MDM4UI

GR 12 DATA MANAGEMENT

$$\sigma = \sqrt{\frac{\sum(x_i - m)^2}{n-1}}$$

Same as others

Probably more than others

Probably less than others

Definitely more than others

Definitely less than others

| +2 SD | -1 SD | Mean Score | +1 SD | +2 SD |

2% 14% 34% 34% 14% 2%

SD = Standard Deviation
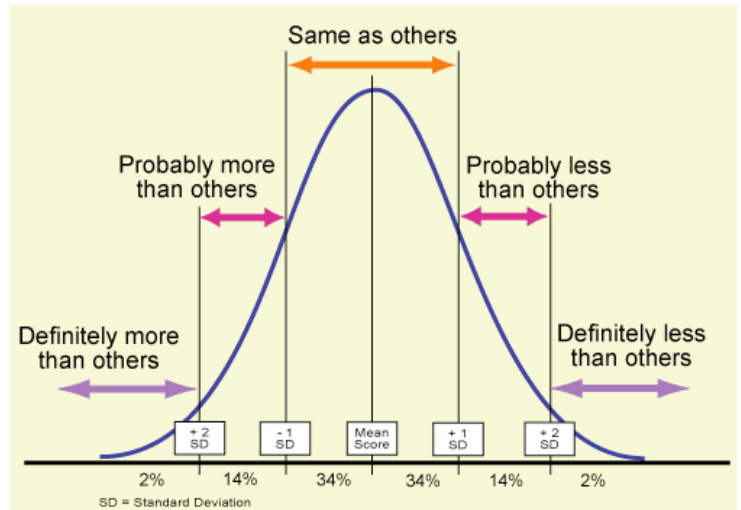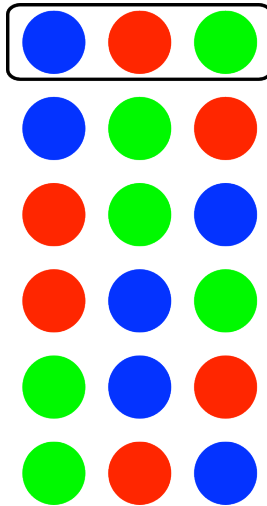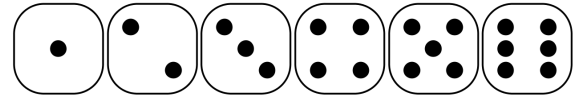
Welcome to Grade 12 Data Management

"The [theory of probability]… enters into the regulation of some of the most important practical concerns of modern life." –George Chrystal

This course broadens students' understanding of mathematics as it relates to managing data. Students will apply methods for organizing large amounts of information; solve problems involving probability and statistics; and carry out a culminating project 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.

The Basics

Course Code	MDM 4UI
Teachers	Ms. Hughes & Mr. Jackson
Text	<u>Mathematics of Data Management</u>, McGraw-Hill Ryerson, 2002
Prerequisite	MCR 3UI or MCF 3MI

Term 1

Module 3
Statistics

Unit 5 & 6
Collecting and Presenting Data
Statistics of One Variable

Unit 7
Statistics of Two Variables

Term 2

Module 1
Organized Counting

Unit 1
Permutations

Unit 2
Combinations

Module 2
Probability

Unit 3
Basic Probability Concepts

Unit 4
Probability Distributions
Normal Distributions

Assessment in MDM 4UI

Knowledge & Understanding, Inquiry, Application and Communication

The evaluation of your progress will occur on a regular basis. Expect a major test/ summative assignment at the end of each unit of study. Make sure you are ready at the end of each unit: review your notes, complete practice problems and get help with any work you don't understand.

It is important that you keep all of your tests, assignments, quizzes and projects and that you make corrections. These corrected materials will help you improve on your mistakes and will be useful when you study for your final exam.

ASSESSMENT TECHNIQUE	PURPOSE
Tests	Summative
Problem Sets	Summative
Culminating Tasks	Summative
Quizzes	Formative
Assignments	Formative

These assessment techniques are used to measure your ability in the various areas of the achievement chart for science: Knowledge and Understanding, Inquiry, Application and Communication. Each technique measures your performance across the achievement chart in a different way.

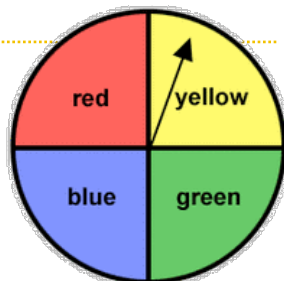| FINAL GRADE	
Course work	70%
Final Summatives	30%

The Flipped Classroom

In Data Management you will experience a different style of instruction. We are using a 'flipped' classroom approach, whereby you will watch lectures and complete notes at home while using class time to discuss, consolidate and apply. Your teachers feel this is a strong method for success.

Please note that you must do all work on a daily basis in order to be successful. Do not fall behind. Watch the lectures each evening. Time spent learning the material will differ from student to student, but you must be an active participant and arrive to class ready to work.

If you have a question, please ask it! When your teacher asks you a question, please answer! Do not be embarrassed if you are confused about a topic - the concepts in data management are new for almost every student - if you are unsure, chances are someone else is too!

Attendance Policy

If you are absent due to an illness or school related activity, **you are responsible** to see your teacher upon returning to school to make arrangements to complete missed work. Invalid or unsubstantiated absences are taken seriously and will result in a mark of **zero** for any test or problem set submitted during your absence. You may be asked to provide a doctor's note to validate an absence for the final exam.