

Winston Churchill Collegiate Institute
Course Syllabus



General Information

Course Title	Calculus and Vectors
Course Code	MCV4U
Department	Mathematics
Office Location	A216
Office Hours	8 :30 a.m. – 4 :00 p.m.

Course Description

This course builds on students' previous experience with functions and their developing understanding of rates of change. Students will solve problems involving geometric and algebraic representations of vectors and representations of lines and planes in three-dimensional space; broaden their understanding of rates of change to include the derivatives of polynomial, sinusoidal, exponential, rational, and radical functions; and apply these concepts and skills to the modelling of real-world relationships. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended for students who choose to pursue careers in fields such as science, engineering, economics, and some areas of business, including those students who will be required to take a university-level calculus, linear algebra, or physics course.

Prerequisites

The new Advanced Functions course (MHF4U) or Functions (MCR3U)

Course Materials & Replacement Costs

Textbook reference: Nelson **Calculus and Vectors**; GSP (Geometry SketchPad) or any graphic software;

Graphing calculator TI-84 (optional)

Useful websites / resources

Evaluation

Mark Distribution

- Knowledge / Understanding 35%
- Thinking / Inquiry 20%
- Application 25%
- Communication 20%

Final Exam 30%

Learning Skills & Work Habits



Students are evaluated not only on the content they have learned, but also by the six (6) learning skills and work habits that evaluate key student habits and are considered essential skills. These learning skills and work habits evaluated on your report card are:

Responsibility	Collaboration
Organization	Initiative
Independent Work	Self-Regulation

These six (6) attributes are evaluated on a scale of Excellent (E), Good (G), Satisfactory (S) and Needs Improvement (N).

Missed Quiz, Test & Assignment Policy

If a student is absent for a quiz, the student will be permitted to write the quiz if:


-  A signed note is provided from the parent/guardian of the student excusing he/she for the missed class due to illness or an appointment.
-  A student is excused due to an excursion or athletic activity

A student will only be allowed to write the quiz if it has not yet been marked and returned to the other students. If the student is excused from the quiz for the above two (2) reasons and the quiz has been returned the student will be granted a "no mark."

It is the student's responsibility to make arrangements ahead of time for any tests/quizzes that are missed. Failure to do so may result in a mark of zero for the student.

Late Assignments/Work Policy

Teachers will assign due dates for various assignments, work and presentations. Students are expected to submit their work on or before the assigned due date. Late assignments and work will be accepted if:

-  A signed note is provided from the parent/guardian of the student excusing him/her for the missed class due to illness or appointment. The reason for the absence, the date of the absence and contact information for the parent/guardian must be included on the note.

If the student is absent in class due to an excursion/sporting activity, it is still the responsibility of the student to deliver the assignment/work prior to the due date/time.

If the assignment is late, 2% will be deducted from the mark for every day the work is late. Once the assignment has been marked and returned students will no longer be allowed to submit an assignment and will receive a mark of zero (0).

Note: The policies applicable to late assignments are in line with the guidelines as outlined in the Ministry of Education Policy document *Growing Success: Assessment, Evaluation, and Reporting in Ontario Schools* (page 43). Should a student wish to appeal the decision of the teacher as a result of extenuating circumstances he/she can bring it to the attention of the teacher, department Assistant Curriculum Leader and Vice Principal for review.

Missed Test and Final Exam Policy

If a student is absent for a unit test or final exam a doctor's note must be provided for the student's absence. The doctor's note should identify the date(s) of the absence(s) and medical office contact information. The note must be received by the teacher and office the day upon his/her return.



Upon receipt of the note the teacher will enter a 'no mark' or provide an alternative test. If a doctor's note is not provided, the student will be given a mark of zero (0).

Should a student miss a test or final exam for vacation purposes a mark of zero (0) will be assigned.

Academic Honesty (Plagiarism) Policy

Students are expected to demonstrate academic honesty on all assignments, presentations, tests and examinations. Cases of academic dishonesty will be dealt with on a case-by-case basis, and will involve an investigation, communication with the student and the parent/guardian, and a mark of zero (0) for the plagiarized work.

Students will be taught that plagiarism or cheating is:

-  Copying, reproducing or paraphrasing significant portions of someone else's published or unpublished material, and
-  Representing these as one's own thinking by not acknowledging the appropriate source, or by failing to use appropriate quotation marks

Students will also be taught how to accurately and appropriately document the information and ideas of others to avoid plagiarizing.

This applies to all assignments including lab reports, diagrams, essays, and computer projects. Different forms of writing require different types of acknowledgement and/or documentation. Whether the student has an opportunity to demonstrate his/her learning in another assignment will be at the discretion of the teacher and/or Vice Principal/Principal