

**Mathematics 414 – Cultural, Social, Technical (CST) Option
Course Syllabus 2020-21**

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Course Overview:

Grade 10 CST Math is a continuation of the concepts learned in previous years. We will be building on prior knowledge while learning new and interesting topics. Math plays an important role in a person's social, political, and cultural development and in this course we will be investigating the ways in which this happens.

In this course, you will be evaluated on two competencies:

- 1) Solves a situational problem – be able to relate math concepts to real life scenarios
- 2) Uses mathematical reasoning – be able to analyze a situation and solve it using the most effective mathematical methods

Materials Recommended for Every Class:

- Workbook (provided)
- Memory Aid in sheet protector
- Pencils/Erasers, Ruler, Calculator
- Whiteboard, Marker, and Eraser (provided)

Topics To Be Covered (tentative schedule):

Term 1	Term 2	Term 3
<p>Review (algebra)</p> <p>Linear Functions (slope, finding the rule, graphing, and systems of equations)</p> <p>Analytic Geometry (distance, midpoint, division point, intercepts, parallel lines, perpendicular lines, proofs)</p>	<p>Function Properties (domain, range, signs, extremes, intercepts)</p> <p>Functions (constant and linear functions, quadratic functions, exponential functions, step functions, piecewise functions, periodic functions)</p>	<p>Triangles and Trigonometry (angles, isometric triangles, similar triangles, metric relations, sine law, area of triangles)</p> <p>Equivalent Figures (area and volume, equivalency, rules of equivalency, comparison of figures, cosine law)</p> <p>Statistics (one-variable statistics, percentile, mean deviation, linear correlation, correlation coefficient, linear regression)</p>

Reporting

The final mark for the year is calculated with the following weighting:

Term 1	Term 2	Term 3	Total
20%	20%	60%	100%

Missing a Test or a Quiz

Tests must be written on the scheduled day. If you know ahead of time that you will be away, alternative arrangements must be made before the test date. Missed tests will be written on your own time at lunch.

Late Policy and Absences

All late arrivals will be recorded and detentions will be served with the office. *You* are responsible for catching up on class notes and completing any assignments, tests, or quizzes which you missed due to absence. If you are aware of your absence in advance, please let me know.

Class Procedures

My foremost request is that we all respect one another in class. That means respecting each other individually, as well as respecting the thinking of others.

Additionally, your responsibilities including bringing all your materials to every class. ***Please do not do mathematics work in pen.*** You need your math binder, your texts, and homework. As well, you must hand in all assignments on time. While I am somewhat flexible about late assignments due to illness or other excused absences, I expect you to see me the day you return from illness to get your missed work. You need to be caught up at all times because you will quickly get behind. Assignments not turned in will be referred to study hall until the work is completed. If you know you will be absent on a due date, please see me prior to that date to arrange an alternative.

Plagiarism

Many students, afraid that their incomplete work will be checked by me, copy another student's answers prior to class. *If you do this, it is cheating and I will give a grade of zero for the assignment and refer you to the administration for disciplinary action.* The integrity of everyone's individual grade is important, especially as this course is needed for both high school graduation and post-secondary admission.

Extra Help Options

A regular tutorial schedule will be set during lunch hour in the next few weeks. These will be open forum: a place to complete homework, work on assignments, or ask questions while I am present. If you feel the need to acquire outside Math tutoring, LEARN is an excellent (and free) online option for all WQSB students. Additional tutoring is also available, so please see me for information on available tutors.

I am looking forward to a great year with you in Mathematics 414!