

# **Mathematics 3208**

## **Course Description**

### **Level of Instruction: Senior High**

#### **Curriculum Overview**

Mathematics 3208 is the fourth (and optional) course in the Advanced Program for High School Mathematics in Newfoundland & Labrador. This course is designed to provide students with an introduction to the fundamental topics generally found in any first year university calculus course. The Advanced Program aims to prepare students to make connections between mathematics and its applications and to become numerate adults, using mathematics to contribute to society. Students who enroll in the Mathematics 3208 course will have the option to write the Memorial University Mathematics 1000 exam in June to obtain university credit/grade.

#### **Authorized Learning Resource**

*Single Variable Essential Calculus Second Edition (Nelson)*

*(Pre-Calculus 12 [Mathematics 3200] is a supplementary resource for this course)*

#### **Unit Break Down**

<b>Unit</b>	<b>Topic and Chapters</b>	<b>Chapters (&amp; Sections) in text</b>	<b>Hours (% of course)</b>	<b>Approx. Completion</b>
1	Pre-Calculus	1.2 PC: 10.1 - 10.3	5 (5%)	Sept. 23
2	Limits & Continuity	1.3 - 1.6, 3.4	20 (18%)	Nov. 4
3	Rational Functions	1.6, 3.4 PC: 9.2	6 (5%)	Nov. 13
4	The Derivative	2.1 - 2.6	20 (18%)	Dec. 22
5	Applications of the Derivative	2.7, 3.1, 3.3, 3.4, 3.5	15 (14%)	Feb. 23
6	Calculus of Trigonometry	1.3, 1.4, 1.6, 2.3 – 2.7 3.5, 5.6	15 (14%)	Mar. 24
7	Anti-differentiation and Integration	3.7, 4.1 – 4.3, 7.1	19 (17%)	May 10
8	Calculus of Exponential and Logarithmic Functions	5.2 – 5.4	10 (9%)	Jun. 03

**Assessment:**

Assessment in this course is governed by the *Assessment and Evaluation Policy* of the Newfoundland & Labrador English School District. While this policy is under review, teachers and students should follow the policy that was in place for their respective former district.

**Assessment and Evaluation Plan for Mathematics 3208:**

Tests/Quizzes	25%
Mid-year Exam	20%
Final Exam	40%
Other Forms of Assessment (Assignments, portfolio, journal, presentation, projects)	15%

**Note:** All evidence of learning shall be considered when determining a student's final grade. Averaging shall not be used as a sole indicator of a student's level of attainment of the course outcomes.

**Resource Links:**

[Curriculum Guide for Mathematics 3208](#)

[http://www.ed.gov.nl.ca/edu/k12/curriculum/guides/mathematics/Calculus/Calculus\\_3208\\_curriculum\\_guide.pdf](http://www.ed.gov.nl.ca/edu/k12/curriculum/guides/mathematics/Calculus/Calculus_3208_curriculum_guide.pdf)

B. Williams

[williamwilliams@nlesd.ca](mailto:williamwilliams@nlesd.ca)