# Course Outline: Advanced Placement Calculus 30 & 30L 2019-2020 School Year

CAMPBELL COLLEGIATE EST. 1963

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(Bookmark this – you're going to need it on a regular basis including printing out your notes!)

Prerequisite: Pre-Calculus 30

Text: Calculus by Finney, Demana, Waits, & Kennedy

Saskatchewan Calculus 30 Curriculum: https://goo.gl/3R2pSL

Saskatchewan Calculus 30L Curriculum: https://bit.ly/2JpCVkX

These two courses run concurrently all year. The 30 Final exam will be written in class in May (after the AP exam) and the 30L Final will be written during Final Exam week in June.

#### **Course Description:**

- Advanced Placement (AP) Calculus focuses on two major concepts: Differentials and Integrals. Differential
  calculus focuses on rates of change, slopes of curves, and velocity/acceleration of moving objects. Integral
  calculus is used to measure areas, lengths of curves, determine centers of mass and volumes of some objects.
- In order to teach all concepts necessary to write the AP Calculus exam, students will cover two Saskatchewan curricula concurrently over the course of the 10 month course: Calculus 30 and Calculus 30L. Two separate final exams will be written (both near the end of semester 2) and two high school credits will be granted providing students successfully pass each course.
- To be successful in AP calculus students will need to focus on four major approaches to understanding mathematical concepts and problems. These four approaches are: numerically, analytically, graphically, and verbally. It is imperative that students contribute to class discussions and are proactive using correct vocabulary when discussing concepts related to calculus.
- Students will be required to use graphing calculators for certain assessments and will not be permitted to use them during others. The tests will consist of two sections, one requiring the use of a graphing calculator and the other where no calculator is permitted.

### **Breakdown of course:**

The following table describes the course by outcome, chapter and approximate time breakdown.

Textbook Chapter	1	2	3	4	5	6	7	8	9	7*	
Calculus 30	30.1 & 2	30.3	30.4 & 7	30.4 & 7	30.5 & 6	30.8	30.8	30.8	X	X	
Outcomes Integral Calculus 30L Outcomes	X	X	X	30L.2	30L.6	30L.1 & 5 & 6	30L5 & 7	30L.4	30L.8	30L.3	
Chapter Sections	Days spent on each Section in each Chapter										
Section 1	2	4	2	3	2	2	2	2			
Section 2	1	2	1	2	4	2	2	2	2	2*	
Section 3	SR	2	4	2	4	2		4	2*	3*	
Section 4		1	2	<mark>3</mark>	3	2	3				
Section 5	SR		1		2	1				3*	
Section 6	1				2						
OTHER	5	2	3	4	7	3	5	4			
Review		1	1	1	2	1	1	1	2*	2*	
Test		1	1	1	2	1	2	2	1*	1*	
# Classes	9	13	15	16	28	15	13	15	2 / 5*	11*	

<sup>\*\*\*</sup> The starred topics are ones we will cover AFTER the AP exam on May 5, 2020.

- There are approximately 143 classes before the AP Calculus AB exam on May 5th.
- We will cover approximately 126 classes for learning before the AP exam, which will give us approximately 17 days of review.
- After the AP exam we will cover the last couple sections in the locally developed course to prepare for the final exam in June. This will be for the Integral Calculus 30L exam.

## EVALUATION:

Unit	1	2	3	4	5	6	7	8	9	7*	Final Exam
CALCULUS 30	4%	13%	15%	13%	23%	6%	6%	X	X	X	20%
CALCULUS 30L	X	Х	X	9%	5%	18%	14%	16%	6%	12%	20%

- The mark breakdown in each category will be comprised of a test and one or two hand in assignments per unit as well as online Delta Math Assignments. The hand in assignments will be given and treated as though they are quizzes; they will be done individually during class time but will often be open notebook assignments. The review assignment will usually be an assignment of this nature.
- I am always looking for improvement, so if you do better on the unit test it is possible that I will use that mark for your assignment as well. The conditions for this are:
  - if and only if the test and the assignment cover all of the same curricular outcomes and indicators (this would work for a review assignment but it would not work for an assignment given in the middle of the chapter)
  - You are able to demonstrate that you have completed an appropriate amount of homework questions throughout the chapter (done prior to the test). This will be a subjective decision!
- All hand in assignments will be marked and returned to you prior to you writing the chapter exam.
- LATE ASSIGNMENTS will not be accepted once I have handed corrected assignments back to the class. This will result in a mark of zero.
  - If you miss an in class assignment you will write it the day you return during class time (assuming that it is not after the date that the corrected assignment has been handed back)

#### MISSING EXAMS

- It is expected that you will inform me in advance of any exams that will be missed for other scheduled events. I have a calendar on the wall that you need to fill in if you know you will be absent. Unless other arrangements have been made, you will write the exam during class time on the day of return.
- Exams that are missed for unsuitable reasons (etc.: skipping, not informing me of a scheduled absence in advance) will be given a mark of zero for that test. IF appropriate explanations can be provided by your parent or guardian, there will be an opportunity to write another version of the test. The mark of zero on the original version will still stand and will be counted towards the incentive.

#### CLASSROOM EXPECTATIONS:

- If you don't understand the way something has been taught I can usually teach it in a couple several different ways just ask!
- My classroom is a place where people feel comfortable and accepted. Please choose to follow this guideline!
- Phone use: During teaching time, phones/smart watches must either be left in your locker or placed in your slot in the phone holder at the front of the classroom. On most days you will be allowed to retrieve your phone after I am done teaching. This privilege will be removed if you choose to use your phone inappropriately in class.
  - Phones will NEVER be allowed during tests so be sure to always have your GRAPHING calculator with you! I do not usually have extra calculators so you must come prepared. You also ALWAYS need a scientific Calculator.
- There is no such thing as a stupid question! Ask if you don't understand!!!!!!!
- You must come prepared for class bring all supplies and your textbook every day.

**Organization**: The more organized you are the better you will do in this class!

NOTE: I will NOT be printing out your notes for you this year. They are available to be printed out on my website under the AP Calculus link at <a href="http://carignanmath.weebly.com">http://carignanmath.weebly.com</a>. Please remember that most of your hand in assignments this year will be open notebook - you want your notes to be as organized as possible! You will have a duo tang of additional assignments that I print for you (these are not to be written on!)

Loose Leaf

Coloured Pens

Eraser

An approved Scientific Calculator

**Graph Paper** Binder

Highlighters

- Ruler
- - Pencils
- Sticky Notes
- Approved

Graphing Calculator

OR

# ONLINE ITEMS THAT YOU MUST SIGN UP FOR:

### REMIND FOR BOTH CLASSES:

- Text the message **@apcalc314** to the number (780) 666-7508
- On your browser go to rmd.at/apcalc314 and follow the instructions

All students must join my Google Classroom in order to have access to all assignments and documents: The classroom is called AP Calculus 2020 and the class code is 44dorz9

All students must sign up for Delta Math (every month you will have several online assignments here that are summative). Instructions are on my Google Classroom.

All students are required to sign up to join the official AP Classroom on AP Central. Students need a College Board student account to log into My AP. Go to <a href="https://myap.collegeboard.org/login">https://myap.collegeboard.org/login</a> to create an account (this account will work for all AP classes that you take). You then must join my classroom:

If you are in my Period 2 class, you will join class code **PYRMYG**.

If you are in my period 4 class, you will join class code **D2WXPJ** 

Remember that on my weebly website I have math videos for every topic and a live google calendar with daily plans! Use this to stay on top of what will be doing in class! <a href="http://carignanmath.weebly.com">http://carignanmath.weebly.com</a>