



## NORTH TORONTO COLLEGIATE INSTITUTE

### Mathematics Department

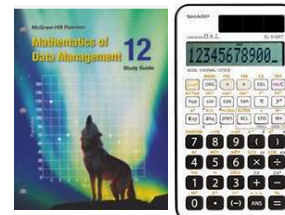
Telephone 416-393-9180, ext. 20080

**Teacher:**

Course Title	Course Code	Credit Value	Prerequisite
<b>Grade 12, Data Management, University</b>	<b>MDM4U1</b>	<b>1.0</b>	<b>MCR3U1 or MCF3M1</b>

**TEXTBOOK:** Mathematics of Data Management, McGraw-Hill Ryerson (Replacement Cost: \$120)

**REQUIRED MATERIALS:** Graph paper, notebook, writing utensils, and a scientific calculator. The only approved calculator for tests, quizzes, and assignments is the SHARP EL-510 <https://www.staples.ca/products/437262-en-sharp-el510rtb-scientific-calculator-white>



### COURSE DESCRIPTION

This course broadens students' understanding of mathematics as it relates to managing data. Students will apply methods for organizing and analyzing large amounts of information; solve problems involving probability and statistics; and carry out a culminating investigation that integrates statistical concepts and skills. Students will also 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.

### OVERALL EXPECTATIONS

From the 2007 Ontario Mathematics Curriculum Document, the course explores these strands:

1. **Counting and Probability**
2. **Probability Distributions**
3. **Organization of Data for Analysis**
4. **Statistical Analysis**
5. **Culminating Investigation**

### **Chapter Topic Textbook Sections**

- Chapter 4** - Permutations and Organized Counting 4.1 – 4.5  
**Chapter 5** - Combinations and the Binomial Theorem 5.1 – 5.4  
**Chapter 6** - Introduction to Probability 6.1 – 6.5  
**Chapter 1** - Tools for Data Management 1.1, 1.6, 1.7, 6.6  
**Chapter 2** - Statistics for One Variable 2.1 – 2.6  
**Chapter 3** - Statistics for Two Variables 3.1 – 3.5  
**Chapter 7** - Probability Distributions 7.1 – 7.4  
**Chapter 8** - The Normal Distribution 8.1 – 8.6  
**Chapter 9** - Culminating Project

### **ASSESSMENT AND EVALUATION BREAKDOWN**

To promote student success, ongoing assessment and feedback will be given regularly to the students. A variety of assessment and evaluation strategies will be used in this course, **including quizzes, tests, assignments**. Expectations will be evaluated based on the provincial curriculum expectations and the achievement levels outlined in the ministry document. Expectations are organized into four categories of knowledge and skills. The course evaluation is broken down according to the strands and percentages listed below:

Term Evaluation 70 %		Final Evaluation 30 %		
<b>Knowledge and Understanding</b>	<b>20 %</b>	<b>Final Exam</b>	<b>20%</b>	
<b>Thinking</b>	<b>15 %</b>		<b>Culminating Project</b>	<b>10%</b>
<b>Communication</b>	<b>15 %</b>			
<b>Application</b>	<b>20 %</b>			

### **Learning Skills**

The evaluation of learning skills (responsibility, collaboration, independent work, organization, self regulation, and initiative) will be reported as needs improvement, satisfactory, good or excellent. Students will find that concentrating on these skills will result in a higher level of success in meeting the course expectations.

### **General Expectations:**

Regular and punctual attendance, daily homework practice, active participation in class activities, and a positive attitude are the most effective ways to ensure success in the course. Please enter the classroom with the mindset of teamwork and respect. If you are late, you are to go to the office to obtain a late slip prior to coming to the class.

**Due Dates & Test Dates:**

Students are responsible to hand in work in accordance with the due date. In the case of a known absence (e.g., a field trip, a sports meet, or an unavoidable medical appointment) on the day an evaluation is scheduled, a student must speak to the teacher in advance and provide acceptable documentation to arrange an evaluation makeup opportunity during lunch or after school at the teacher's discretion. In the case of an unexpected absence, a student must communicate with the teacher on the day upon return to school to make alternate arrangements. Failure to do so may jeopardize any makeup opportunity. Once a marked evaluation is returned to the class, a student can no longer make up for the missed evaluation, and a mark of zero will be issued.

**Student Accommodations:**

Appropriate accommodations for exceptional and ELL students are provided by the teacher in accordance with the recommendations as outlined in each identified student's Individual Education Plan (IEP) and/or Annual Education Plan (AEP). Please speak to your teacher if you have an IEP or need any accommodations to support your success. Open communication between students and the teacher is key to math learning in the classroom.

If you have an IEP, please inform your teacher within the first days of class so accommodations can be implemented right away.

**Absences:**

You are responsible for any work missed while you are away. It is best to find out what was covered up in class. Class material will be provided on the digital platforms used in class (Brightspace, OneNote, Google Classroom)

**Extra Help and Homework:**

Extra help is available several days a week after school, and during lunch. Most classes will begin with homework help. Homework is assigned on most days. Homework is expected to be completed on a regular basis.

**Respect and Behaviour:**

Students and parents should make themselves aware of the contents of the North Toronto Code of Respect and Behaviour. This document contains the specifics regarding school expectations, and procedures for attendance and evaluations. This can be found on the [NTCI website](https://www.northtorontoci.ca/), at <https://www.northtorontoci.ca/>.

**We look forward to supporting your mathematics learning journey!**

**Note: Information provided by this course outline is subject to change without further written notice.**