# <u>Syllabus</u> Math 30-1 Miss Yoner

### **Course Rationale**

"Mathematics is a broad-ranging field of study in which the properties and interactions of idealized objects are examined. Whereas mathematics began merely as a calculational tool for computation and tabulation of quantities, it has blossomed into an extremely rich and diverse set of tools, terminologies, and approaches which range from the purely abstract to the utilitarian." (Wolfram MathWorld)

You know the difference between linear and quadratic and you can list the characteristics of most relations, but this year we bring it all together to show you that it is all interrelated. We will start by learning about polynomials, radicals, rationals, and inverse functions. While working through these functions we will discuss parent functions and how they can be transformed or combined to create new functions.

We will continue to work through and expand our understanding of trigonometric functions, the unit circle, exponents, logarithms and counting methods, while exploring mathematical notation, skills and terminology that will help you to be successful in a university math program.

As this program is geared toward pure mathematics and engineering, I will be emphasizing an ability to do work manually and to use the calculator as a tool to assist with checking your work as most calculus classes do not allow you the use of a calculator.

### **Unit Marks**

Unit Quizzes and Assignments 60% Unit Exam 40%

### **Course Content**

| Unit 1 - Relations and Functions                         | 55% |
|--|-----|
| Section 1 – Function Transformations and Operations      |     |
| Section 2 – Radical, Polynomial and Rational Functions   |     |
| Section 3 – Exponential and Logarithmic Functions        |     |
| Unit 2 - Permutations, Combinations and Binomial Theorem | 15% |
| Unit 3 - Trigonometric Functions                         |     |

Note: As this is a diploma class, remember that this course mark is only worth 70% of your final mark along with a 30% Diploma.

### **Classroom Expectations**

**Be Open-minded** ~ If you see the worst in any situation or idea without first considering its merits, you only impede your own growth.

**Be positive** ~ Attitude is everything. If you say you can't, you start to believe you can't.

**Be respectful** ~ Others have the right to a quality education, same as you. Don't mess with that.

## WORK IS EXPECTED TO BE NEAT. (Use a pencil and eraser or buy erasable pens;my favorite!)

### **Materials Required**

Binder loose-leaf Notebook (optional) graphing paper dividers ruler Pencils and Erasers Pens/Highlighters **GRAPHING CALCULATOR** (TI Graphing Calculator)

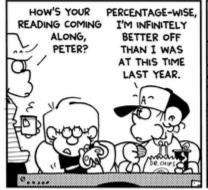
**Late**: I do attendance in the first 5 min. If you are over 5 min late you will need to check in at the office.



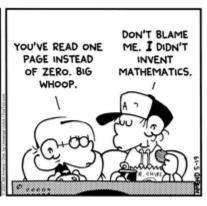
#### **Bathroom/Drink:** Only one student may be out of

the room at a time. If you require to leave the room for one of these reasons please ask before you leave and write your name on the board so that I know who is out. If someone is already out you may write down your name below the previous name to guarantee you get out next.

Cell Phones: Your phone will be on silent when you walk in the door. I do not mind if you have your cell phone on you, however it must be out of sight until work time. During the lectures, I expect to have your full attention considering some of these concepts can be tricky. Your phone will be in a pocket, backpack or simply in your locker. During work periods, you are more than welcome to listen to music while you work as long as you have set up a playlist so that it does not become a distraction. If at any point I believe that your phone has become a distraction then I will pass you a paper bag that you will put your phone into. You can keep that bag on your desk, however you will not be allowed to access your phone for the rest of class. If there are further issues, then we might have to have a discussion with your guardians.







**Seating Plan:** Personally I do not enjoy seating plans, I believe that they can limit the classroom discussion. However if the seating arrangement is inhibiting your learning or others then I can easily make up a seating plan.

Late Assignments: Since this is a face paced course I expect all assignments to be done on time and done to the best of your abilities. You will have time in class to work on assignments and you will have a generous amount of time for your deadlines as well. If the assignment is not handed in on the due date then you are setting yourself behind and it will be very difficult to catch yourself back up. All overdue assignments have to be in a week before my report card marks are due and I will let you know when that is approaching. After this deadline has passed, those assignments will no longer be valid to go towards your grade.

**Music:** You may have headphones in my class for listening to music during independent work time if it helps you concentrate. This does not mean you can be on your phone looking for or changing songs, so

YOU MUST BE THE

**SOUARE ROOT OF-1** 

**BECAUSE YOU** 

**CAN'T BE REAL** 

have your playlist ready ahead of time and place your phone face down on the corner of your desk so that it is clear you are not using it inappropriately.

**Food:** You may eat and drink in my class. Food and drink will be healthy and quiet.

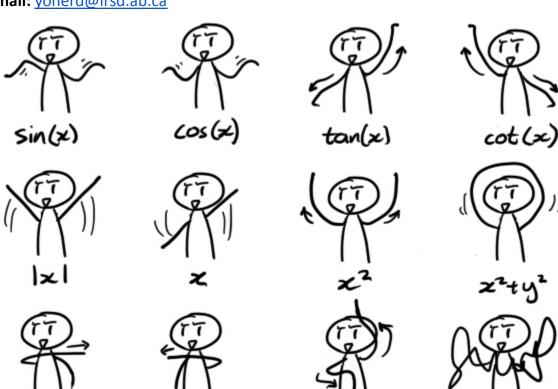
If you must have a slurpy, iced cappuccino or iced coffee, you will bring me one too.

Math Games: Are available in my classroom for if you need a mental break.

Dress Code: Clean and Modest. No drug/alcohol logos.

# **Contact Information: Teacher:** Miss Yoner

e-mail: yonerd@lrsd.ab.ca

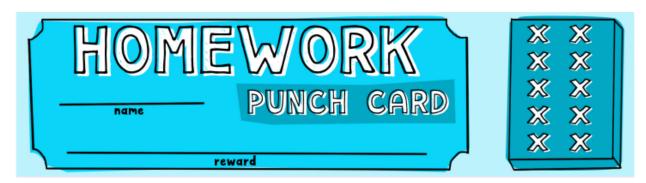


## **Textbook Work**

### **Self-Assessment for Textbook Work:**

How to mark:

- 100% I got it all right with no help from the key
- 90% I got it all right, but had to check the key for help a few times.
- 80% I understand it, and could do it without assistance now, but I used the key.
- 70% I got through it all, but would like some help on a few questions (1 or 2)
  - I have indicated on my assignment beside my mark which numbers I would like your help with.
- 60% I got through most of it, but would like to sit down with you at lunch/CHAT to go through what I didn't understand.
- 50% I understood most of it and could use some help, but I have no intention of coming in for help.



# Rewards:

## Small Rewards:

1 Card- Candy Bar, Chip Bag, Pop/Beverage, Tim Hortons Gift Card (\$2), Popcorn Bag or Earn an Extra 5% on a Test.

# Large Rewards:

(2 Cards) x (# of students in the class)- Movie Day or Game Day.

# Parent/Guardian Form

| Student's Name:                         |                         |             |                   |
|---|-------------------------|-------------|-------------------|
| Emergency Contact #1                    |                         |             |                   |
| Name:                                   | Relation:               |             |                   |
| Telephone Number:                       |                         |             |                   |
| Email:                                  |                         |             |                   |
| Emergency Contact #2                    |                         |             |                   |
| Name:                                   | Relation:               |             |                   |
| Telephone Number:                       |                         |             |                   |
| Email:                                  |                         |             |                   |
|   |                         |             |                   |
|   |                         |             |                   |
| Under the Freedom of information a      | and Protection of Priv  | acy Act a   | 11                |
| parents/guardians are allowed to asl    | k that their child have | no picture  | es taken of them  |
| and/or that their picture is not put or | n any website for sch   | ool related | l purposes.       |
| Please indicate below what makes y      | you and your child the  | e most con  | ıfortable:        |
| 1) My child can have their pictu        | re taken in class picto | ures (such  | as during         |
| presentations, to showcase th           | eir work, etc.)         | YES         | NO                |
| 2) My child can have their pictu        | re uploaded to schoo    | l related w | rebsites (such as |
| Google Classroom)                       |                         | YES         | NO                |

Please answer a few questions on the back of this page

| Questions:  |  |  |
|---|--|--|
| Does your child have any allergies that I should be aware of?                         |  |  |
|   |  |  |
| Is there anything you would like to inform me about before we start this school year? |  |  |
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| Parent/Guardian Signature:  |  |  |