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| Pre-Calculus Mathematics 11 Course Outline |
| Term | Topic/learning objectives | Resource | Value |
| **1** **Trigonometry** |
|  | Standard position angles | Chapter 2  | 12% |
|  | Special triangles | Chapter 2 |
|  | Sine and cosine law | Chapter 2 |
| **Quadratic functions and equations** |
|  | Characteristics of graphs | Chapter 3 | 17% |
|  | Transformations/graphing | Chapter 3/4 |
|  | Factoring second degree polynomials | Chapter 4 |
|  | Changing forms of equations | Chapter 3/4 |
|  | Relating functions and equations | Chapter 4 |
|  | Applications of quadratics | Chapter 3/4 |
| **2 Radicals** |
|  | The real number system | handouts | 15% |
|  | Powers and exponent laws | handouts |
|  | Simplifying radicals | handouts & Chapter 5 |
|  | Operations with radicals | Chapter 5 |
|  | Radical equations | Chapter 5 |
| **Rational expressions and equations** |
|  | Operations with expressions  | Chapter 6 | 13% |
|  | Non-permissible values | Chapter 6 |
|  | Solving equations | Chapter 6 |
| **Inequalities** |
| **3** | Linear with one and two variables | Chapter 9 | 9% |
|  | Quadratic with one and two variables | Chapter 9 |
|  | Interval notation | handouts |
| **Financial Literacy** |
|  | Compound interest | handouts | 10% |
|  | Investments and loans with payments | handouts |
|  | Buying vs leasing | handouts |
| **History of Math** |
| May be in Term 1 or 2 | Research project | handout | 4% |
|  | Final Exam | 20% |

Grading:

The CHSS Mathematics Department uses a Cumulative Grading system. This means that each unit is worth a specific percentage of the entire course. Each term mark will be a reflection of the student’s learning up until that point. The final mark will not be an average of each term but rather a mark showing the student’s level of mastery throughout the entire course.

## Student Expectations:

* Students must bring a 3-ring binder notebook, textbook, calculator, graph paper and pencil to every class. A scientific calculator is necessary for this course, a graphing calculator is allowed for some units. A cell phone calculator may not be used for quizzes or tests.
* Homework assignments and unit reviews are due the day of the unit test, and will not be accepted late. Rewrites will only be permitted if that work has been completed prior to the first attempt.

### Work Habits: Work Habit marks are independent of achievement marks.

* A “G” student: consistently does their work, has good attendance, is attentive in class, is respectful, and tries their best to be successful.
* An “S” student: completes work most of the time, attends regularly, is attentive most of the time in class, is sometimes off-task, and could try harder to be successful.
* An “N” student: consistently does not do their work, does not attend regularly, is inattentive in class, acts inappropriately, and does not try to be successful.