



Preston High School

550 Rose St, Cambridge, Ontario N3H 2E6 ☎ 519-653-2367 ☎ phs.wrdsb.ca

Course Outline: Mathematics of Data Management • University • MDM 4UI

Prerequisite: Functions and Applications, Grade 11, University/College Preparation (MCF3M) or

Functions, Grade 11, University Preparation (MCR3U)

Credit Value: [1]

Ministry Document: The Ontario Curriculum, Grades 11 and 12: Mathematics 2007

Semester: 2

Block: D

Room: 222

Teacher: Z. Rexhepi

Contact: (519) 653-2367

Email: zekerijah_rexhepi@wrdsb.ca

Website: www.mrrexhepi.com

Textbook: Mathematics of Data Management, Nelson 2002

Big Ideas:

Students will study concepts related to Counting and Probability, Probability Distributions, Organization and Statistical Analysis of Data.

Essential Learnings:

Students will have multiple opportunities to demonstrate essential learning. Successful demonstration of **all essential learning** listed below is required to earn the course credit.

Counting and Probability

Students will:

- Solve problems involving probability of an event(s) for discrete sample spaces
- Solve problems involving permutations and combinations to determine a probability

Probability Distributions

Students will:

- Demonstrate an understanding of discrete probability distributions, represent them in various ways, determine expected values and solve related problems
- Demonstrate an understanding of continuous probability distributions, determine standard deviations and solve problems related to the normal distribution and other applications

Data

Students will:

- Demonstrate an understanding of the role of data, the variability of data and the different types of data
- Describe the characteristics of a sample, sampling techniques, data collection and organize data to solve a problem

Statistical Analysis

Students will:

- Analyse and draw conclusions from 1-variable data using various types of summaries
 - Analyse and draw conclusions from 2-variable data using various summaries
 - Demonstrate an understanding of the application of data management used in by various industries and occupations
-



Preston High School

550 Rose St, Cambridge, Ontario N3H 2E6 ☎ 519-653-2367 ☎ phs.wrdsb.ca

Guidelines for Assessment, Evaluation, & Reporting:

It is important for students to develop good personal management skills (such as time management and planning, and communication with teachers). These skills will be reflected in the **learning skills** area of the report card.

Teachers will gather evidence of student learning through observations, conversations, and student-produced work. *To earn this credit, the student will provide evidence of all the essential course learning, with their own work:*

Final evaluation and mark will be based on:

- Seventy percent (70%) of the final mark will come from term work, balanced across all essential learnings, using a variety of assessment tools.
- Thirty percent (30%) will come from final evaluations, balanced across all essential learnings, using a variety of assessment tools.

Report card grades will reflect the student's most consistent level of achievement, with consideration given to more recent evidence.

Typical evaluation assessment tools and weightings

	Final Weight
Tests, Quizzes, Assignments	70%
Final Exam and Summative	30%

1. **Late and Missing Assignments** limit the evidence that teachers need to plan, assess and evaluate student learning. *To earn this credit, the student must provide evidence of all the essential course learning.*
2. **Cheating and Plagiarism:** It is important for students to do their own best work. Most assignments for this class are done within the classroom, observed by the teacher, and this helps to minimize the chances of cheating and plagiarism. In the event that cheating or plagiarism occurs, the following consequences may be implemented, in consultation with administration, depending on the situation:
 - i. The student may be required to redo all or part of the assignment or assessment.
 - ii. The student may be required to complete an alternate assignment or assessment.
 - iii. The student's work may be treated as a missed assignment.

There may also be other consequences that are determined to be appropriate (e.g. detention, suspension, etc.) as per the school's progressive discipline process. Parents/guardians will be informed about the infraction and the consequences. Please refer to your student handbook for more details on these policies and other academic procedures.



Preston High School

550 Rose St, Cambridge, Ontario N3H 2E6 ☎ 519-653-2367 ☎ phs.wrdsb.ca

3. Learning Skills: The Learning Skills and Work Habits section of the provincial report card is an integral part of a student's learning. Students will be assessed in the following areas:

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

The following scoring system is used for Learning Skills:

E → Excellent; G → Good; S → Satisfactory; N → Needs Improvement

Signatures:

Please sign below indicating you have read and understood this course outline, including the requirements for successful completion of this course, and return this sheet to your teacher:

Student

Parent/Guardian

Date

Date

Please indicate how you would prefer to be contacted for updates on your student's progress: