

## INTRODUCTION TO MATH 0131

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### Calendar Description:

MA 0131 Mathematics Grade 12 Calculus Equivalent 5 (5-0-0) Time: 75 Hours

Description: This course includes slopes and tangents, distance, velocity and acceleration, maxima and minima, sequences, limits and derivatives, derivatives of functions, tangents, derivatives and graphs, further applications of derivatives and anti-derivatives.

Prerequisite: [MA 0120](#) or equivalent (Pre- or Co requisite [MA 0130](#)).

### Resource requirements:

Scientific calculator

Modules will be provided. An auxiliary fee has been charged for the use of these modules.

### Attendance:

Regular attendance is expected of all students in all mathematics courses. Your success in math is directly linked to your attendance. Attendance will be taken during class. Any student **missing more than 15 classes may be debarred from writing the final exam.**

### Course Delivery and Evaluation:

This course is divided into 10 separate units called modules. The instructions for each topic are given in the modules, followed by several examples and exercises. Study the instructions and work through the examples before starting each exercise. The answers for each exercise are given at the end of the module. Check your work **often** to make sure you understand each new topic.

**The key to success** in working with modules is to **ask questions** whenever you have difficulty understanding the instructions, the examples, or the exercises. **Do not hesitate to ask for help.**

After each module you must write a test. When writing a test, be sure to show all of your work on the test paper. Marks are given for method as well as final answer. A passing mark of 60% is required on the test before continuing on to the next module. If you are unable to attain this mark, you must review the material and rewrite the test. The first and second test mark will be averaged.

A 50-minute midterm, which will cover the first five modules, must be written by **Thursday, May 26**. If you miss this date, you will receive a mark of 0% on your midterm. Upon

completion of all the course modules, you will write a three hour final exam. Be sure to leave time to prepare for these important exams! They are worth a large percentage of your final grade.

The recommended test date for each module and the midterm is on the next page. Follow these dates as closely as you can. You are encouraged to write a test early if you are prepared. **Consult your instructor immediately if you find yourself falling behind schedule.** Your instructor may need to reassess your math skills to ensure that you are placed in a course where you can be successful. **All tests must be written by June 20, 2005.**

**Bonus**

When you write your module tests on or before the given date, you will be awarded an additional 2% on your score for each test.

Your final  
mark is  
determined by:

10 module tests	40%
Midterm	20%
Final Exam	40%

Final grades are given as follows:

Alpha Grade	4-Point Equivalent	Percentage Guidelines	Designation
A+	4.0	90 - 100	Excellent
A	4.0	85 - 89	
A-	3.7	80 - 84	First Class Standing
B+	3.3	76 - 79	
B	3.0	73 - 75	Good
B-	2.7	70 - 72	
C+	2.3	67 - 69	Satisfactory
C	2.0	64 - 66	
C-	1.7	60 - 63	
D+	1.3	55 - 59	Minimal Pass
D	1.0	50 - 54	
F	0.0	0 - 49	Fail

### MA0131 – Spring 2005

Module	TOPIC/DESCRIPTION	Recommended Time & Test Date	Date written	Your mark
1	Introduction to Limits	May 5		
2	Tangents and Rates of Change	May 9		
3	Sequences and Series	May 12		
4	Introduction to Derivatives	May 18		
5	Maxima and Minima - word problems	May 24		
	<b>MIDTERM</b> - must be written on or before	<b>May 26</b>		
6	Derivatives of Functions - chain rule - product rule - quotient rule	May 31		
7	Tangents, Derivatives and Graphs	June 6		
8	Further Applications of Derivatives	June 9		
9	Anti-Derivatives and Area	June 14		
10	Derivatives of Trigonometric Functions	June 20		
	<b>FINAL EXAM - 3 HOURS</b>	<b>June 22</b>		