Delview Secondary School Department Of Mathematics

**Pre-Calculus 11 Syllabus**

# Course Rational

Learning to solve problems is the main reason for studying mathematics. In today’s technological world, many people are finding that their job demands higher levels of mathematical ability than ever before.

# Course Structure

The material for this course will be delivered in a variety of ways, the intention being to address the different learning style preferences of students enrolled in the course and at the same time, utilize suitably proven teaching methods to ensure successful concept development. It is expected that all students will endeavor to work equally well independently or collaboratively.

# Practice

Textbook assignments will be given on a regular basis. On going student self-assessment will be an integral part of this course as students learn to take responsibility for their own learning.

# Course Grade

Students will be assessed and evaluated on an individual basis using a variety of the following techniques:

|  |  |  |
| --- | --- | --- |
| **Category** | Description | **Weight** |
| Tests **&**  **Projects**  Teacher evaluation | • midterm testing  • chapter tests  • cumulative testing  • cross-grade testing  • projects | 80 % |
| Quizzes Student self-assessment | • skill assessment  • *may* have chance for rewrite | 10 % |
| Assignments **&**  **Practice**  Teacher evaluation  Student self-assessment  &  Concept and skill development | • worksheets  • group assignments  • homework completion  • in-class warm up questions | 10 % |

# Work Habits Grade

Students are encouraged to demonstrate the kind of work habits that would be valued in any job situation. In general, qualities like punctuality, preparedness, perseverance through problem solving activities and diligence are minimum expectations in the work force. Students will be evaluated specifically as outlined in the Delview Student Agenda. Students will self-assess their own work habits using a rubric.

# Materials Required For Class

|  |  |
| --- | --- |
| **Required Every Class** | **Required Occasionally** |
| • 2 pencils (no erasable pens)  • good eraser  • Math textbook  • 3-ring binder with loose-leaf paper  • scientific calculator  • ballpoint pen for marking work  • 30 cm ruler (unbroken)  • Math workbook  • Math notebook | • graphing paper (always have some in binder)  • pencil crayons  • scissors  • graphing calculator  • miscellaneous minor supplies as required |

# Course Content

The Pre-Calculus 11 curriculum covers 8 main topics. It is meant to give the skills required for Pre-calculus 12. For those students who wish to go on, the concepts will also be needed for Calculus and beyond.

# Course Outline

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| --- |
| **Topic** |
| Radicals and Exponents  Radical Expressions and Equations  Quadratic Functions  Quadratic Equations  Linear and Quadratic Inequalities  Rational Expressions and Equations  Trigonometry  Financial Literacy |

## Course Expectations

1. **BE PREPARED**: The tools necessary for this course are two pens (one red and one blue or black), a pencil with eraser, 3 ring binder with ample supply of notepaper, textbook, a ruler, and a calculator (not a cell phone).
2. **BE PUNCTUAL**: The first few minutes of class are very important. They set the tone for the entire lesson. Nothing is more disruptive than a stream of students drifting in late and interrupting the lesson. If you are late, enter the classroom **quickly** and **quietly** and take your seat. All "lates" are recorded. After your **second** unexcused late, you will be unable to receive a G for work habits.
3. **BE A PURPOSEFUL LEARNER**: At all times be on task and participate in the lesson. Behave in a mature and cooperative way using every minute of class time effectively. Remember that it is your teacher who dismisses you **not** the bell.
4. **DO NOT MISS CLASSES**: Attending classes regularly will ensure you do not miss important concepts. Even if you are not feeling the greatest, you will learn more than if you are absent. If you know that you will be absent make sure that you inform me beforehand. If you do miss a class it is **YOUR RESPONSIBILITY** to get any notes or assignments that you missed. I suggest that you take the phone numbers of several people who live near you so that you may call and ask about the day’s proceedings (see back of this sheet). These people should be counted on to collect any handouts for you. Following these suggestions will prevent you from falling too far behind.

Note: **YOU ARE EXPECTED TO COMPLETE EVERY ASSIGNMENT WHETHER YOU ARE HERE OR NOT!**

1. **COMPLETING ASSIGNMENTS**: Assignments and homework quizzes count for an important portion of your grade. Marks will be awarded for 1) questions being written out (summarized for word problems), all work shown, an answer found, and problem marks correct/incorrect (if you do not have the correct answer, ask in class or during flex the next day). Work must be written neatly and legibly.

If you struggle with your homework the minimum you can do for each assigned problem is:

For computation problems:

* Write the question; Attempt to solve

For word problems

* State your variables/draw a picture; Attempt to write a starting equation

1. **EXTRA HELP**: If you would like to see me for extra help, you will find me in room 171 before school and during flex and in room 131 after school. If you are struggling, the responsibility is YOURS to get on track.
2. **CHEATING**: Students are expected to complete their own work on an individual basis unless otherwise stated by the teachers. Any student who plagiarizes the work of another - either in test situations or on major assignments will face disciplinary action. This may range from receiving a zero on an assignment or test to disciplinary action by the administration. (Note: the work of “another” includes that of students or any published work such as books, CD-ROM, Internet and periodicals).
3. **WORK WITHOUT DISTRACTIONS:** Avoid use of electronic devices during class. If you wish to listen to music, ask first. If phones or other devices are being abused, they will not be allowed in class.

## HAVE A FRIEND HELP YOU!

Your success in Math is directly related to your completion of assignments, homework, labs etc. ***THERE IS NO SUBSTITUTE FOR HARD WORK***. Math is a subject that teaches problem solving skills and other process skills. **YOU** must be able to perform these skills when the time comes i.e. in an assignment or in a test situation. Because Math concepts build upon previous concepts, you cannot afford to miss concepts or techniques because the missed content will be used later on in the course. It is for this reason I will ask you to take the names and phone numbers of several people in the class you can rely on to help you out if you do happen to miss class time.

I will not chase you down to catch you up or to collect an assignment you missed or to check off a homework check that was done in a previous class. It is your responsibility to find out if you missed anything and to take the appropriate actions to catch up including showing me your homework if I did a check in the previous class that you may have missed!).

I have chosen the following people to be my Math buddies for the summer:

|  |  |  |
| --- | --- | --- |
|  | **NAME** | PHONE NUMBER/EMAIL |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**If I miss a class:**

***My friend’s responsibilities are:***

* to get any photocopied handouts or assignments for me,
* to take note of any due dates or other special instructions given in class, and
* to be prepared for a phone call.

***My responsibilities are :***

* to **call** my buddy to get assignments etc. at earliest possible time,
* to ask about and record any due dates and special instructions,
* to have my buddy show me or tell me about anything that I may not understand, and
* to **complete** the required work.