Ursuline College Chatham

Student Trustee Report

Featured:

- Introduction
- Learning
- Pedagape
- Wrestling
- Dodgeball

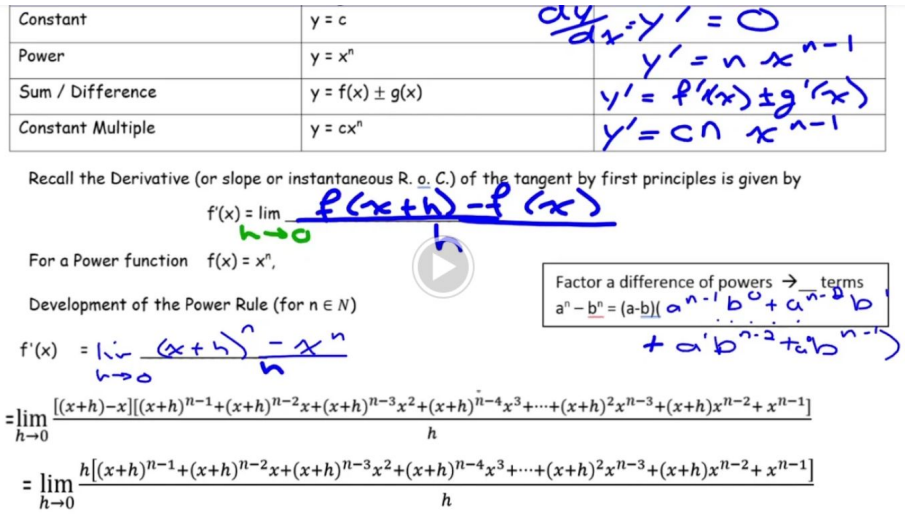
Introduction to March

Beginning on Monday, March 2nd, and ending on Friday, March 13th, the period of time in which Ursuline College was open was quite limited this month. Many teachers have adapted to the school's closure by ensuring students have access to relevant course material and resources, allowing them to continue to learn while away from school. In any event, UCC had an eventful twelve days prior to schools closing for March Break.

MARCH 2020						
SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Learning at Home

The Ontario government has released an online resource allowing some students to continue their studies while at home. Unfortunately, an abundance of courses are still unavailable online. As a result, many teachers have released course material in advance. Students with classes in the UCC Mathematics Department are especially fortunate to be taught by many resourceful teachers who have begun recording and distributing lessons through the internet.



Constant	$y = c$	$\frac{dy}{dx} = y' = 0$
Power	$y = x^n$	$y' = n x^{n-1}$
Sum / Difference	$y = f(x) \pm g(x)$	$y' = f'(x) \pm g'(x)$
Constant Multiple	$y = cx^n$	$y' = cn x^{n-1}$

Recall the Derivative (or slope or instantaneous R. o. C.) of the tangent by first principles is given by

$$f'(x) = \lim_{h \to 0} \frac{f(x+h) - f(x)}{h}$$

For a Power function $f(x) = x^n$,

Development of the Power Rule (for $n \in N$)

$$f'(x) = \lim_{h \to 0} \frac{(x+h)^n - x^n}{h}$$

Factor a difference of powers → terms

$a^n - b^n = (a-b)(a^{n-1}b^0 + a^{n-2}b^1 + \cdots + a^1 b^{n-2} + a^0 b^{n-1})$

$$= \lim_{h \to 0} \frac{[(x+h)-x][(x+h)^{n-1} + (x+h)^{n-2}x + (x+h)^{n-3}x^2 + (x+h)^{n-4}x^3 + \cdots + (x+h)^2 x^{n-3} + (x+h)x^{n-2} + x^{n-1}]}{h}$$

$$= \lim_{h \to 0} \frac{h[(x+h)^{n-1} + (x+h)^{n-2}x + (x+h)^{n-3}x^2 + (x+h)^{n-4}x^3 + \cdots + (x+h)^2 x^{n-3} + (x+h)x^{n-2} + x^{n-1}]}{h}$$

Pictured above is an image of a recorded Calculus (MCV4U0) lesson.

Pedagape Club: E-Waste Campaign

On Ash Wednesday, Pope Francis asked for a particular zeal for the virtues of charity and obedience. Inspired by his environmental activism and Ash Wednesday homily, the Pedagape club has chosen to devote their Lent to collecting electronic waste in the form of unused cell phones, computers, and other electronic devices. Their initiative has been successful, with many Lancers choosing to donate their old electronics throughout the month of March.

Wrestling

The Ursuline College Wrestling Team completed one of their most successful seasons in its history on March 3rd. At OFSAA, one UCC wrestler finished with a silver medal—the highest placement the team has ever received. Other accomplishments include wrestlers finishing fifth and sixth in their categories. We're incredibly proud of our wrestling team!

Dodgeball

Despite the announcement of school closures, Lancers left for the March Break with lots of school spirit. On Friday, March 13th, Ursuline College's Me-To-We Club held a dodgeball tournament for grades nine and ten to help raise funds to build a school in a third world country.