

MDM 4U
MATHEMATICS FOR DATA MANAGEMENT
TEXT: MCGRAW HILL RYERSON

Outcome Achieved	Essential Outcome
Unit 1: Permutations and Organized Counting (Ch. 4)	
	<ul style="list-style-type: none"> - Fundamental Principle of Counting - Factorials / Permutations (some identical) - Pascal's Triangle and problems
Unit 2: Combinations and Binomial Theorem (Ch. 5)	
	<ul style="list-style-type: none"> - Counting with Venn Diagrams - Combinations and problems - Binomial Theorem
Unit 3: Probability (Ch. 6)	
	<ul style="list-style-type: none"> - Basic Probability - Odds - Probability using permutations and combinations - Probability with different events * NO MATRICES*
Unit 4: Statistics of One Variable (Ch. 2)	
	<ul style="list-style-type: none"> - Graphical data analysis - Indices - Sampling techniques - Bias in surveys - Measures of Central Tendency and Spread
Unit 5: Statistics of Two Variables (Ch. 3)	
	<ul style="list-style-type: none"> - Scatter Plots, correlations and linear / non linear regressions - Cause/ effect and critical analysis
Unit 6: Probability Distribution (Ch. 7)	
	<ul style="list-style-type: none"> - Probability, Binomial, Geometric and Hypergeometric distributions
Unit 7: Normal Distribution (Ch. 8)	
	<ul style="list-style-type: none"> - Continuous Probability distributions - Normal distributions - Normal approximation to binomial distributions - Repeated sampling and Hypothesis testing - Confidence intervals
Unit 8: Culminating Project	
	<ul style="list-style-type: none"> - Choose topic - Research sources - Identify one variable / two variable - Apply information from Unit 4 – 7 - Graphical analysis - Presentation / report
