Royal West Academy

Course Outline

Course:	Mathematics 306
Teacher:	V. Gagliano **Room:** 312
E-mail:	vgagliano@emsb.qc.ca
Texts/workbooks:	Math Help Services, Visions Workbook, 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 1 – Lunch; Day 5: Lunch

Materials Required Pens, ruler, pencils, eraser, highlighter, scientific calculator (NOT GRAPHIC) (ideally with display), copy book for homework solutions, Course notes will be distributed (binder or folder to store notes and homework)

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

Parents and students are responsible for daily check to their email and class portals. Parents are to go on classroom portal and MHS to follow student progression.

Evaluation

TERM 1 (20% of year-end grade): August 30th – November 2nd	Evaluation Methods	Timeline
Competency 1: Solves a situational problem	Situational problem assessments and/or assignments	Generally, two to three per term
Competency 2: Uses mathematical reasoning	Class tests, assignments and/or homework	Weekly to Bi-weekly

TERM 2 (20% of year-end grade): November 3rd – February 2nd	Evaluation Methods	Timeline
Competency 1: Solves a situational problem	Situational problem assessments and/or assignments	Generally, two to three per term
Competency 2: Uses mathematical reasoning	Class tests, assignments and/or homework **Mid-Year Exam**	Weekly to Bi-weekly **January 24th -20th.** **Worth 50% of C2**

TERM 3 (60% of year-end grade): February 5th – June 21st	Evaluation Methods	Timeline
Competency 1: Solves a situational problem	Situational problem assessments and/or assignments	Generally, two to three per term
Competency 2: Uses mathematical reasoning	Class tests, assignments and/or homework **Final Exam**	Weekly to Bi-weekly

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	=	TBD % of Final Cl Mark		Term 1	Term 2	Term 3	=	TBD% of Final C2 Mark
20%	20%	60%				20%	20%	60 %		
Final Exam (June)			=	TBD% of Final C1 Mark		Final Exam (June)			=	TBD% of Final C2

Additional Information / Specifications

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 exercices.
- 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 – Numbers
- Set of numbers
- Exponential notation
- Laws of exponents
- Cube root
- Scientific notation

Topic 2 – Algebraic Expressions
- Polynomial operations
- Manipulating algebraic expressions
- Expanding: multiplication of algebraic expressions
- Factoring: Finding the common factor
- Solving first-degree equations in one variable
- Inequalities
- Rule for transforming inequalities
- Solving inequalities

Topic 3 – Relations and Functions
- Relation, inverse and function
- Independent and dependent variables
- Types of representation
- Properties of functions in context
- Polynomial function of degree 0 or 1
- Rate of change
- Finding the rule of a first degree polynomial function
- Modeling a situation using a polynomial function of degree 0 or 1
- Inverse variation function

Topic 4 – Systems of Equations
- System of equations
- Constructing a system of equations
- Solving a system of equations: graph, table of values
- Solving a system of equations: method of comparison

Topic 5 - Statistics
- Sampling methods
- Experimental and theoretical data
- Table of condensed data
- Table with data grouped into classes
- Types of graphs
- Measures of central tendency
- Measures of dispersion: range
- Quartiles
- Box-and-whisker plot

Topic 6 - Probability
- Random experiment
- Theoretical and experimental probability
- Probability of an event
- Arrangement, permutation, combination
- Continuous or discrete random variable
- Geometric probability

Topic 7 – Pythagorean Theorem, Area of Solids and Spatial Sense
- Pythagorean Theorem
- Nets and Area
- Right circular cone and sphere
- Decomposable solids
- Lateral area and total area
- Parallel projection
- Central projection
- Description and construction of objects

Topic 8 – Volume of solids
- Area and volume
- Choice of unit of measure for volume
- Capacity
- Volume of a right prism and cylinder
- Volume of a right pyramid, cone and ball
- Volume of a decomposable solid
- Similar solids

*Subjected to change order.