# <u>Math 35 AP</u> Course Outline

 Instructor:
 Mr. Carder (scarder@rockyview.ab.ca)

 Textbook:
 Calculus, Graphical, Numerical, Algebraic, R.L. Finney, F.D. Demana, B.K. Waits, D. Kennedy, Scott Foresman - Addison Wesley, 1999

 Calculator:
 TI-84+ is recommended.

### Course Philosophy

The Advanced Placement Course in Calculus Math 31 is designed to develop the students' understanding of the concepts of calculus and to provide experience with its methods and applications. The course emphasizes a multirepresentational approach to Calculus, with concepts, results, and problems being expressed numerically, geometrically, numerically, analytically, and verbally. The connections among these representations are also important. Students who take an AP course will seek credit or placement or both from institutions of higher learning (dependant on the institution).

Broad concepts and widely applicable methods are emphasized. The focus of the course is not memorization of an extensive list of functions, curves, theorems, or problem types.

Technology will be used regularly to reinforce the relationships among the multiple relationships of functions, to confirm written work, to implement experimentation, and to assist in interpreting results.

#### Calculators

Test administrators are required to check calculators before the exam. Therefore, it is important for each student to have an approved calculator. Students should be thoroughly familiar with the operation of the calculators they plan to use on the exam. Calculators may not be shared, and communication between calculators is prohibited during the exam. Students may bring to the exam one or two (but no more than two) graphing calculators from the 2005-06 List of Graphing Calculators. Calculator memories will not be cleared. Students are allowed to bring to the exam calculators containing whatever programs they want. Students must not use calculator memories to take test materials out of the room. Students should be warned that their scores will be invalidated if they attempt to remove test materials from the room by any method.

### Your fun-filled semester will include:

Chapter	Topics
1.	Precalculus
2.	Limits and Continuity
3.	Derivatives
4.	Applications of Derivatives
5.	The Definite Integral
6.	Differential Equations and Mathematical Modeling
7.	Applications of Definite Integrals

## Evaluation

Quizzes and Assignments Tests<sup>1</sup> 80% 20%

<sup>&</sup>lt;sup>1</sup> There will be a test every 2 - 3 weeks based on the total material covered to that point. There will be four tests altogether, each worth 5% of your mark.

## **Classroom Procedures:**

- 1. Attend every class. If you are away <u>for ANY reason</u>, you are still responsible for the days' work.
- 2. Be punctual. Show up on time, with the necessary materials for the class. If you arrive late, you must bring a note explaining the reason for the lateness (exam, guidance appointment, etc.).
- 3. Hand in assignments on time.
- 4. Appeals. The procedure for appealing marks is outlined in your student handbook.
- 5. Food and drink. Food will be allowed on the condition that **all** traces of it are cleaned up by the end of class. The right to eat in class will be removed at the first instance of remains being left behind.

## The College Board Exam

### Cost: TBA (approximately \$100.00CDN)

## Date: Tuesday, May9th (8:00 AM)

### Breakdown

- <u>Section I Part A</u> (**no** calculator allowed)
  - 28 Multiple Choice Questions 55 minutes
- <u>Section I Part B</u> (graphing calculators are required)

17 Multiple Choice Questions 50 minutes

- <u>Section II Part A</u> (graphing calculators are required)
  - 2 Free Response Questions 30 minutes
- <u>Section II Part B</u> (no calculators allowed)

4 Free Response Questions

60 minutes

During this time students will be permitted to work on the questions from Part A but without the use of a calculator.