# Citadel High Mathematics <br> Department 

## MATH 11 COURSE OUTLINE

Prerequisite: Successful completion of Mathematics: Grade 10
Textbook: Foundations Mathematics 11 (Pearson, 2010)

## Course Outline:

## Geometry: <br> Assessment 30 \%

- Students will be expected to derive proofs that involve the properties of angles and triangles.
- Students will be expected to solve problems that involve the properties of angles and triangles.
- Students will be expected to solve problems that involve the cosine law and the sine law


## Logical Reasoning: <br> Assessment 10\%

- Students will be expected to analyze and prove conjectures, using inductive and deductive reasoning, to solve problems.


## Statistics:

Assessment 20 \%

- Students will be expected to demonstrate an understanding of normal distribution, including standard deviation and z-scores.
- Students will be expected to interpret statistical data, using confidence intervals, confidence levels, and margin of error.
- Students will be expected to critically analyze society's use of inferential statistics.


## Functions and Relations: Assessment 40 \%

- Students will be expected to model and solve problems that involve systems of linear inequalities in two variables.
- Students will be expected to demonstrate an understanding of the characteristics of quadratic functions, including vertex, intercepts, domain and range, and axis of symmetry.


## Assessment:

Mathematics courses require commitment and students must take responsibility for achieving the outcomes. Students need to make sure that they keep up with the work and seek help early if they encounter difficulties before they become insurmountable. Extra help and tutoring are available at lunch hour.

| Final Assessment: | $80 \%$ Course Outline |
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|  | $20 \% \quad$ Final Exam |

NOTE: Individual assessments will be recorded in PowerSchool and included in final grade after enough assessments have occurred within a unit.

