



# Calculus 12

## COURSE OUTLINE

### Overview

This Calculus 12 course fully meets the learning outcomes for the BC Curriculum.

This engaging and easy to navigate course was designed to help students reach their full potential in Secondary Mathematics. Each lesson contains carefully selected practice problems and extra resources.

Online lessons are video-based, and students have complete control over the pace at which they learn—lessons can be paused, resumed and repeated using simple navigation buttons. Examples are interactive with animated step-by-step flash and video whiteboard solutions. Extra resources, including alternate lessons and examples, have been carefully selected to assist students who need additional instruction.

**Prerequisites:** PreCalculus 12 with a minimum mark of C+.

### Course Content and Timelines

The timelines suggested are based on a 10-month fall course September to June. Timelines should be adjusted based on each student's situation.

- Unit 1:** PreCalculus Review (**complete by the end of September**)  
**Unit 2:** Limits and Continuity(**Complete by the end of October**)  
**Unit 3:** Differentiation (**Complete by the end of November**)  
**Unit 4:** Applications of Derivatives (**Complete by the middle of January**)  
**Unit 5:** Integration (**Complete by the end of February**)  
**Unit 6:** Applications of Integrals (**Complete by mid-April**)  
**Unit 7:** Differential Equations and More Riemann Sums (**Complete by June 14**)

## Course Materials

No textbook is required. Course content is delivered on our Moodle platform by videos, online links and associated worksheets.

A scientific calculator is required, and should be brought to the test center when writing exams.

You should print out the formula sheet package from the first page of the moodle course. The package contains a periodic table, a list of names, symbols, and atomic masses and numbers of elements, and a list of common ions with their charges. You will receive a copy of the formula sheet package when you write your exams.

## Additional Websites

Mathematics and Educational Websites that may help students:  
Also for review and enrichment there are outstanding Chemistry videos and assignments on the website: [Khan Academy](#)

Information about the British Columbia Calculus 12 curriculum:  
<https://curriculum.gov.bc.ca/curriculum/mathematics/12/calculus>

## Assessment Information

<b>Video Notes and Review Assignments</b>	<b>15 %</b>
<b>Quizzes</b>	<b>15 %</b>
<b>Unit Exams</b>	<b>70 %</b>

## Assignments:

You must submit all Review Assignments and Unit Notes to me before you receive your final mark.

1. SAVE the document as Calculus 12 Unit \_ (Review Assignment or Notes) and YOUR NAME

EXAMPLE: Calculus 12, Unit 2 Review Assignment, Joe Smith

2. Attach the assignment using the Chapter Hand-In Box on Moodle.

## Quizzes

For each unit except the first, there will be two or three on-line quizzes which you can complete at home, with no password required. These quizzes will help you to prepare for the Chapter Tests, since they use the same test bank for questions.

## Practice Tests

To provide extra review prior to writing your Chapter Tests, each unit has a Practice Test, which can be printed off from the moodle course website. Each Practice Test also has an attached answer key from which you can check that your methods and calculations are correct.

## Chapter Tests

When you have completed the Practice Test for a unit, you should sign up for the Chapter Test. The Chapter Tests are password protected and must be written at one of the three Test Centers (North Delta, Delta Secondary, or South Delta Secondary). To book a test or to check the hours of operation of the Test Centers are available by the Book a Test? link on the Delta Access website, [www.deltaaccess.ca](http://www.deltaaccess.ca).

## Reporting

### Weekly Progress Reports:

These will be sent to both students and parents through Moodle. These reports are sent via email and are based on information provided on course introduction forms filled out. Please make sure your Moodle profile is up to date with this information to ensure these are received. If you need assistance with this, please contact me at [tvuorela@deltasd.bc.ca](mailto:tvuorela@deltasd.bc.ca) to help you make sure you are getting these reports.

### Report Cards:

These will be issued for the in late November, January, March, June and early August to meet the needs of post-secondary admissions. Students needing marks for post-secondary must complete the course within the guidelines provided by teachers so their marks are uploaded for transcripts.

These reports are available for Delta School District students on our student management system. For those not attending one of our high schools, please call our Continuing Education office 604-940-5550 to receive a copy.

In order to be active and get a term report card, you must complete all the work for the first and second units.

Course reports are based on only what has been submitted for the Fall until April 1. After April 1, all missing assignments will count with zero marks grade calculations giving students a realistic picture of current course progress. It is important when viewing report cards and progress reports up until this point that the amount of the course completed is taken into consideration. (ie. 90% standing in a course that is only 10% complete is very different than 90% in a course that is 80% complete).

## **Plagiarism**

### **Plagiarism and Academic Dishonesty**

*Plagiarism is the unauthorized use or close imitation of the language and thoughts of another author and the representation of them as one's own original work, as by not crediting the author* (Dictionary.com) <http://dictionary.reference.com/browse/plagiarism>

Plagiarism can be done either intentionally or accidentally. Regardless, it is an academic offence that carries with it varying levels of consequences – from a mark of zero for work submitted to expulsion from the course and/or on-line program. Plagiarism takes various forms: copying another's work, not citing another's original work, cutting and pasting from the internet and claiming the work as your own, allowing other students to copy and submit your work as their own, and so on. It is YOUR RESPONSIBILITY to be aware of the rules around using and citing other people's work.

An excellent website that answers questions about plagiarism can be found at:

<http://www.plagiarism.org/>

<http://www.grammarly.com/>

<http://www.englishclub.com/writing/plagiarism.htm>

<http://australianhelp.com/plagiarism>

If you are uncertain as to whether you may be plagiarizing someone's work, check with your teacher or consult the many websites that outline the rules.

If a student is found to have submitted plagiarized work, the Delta Access teacher will notify both the student and Delta Access administration to document the violation and to determine further consequences. Repeated occurrences of plagiarism will likely result in a final mark of "Failure" in the specific on-line course.

## **Keys to Success**

1. Actively work through each lesson, trying each example and reflecting on new material.
2. Use the Learning Guide as a tool for documenting your understanding. Make sure it is neat and well-organized, so that your understanding will be clear.
3. Keep up with the suggested timeline for course completion.
4. If you have any questions from the lessons, Learning Guides, Projects, Practice Exams, or Unit Exams, get assistance immediately. You can contact me any time at the email provided below.

## **Contacting your Teacher**

You can email me anytime at [tvuorela@deltasd.bc.ca](mailto:tvuorela@deltasd.bc.ca)