

ST. MICHAEL CATHOLIC HIGH SCHOOL
DATA MANAGEMENT – GRADE 12 UNIVERSITY
MDM4U

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 broadens students' understanding of mathematics as it relates to managing data. Students will:

- apply methods for organizing and analysing large amounts of information
- solve problems involving probability and statistics
- carry out a culminating investigation that integrates statistical concepts and skills
- refine their use of the mathematical processes necessary for success in senior mathematics

Students planning to enter university programs in business, the social sciences, and the humanities will find this course of particular interest.

ITEMS NECESSARY FOR THE COURSE

Every day the following items should be brought to class:

- 3 ring binder with **LINED** and **GRAPH PAPER**
- textbook
- Scientific calculator (one with a fraction button will help!)
- Pencil(s), eraser, ruler

TEXTBOOK: Nelson: Mathematics of Data Management

TEACHER: Mr. N. White

TERM: Spring Semester 2022-23

UNIT TITLES:

Unit 1: Introduction to Probability

Unit 2: Permutations

Unit 3: Combinations

Unit 4: Probability Distributions for Discrete Variables

Unit 5: Organisation of Data for Analysis

Unit 6: One-Variable Data Analysis

Unit 7: Probability Distributions

Unit 8: Two-Variable Analysis

EVALUATION OF STUDENT ACHIEVEMENT:

Course Grade Weighting

Term Work: 70%

Evaluation consists of:

- a) **Unit Tests** - at the end of each strand unit. Testing techniques include a variety of formats.
- b) **Assignments; Homework** - these may or may not require a significant amount of individual work both at home and in class
- c) **Unit Summative Assessment Tasks** - Individual and group performance skills will be assessed using traditional and performance based tasks, over a period of a few/several days. At the end of specific units, and at the end of the course, students will demonstrate their achievement of the expectations of the course. They will do this by solving problems which require them to:
Form conjectures; Model situations; Gather, organize and display data; Carry out pencil and paper routines; Identify necessary conditions in a problem and being aware of what can be ignored in a problem; Communicate reasoning and results; Demonstrate their skills using technology towards specific application(s).

Final Evaluation: 30%

Evaluation Consists of:

- a) A Final Summative Assessment - (15%)
- b) Final Examination (15%)

ACHIEVEMENT CATEGORIES:

The categories represent four broad areas of knowledge and skills within which the expectations for any given mathematics 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 (go to the course codes at the top and click on MDM4U).

You can also follow along using the remind app to keep up to date with set homework, upcoming tests and assignment deadlines.

GENERAL EXPECTATIONS:

Be Here

The best way to learn the material is to be in class and present for the lessons.

If you aren't here is it **YOUR** responsibility to get caught up! The best place to do that is the website. Lessons are typically posted minutes after class is completed. Therefore, there is no excuse not to be caught up when you return to school. If you don't have a computer or internet at home, please indicate that at the end of the course outline so I am aware from the beginning.

TESTS will be announced at least **THREE** days in advance of when they are to be written. If a student is legitimately absent, with parental/guardian knowledge, the day of a test, s/he must be prepared to write the test **the day they return** to school.

A missed test without reason results in a mark of zero. Should the student be involved in a school approved activity on the day of a test, it becomes the **responsibility of the student** to inform the teacher well in advance so that arrangements can be made. If absent for a summative task, the student must arrange a time to complete this activity or a mark of zero will result.

Be Punctual

Detentions will be assigned as per school policy for lateness. Three late arrivals constitute a detention followed by one for every subsequent arrival. If you aren't prepared when you arrive for class and have to go back to your locker, that counts as a late. Come prepared and in proper uniform to class always!

Be Proactive

You are responsible for your own achievement in this class.

Homework

Homework completion is essential for success. Take advantage of extra help offered at lunchtime – speak to me in advance and I will arrange to meet with you! Homework is to be kept separately in either a coil notebook or duotang so it can be collected periodically. It **MUST** be at school every day so it can be collected.

Keep Up-to-date

The course website is available to see missed work and notes and check test dates. Use it to keep yourself informed. Course notes will **NOT** be photocopied if you miss class, it is your responsibility to use the website.

Be Respectful

Show respect to your peers, to your teacher, and to yourself. Remember where you are, and what you are trying to achieve. Electronics are not to be brought to class unless stated. If I see them I will take them and you can pick them up at the office at the end of the day.

Take care of your resources. Please cover textbooks. If you damage a textbook, you will have to pay for all or a portion of replacing it.

- Graffiti – mild (\$5), moderate (\$15), severe (cost of textbook \$95)
- Water/Beverage Damage – cost of book
- Pages ripped or removed – mild (\$5), severe (cost of textbook)
- Textbook cover damage – folds, gashes, rips, etc... (\$5 - \$10)
- Lost book or wrong book returned (cost of textbook)

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 has these expectations to motivate him/herself to complete his/her daily work in the classroom and at home. Please feel free to contact 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

Website: www.nowyoudothemath.weebly.com (go to the course codes at the top and click on MDM4U). This page should be live in the next day or so.

Email: nick.white@cdsbeo.on.ca

I have read over
the course outline _____ 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)