

St. Michael Catholic High School
Functions – Grade 11 University
MCR 3U

Source Policy Document:

Ministry of Education and Training:

The Ontario Curriculum, Grades 11 and 12 Mathematics, 2007.

Credit Value: 1.0

Course Description:

This course introduces the mathematical concept of the function by extending students' experiences with linear and quadratic relations. Students will investigate properties of discrete and continuous functions, including trigonometric and exponential functions; represent functions numerically, algebraically, and graphically; solve problems involving applications of functions; investigate inverse functions; and develop facility in determining equivalent algebraic expressions. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

Items Necessary for the Course

Every day the following items should be brought to class:

- binder with **LINED** and **GRAPH PAPER** (dividers may help with organization)
- Textbook
- Scientific calculator (you will need one for grade 11 and 12, one with a fraction button will be helpful!)
- Pencil(s), eraser, ruler

Textbook: Nelson – 11 Functions

Teacher: Mr. N. White

Term: Semester 1 2023-24

Course Break Down :

Unit 0: Review

Unit 1: Quadratic Functions

Unit 2: Functions

Unit 3: Inverse Functions and Equivalent Expressions

Unit 4: Trigonometric Ratios

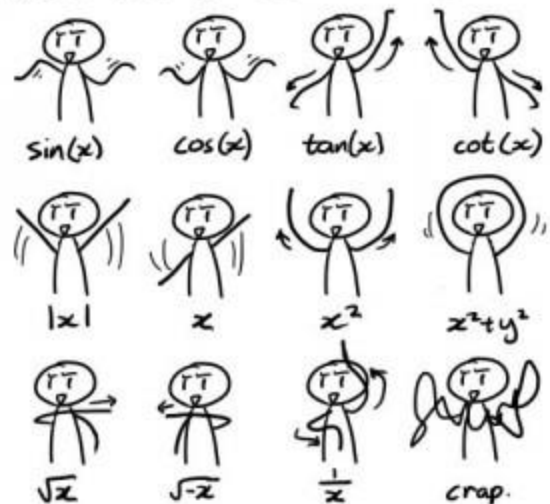
Unit 5: Trigonometric Functions

Unit 6: Exponential Functions

Unit 7: Sequences, Series and Financial Applications

Exam Review

Beautiful Dance Moves



Evaluation of Student Achievement:

Course Grade Weighting

Term Work: 70%

Evaluation consists of assessments such as: Test, Assignments, and Quizzes.

Final Evaluation: 30%

Evaluation Consists of:

- a) A Final Summative Assessment /Culminating Task - (10%)
- b) Final Examination (20%)

Achievement Categories:

The categories represent four broad areas of knowledge and skills within which the expectations for any course are organized. The categories of knowledge and skills are described as follows:

Knowledge and Understanding – subject specific content acquired in each course and the comprehension of its meaning and significance

Thinking – the use of critical and creative thinking skills and/or processes (planning skills, processing skills and critical/creative thinking processes)

Communication - The conveying of meaning through various oral, written, and visual forms.

Application - The use of knowledge and skills to make connections within and between various contexts.

Learning Skills

Students will also be evaluated on their learning skills, which include the following:

- | | | |
|------------------|--------------|------------------|
| ➤ Responsibility | Organization | Independent Work |
| ➤ Collaboration | Initiative | Self-Regulation |

Website

www.nowyoudothemath.weebly.com (hover over the course code, MCR3U, and then choose the appropriate unit)

General Expectations:

Be Here

- Attendance needs to be a priority. YOU are responsible for missed work, visit the website above to get missed notes (they are posted immediately after class) or ask a friend.
- You will have at least three days notice for a test, you must be present on test days. If there is an extenuating circumstance you must notify the teacher immediately.
- Please use the washroom before or after class, if you leave during class you are missing information!

Be Punctual

- The first three lates are excused, after that detention will be assigned.

Be Organized

- Keep your notebook neat and organized. You will need all of your work and tests when it comes time to prepare for the exam and culminating.

Be Proactive

- You are responsible for your own achievement in this class. Homework completion is essential for success. Take advantage of extra help offered – see me to make arrangements!

Be Respectful

- Show respect to your peers, to your teacher, and to yourself. Remember where you are, and what you are trying to achieve – you are in a university bound course and so are your classmates! Appropriate language, clothing and participation are expected from you in this class every day of the semester.

Homework

- *Homework completion is essential for success.*
- You can expect 30 - 60 mins of homework a night. It is essential this is done to keep up with course content. (Depending on your comfort level in math and the speed you typically complete homework.)

Technology

- The Smartboard is used every day in class, which allows all class notes to be posted on the class website.
- If you wish to use a laptop/tablet (not mandatory) you may bring in your own, the school does not provide laptops for students. You must be using the laptop for class related work or you will be asked to leave it at home.
- If you have a laptop/tablet a stylus would be very helpful, or knowledge of Microsoft mathematics add-in.

Cell Phones

- This is becoming more of a hot issue. We will be using the desmos app which is of huge academic benefit to students when appropriate. However, most other uses of cell phones are not, they are just a distraction!

Take care of your resources.

- You are responsible for your textbook that you borrow over the course of the semester. If you misplace it or damage it you will be required to replace it!
- If you damage a graphing calculator, you will have to pay to replace it (\$150)!!!

Dear Parent/Guardian

Please review this course outline as well as the course website, sign below indicating you have done so, and have your son/daughter return this sheet. It is my hope that you involve yourself in your child's learning.

It is very important that your son/daughter understands these expectations to motivate him/herself to complete his/her daily work in the classroom and at home. Please feel free to contact me at the school if you have any questions about the course, your son/daughter's progress or any other concerns.

Thank you for your support,

Nick White
613-258-7232
nick.white@cdsbeo.on.ca

Website : www.nowyoudothemath.weebly.com (hover over the course code, MCR3U, and then choose the appropriate unit)

I have read over the course outline and course website and agree to the expectations of proper behaviour and conduct set out above and the consequences thereof.

Student's Name _____

Student's Signature _____

Parent/Guardian Signature _____

Contact Information: *(Please complete)*

Parent/Guardian contact:

Name: _____

Phone: _____ (H) _____ (W)

Email: _____