason to miss a test. A note explaining the absence from the evaluation may be required when the student returns to school. A student who is absent because of an ECA activity must notify the teacher ahead of time. Repeated absences will be reported to the administration. **\*\*All missed tests will be rewritten at the teacher’s convenience. It is the student’s responsibility to contact the teacher.\*\*** If the following procedures are not followed a mark of 0 will be given for the test or evaluation.

**Remediation:** If results show that a student is experiencing difficulties, they may be obligated to attend remediation.

### Math resources

- <http://www.khanacademy.org> → A website containing small videos on many different subjects, including mathematics.
- <http://learnquebec.ca> → An online website including slide shows on many different subjects and online tutoring. You need a password, provided by the homeroom teacher or the administration. There are also online tutoring sessions.
- <https://www.cemc.uwaterloo.ca/courseware> → It contains good math videos and practice exercises.
- Peer tutoring: A tutoring service organised by Mrs. DiPietro (room 226) where students tutor other students.

### **Summer School**

In the event of a failed course, it is possible that the student may be required to attend summer school.

**Topics:****Topic 1 - Statistics**

- Sampling methods: survey, census, stratified, cluster
- Experimental and theoretical data
- Organizing data: table of condensed data, grouped into classes, histogram, box-and-whisker plot
- Measures of central tendency: mode, median, weighted mean
- Measures of dispersion: range, interquartile range

**Topic 2 - Probability**

- Continuous or discrete random variable
- Theoretical and experimental probability
- Probability of an event
- Simple arrangement, permutation, combination (based on reasoning, not formulas)
- Geometric probability

**Topic 3 – Numbers & Algebra**

- Exponential notation
- Scientific notation
- Laws of exponents
- Cube roots and irrational numbers
- Polynomial operations
- Factoring: Finding the common factor
- Solving first-degree equations in one variable
- Inequalities, set notation, interval notation, number line
- Solving inequalities

**Topic 4 – Relations & Functions**

- Relation, function and inverse of a function
- Independent and dependent variables
- Types of representations (table of values, graph, equation, mapping)
- Properties of functions in context
- Direct, partial, inverse (rational), constant
- Finding the rule of a first degree polynomial function
- Modeling a situation using linear function

**Topic 5 – Systems of Equations**

- Constructing a system of equations
- Solving a system of equations: by graphing, using a table of values, and comparison method

**Topic 6 – Area of Solids & Spatial Sense**

- Pythagorean Theorem
- Nets and Area
- SI units and conversion
- Projection and perspective
- Prisms, pyramids, cylinders review
- Right circular cone and sphere
- Decomposable solids
- Lateral area and total area
- Similar figures

**Topic 7 – Volume of solids**

- Area and volume
- Capacity, SI units, and conversion
- Volume of a right prism and cylinder
- Volume of a right pyramid, cone and sphere
- Volume of a decomposable solid
- Similar solids

\*Subjected to change order.