

Math 10C Course Syllabus – Winter 2021

Teacher:

Mr. Head (micheal.head@pvsd.ca)

Course Description:

This course reviews and adds to some of the topics covered in grade 9 math and then discusses more abstract topics such as solving systems of linear equations, factoring, and determining equations of lines. Students who intend to either attend university (in any discipline) or a trade school in a math-related field should be taking classes in either the “Dash 1” or “Dash 2” streams.

Required Materials:

- Binder & Loose Leaf or Notebook
- Something to give you access to the digital textbook
- Calculator (with “sin”, “cos”, and “tan” buttons)
- Pencil/Eraser/Pen

Course Evaluation:

Unit Exams	20%
Assignments/Quizzes/Other Work	60%
Final Exam	20%

Attendance:

Attendance is taken at the beginning of every class; to be marked present you must be ready to work with all of the expected materials present. If you arrive to class late, please enter the room quietly and be sure that the attendance is changed after the lecture/activity is finished.

For missed classes, it is your responsibility to get missed notes, assignments, and information from a classmate.

Missed exams or quizzes will be made up outside of class time (preferably at noon hour) and arranged on a person to person basis as the student’s responsibility to arrange.

Assignments:

Complete your work to the best of your ability and hand it in on time! All work that is assessed must be handed in. If you miss an assignment, or forget it, or lose it, or whatever, it still has to be handed in. Even if so many days have passed and it is now worth fewer marks, you still have to hand it in. Leaving work incomplete/not handed in is not an option! Students with incomplete assignments may be required to come in over the noon hour until all assignments are completed.

Teacher Expectations:

To be successful in a secondary math class, students must take responsibility for their own learning. Meaning:

- Be on time with all required materials
- Pay attention and engage in class lectures, discussions, and activities
- Use class time efficiently and quietly
- Copy notes and examples from class into your notes or handouts provided
- Ask for help! Please see me to set up some time for extra help if needed
- Fully complete homework assignments on a regular basis and submit them in a timely fashion.
Failure to do so will result in you not being adequately prepared for assessments

Course Topics & Timeline:

Unit 1: Measurement: (M1,M2,M3) 12%

- Imperial measure of length
- Relating metric (SI) and imperial units
- Surface area of right pyramids and cones
- Volume of right pyramids and cones
- Solving problems involving shapes

Unit 2: Trigonometry: (M4) 13%

- Evaluating square roots
- The Pythagorean theorem
- Trig ratios: sine, cosine, tangent
- Solves for angles in right triangles
- Real-life trig applications
- Solving multiple right triangles

Unit 3: Factors & Products: (AN4,AN5) 18%

- Factors and multiples of whole numbers
- Perfect squares, perfect cubes & their roots
- Common factors of polynomials
- Polynomials of the form $x^2 + bx + c$
- Polynomials of the form $ax^2 + bx + c$
- Multiplying polynomials
- Factoring special polynomials

Unit 4: Roots & Powers: (AN1,AN2,AN3) 22%

- Irrational numbers
- Mixed and entire radicals
- Fractional exponents and radicals
- Negative exponents and reciprocals
- Applying exponent laws

Unit 5: Relations & Functions: (RF1,RF2,RF4,RF8) 13%

- Representing functions
- Properties of functions
- Interpreting and sketching graphs
- Graphs of relations and functions
- Properties of linear relations
- Interpreting graphs of linear functions

Unit 6: Linear Functions: (RF3,RF5,RF6,RF7) 14%

- Slope of a line
- Slopes of parallel and perpendicular lines
- Slope-intercept form of the equation for a linear function
- General form of the equation for a linear function

Unit 7: Systems of Linear Equations: (RF9) 8%

- Developing Systems of Linear Equations
- Solving a System of Linear Equations Graphically
- Using Substitution to Solve a System of Linear Equations
- Using Elimination to Solve a System of Linear Equations
- Properties of Systems of Linear Equations

