Pre-Calculus 11 Mr. Sivertson

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Welcome to Pre-Calculus 11. This course is intended to develop your ability to analyze and problem solve using algebraic and graphical methods in preparation to study calculus in college or university. You will be expected to use both methods in various situations. The topics we will be covering this semester are:

* + - Radicals
      * Operations on Radicals
      * Solving Radical Equations
      * Applications of Radical Equations
    - Rationals
      * Operations on Rational Expressions
      * Solving Rational Equations
      * Applications of Rational Equations
    - Quadratics
      * Factoring Quadratics
      * Properties of Quadratic Functions
      * Different Forms of a Quadratic Function
      * Graphing Quadratic Functions
      * Finding the Equation of a Quadratic Function
      * Solving Quadratic Equations
      * Applications of Quadratic Functions
      * The Discriminant
    - Systems of Equations
      * Graphing Linear Systems
      * Graphing Non-Linear Systems of Equations
      * Solving Non-Linear Systems of Equations Algebraically
    - Inequalities
      * Solving Linear Inequalities
      * Graphing Linear Inequalities in 2 Variables
      * Quadratic Inequalities
      * Applications of Inequalities
    - Trigonometry
      * Angles in Standard Position
      * Law of Sines
      * Law of Cosines
      * Solving Triangles
    - Finances
      * Investments and Loans
      * Annuities
      * Stocks and Bonds
      * Mortgages

The material will be learned through classroom discussion, textbook assignments, worksheets, homework and quizzes. Your mark will be determined approximately by Classroom Assessment (30%), Unit Tests (45%), and a Final Exam (25%).

Corrections on assignments can be done for full marks provided they are completed and handed in before the unit test. Corrections on assignments must be done on a separate piece of paper, stapled to the front of the original assignment, showing a full understanding of the question. Graphs must be done on graph paper. No late assignments will be accepted. These will be given a mark of 0.

There will be no retests given. However, at the end of the course I will drop your lowest test score.

Your final mark will be given as a percentage, with the following provincially mandated letter grade:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| A | B | C+ | C | C- | I/F |
| 100% - 86% | 85% - 73% | 72% - 67% | 66% - 60% | 59% - 50% | 49% - 0% |

It is your responsibility to make up any missed work, be sure to get notes from a classmate. I record what was accomplished in class on the Math 11 blog on my website. On the rare occasion that you miss a test, you will be expected to write the test during the next class you attend. There will be lots of time given in class to do assignments, but most people will not be able to complete everything in class, so be prepared to do some Math work each night. Extra help is available from me in room 217 at lunch, before school and after school. Please let me know that you would like to ask questions and I will be sure to be available for you. This quarter there is also Mahlab at lunch times in room 116 with Ms. Hannah.

It is expected that you arrive to class on time, prepared to work, with all necessary supplies: a Theory and Problems for Pre-Calculus 11 Mathematics workbook, a notebook, notepaper, graph paper, pen, pencil, eraser, ruler, and scientific calculator (no smart phones please).

To be successful in this course please follow the following guidelines:

* Cell phones should be off and away. Cell phones are an excellent resource for many workplace situations. However, they are also an incredible distraction for many people. The benefits of having a cell phone are negated by its misuse, therefore no phones are allowed in class.
* Do not plagiarize another student’s work. Plagiarism is the act of presenting someone else’s work as if it were your own. This class is about learning how to think. If you simply copy another student’s assignment you will not have learned the material and will most likely do poorly on tests.
* Come to all classes on time, pay attention, and ask questions. You’re here to learn. If you are having trouble following the lesson, ask me to repeat the idea or to do another example. I want you to be successful.
* Complete and hand in all assignments. Sometimes students finish part of an assignment or neglect to hand in an assignment. Not only does this affect your mark directly but you also miss out on feedback that I can give you on your assignment. Assignments handed in late will not be marked.