

DR. JOHN M. DENISON SECONDARY SCHOOL
MATHEMATICS DEPARTMENT

Course: Mathematics of Data Management, University Preparation
Code: MDM4U
Text: Mathematics of Data Management
 Nelson

Prerequisite: 11U or 11U/C Mathematics
Teacher: Mrs. S. Dalrymple

<u>Course Topics:</u>	<u>Number of Class Periods</u>
The Power of Information	12
In Search of Good Data	16
Tools for Analyzing Data	14
Dealing With Uncertainty- An Introduction to Probability	14
Probability Distribution and Predictions	10
Solving Problems with Matrices, Graphs, and Diagrams	10
Summative Assessment: Presentations/Critiquing of Projects	<u>10</u>
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** Note: The number of class periods is intended as a rough estimate. The weighting may not represent the relative emphasis for testing purposes on the final assessment. Extra time will be used as necessary to prepare for the culminating project.*

Course Objectives:

- To develop skills in finding, using and making sense of data;
- To use real world applications and data to gain experience in decision making, explain events and predict future courses of action
- To extend oral, written and technological communication skills involving the use of the language and notation of mathematics,
- To develop problem-solving abilities whose solution will require the organization and analysis of large amounts of data;
- To develop an appreciation of the role of data in the study and application of mathematics.

Evaluation: Refer to Student Handbook page _____

CATEGORIES:	TERM (70%)	FINAL(30%)
1. Knowledge and Understanding : (Tests, Quizzes, Assignments)	25%	Summative Assessment (Culminating Project) 20% Final Exam 10%
2. Thinking, Inquiry, Problem Solving (Investigations, Performance Tasks and Culminating Project Portfolio)	25%	
3. Communication (Tests, Journals, Performance Tasks and Culminating Project Portfolio)	25%	
4. Application (Tests, Quizzes, Assignments, Performance Tasks and Culminating project Portfolio)	25%	

EXPECTATIONS

1. Student Responsibilities:

- Provide evidence of your achievement
- Demonstrate academic honesty
- Complete work to the best of your ability
- Submit work on time
- Attend classes and be an active participant in the learning and assessment process
- Communicate with me when there is difficulty meeting timelines
- Ensure that any missed work is completed
- Communicating assessment and evaluation methods, and pertinent due dates and timelines for work submission to parents

2. Participation and Attitude:

There are a number of positive ways in which to contribute to the learning environment of the classroom:

- Listen attentively and take proper notes, mathematics builds on previous concepts
- Provide answers orally and/or put solutions on the board
- Ask questions don't be afraid to take a risk
- Help others – both in your group and with individual problems
- Keep your mind open - each semester is a fresh start and a new opportunity, this course is different from other mathematics courses that you have taken

3. Preparation:

To protect your learning environment and the quality of the program that you will need for further progress in mathematics, it is important that you keep up

- Bring the proper equipment ;(e.g., notebook, quiz duotang, textbook, **SCIENTIFIC** calculator, pencil, pen, ruler.)
- **Do your homework** ; don't fall behind, you will need to work on the project for the whole semester
- Get extra help if you do not understand the material after it has been taken up; the math help room is in room 231 during both lunch periods, you may need to spend extra time on the computer to gather data and work in the Fathom™ software program
- If you have concerns about your progress, you should discuss them with me right away.

4. Attendance:

Mathematics is a skill subject that demands regular practice. Your understanding of the new material depends on your skill with previous concepts. To maximize your performance, it is important that you:

- Arrive on time for class; any quizzes* will administered at the beginning of class; the school late policy will be followed
- Get all notes and homework questions with corrected solutions into your notebook, if you have been absent, borrow from a classmate; your notebook is your best study guide
- Inform me ahead of time if you know you will be absent for a class or classes.
- Any student missing a test will have an opportunity to write a **make up test** upon their return to school, **provided** that: (a) I have been informed of a school related absence **before** the test or (b) in case of illness I have been informed by phone **before** your class on the day of the test. **No** test marks will be dropped. All tests have equal weighting. (905-836-0021)

** Quizzes will be held regularly at the beginning of the period. Be on time since these quizzes will be taken up and marked before the lesson. Students must keep their quizzes together with a score sheet in a small binder or duotang that will be handed in on test days. Your 3 lowest quizzes will be dropped at the end of the semester .*