**Math 30-1**

**Semester 1: September 2013 – January 2014**

Mrs. MacKay

**Resource: McGraw-Hill Ryerson Pre-Calculus 12**

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| **Ch.** |  |  **Concepts** |  **%** | **Approx. Date Completed** |
| **1** | **Transformations** | * Horizontal & Vertical Translations
* Reflections & Stretches
* Combining Transformations
* Inverse Functions
 | 10 |  Sept. 18 |
| **3** | **Polynomial Functions** | * Characteristics of Poly. Functions
* Remainder Theorem
* Factor Theorem
* Equations & Graphs of Poly. Functions
 | 10 |  Sept. 30 |
| **2 & 9** | **Radical Functions &** **Rational Functions** | * Transformations of Radical & Rational Funct.
* Square Root of a Function
* Solve Radical & Rational Equations
 | 14 |  Oct. 17 |
| **7 & 8** | **Exponential Functions &** **Logarithmic Functions** | * Characteristics of Exp. and Log Functions
* Transformations of Exp. and Log Functions
* Laws of Logarithms
* Solving Exp. and Log Equations
 | 19 |  Nov. 5 |
| **10** | **Function Operations** | * Sum & Difference of Functions
* Product & Quotient of Functions
* Composition of Functions
 | 8 |  Nov. 15 |
| **4**  | **Trig and the Unit Circle**  | * Angle Measures and Arc Length
* Unit Circle
* Trig Ratios
* Solving Trig Equations
 | 9 |  Nov. 26 |
| **5** | **Trig Functions and Graphs** | * Graphing & Transforming Trig Functions
* Equations and Graphs of Trig functions
 | 10 |  Dec. 6 |
| **6** | **Trig Identities** | * Reciprocal, Quotient and Pythagorean Ident.
* Sum & Difference and Double Angle Ident.
* Proving Identities
* Solving Equations Using Identities
 | 10 |  Dec. 18 |
| **11** | **Permutations, Combinations &** **the Binomial Theorem** | * Fundamental Counting Principle
* Permutations
* Combinations
* Binomial Theorem
 | 10 |  Jan. 10 |

**Expectations**

Regular attendance and punctuality are necessary requirements to ensure the educational success of each student.

Students are expected to be present in class for all exams. If a student misses an assessment, they should expect to write a make-up assessment as soon as they return to class.

**Technology & Resources**

TI-Nspire or **TI-Nspire CX** calculator is recommended for this course.

Access to the internet at home is beneficial for this course as we will be referring to our virtual classroom for resources for learning [www.myecsd.net](http://www.myecsd.net)

* SNAP books for sale in bus.office

**Assessment**

It is essential that students have completed and corrected all assignments on a daily basis.

Answer keys are provided in the text as well as on the virtual classroom.

Continuous evaluation will be used to measure each student’s performance.

Teachers have flexibility with regards to assigning the quiz weighting to the unit exam if circumstances render it.

**Exams 75 %**

**Quizzes/Assignments 25%**

**Term Work 50%**

**Diploma Exam (Jan 24) 50%**