



## 10<sup>th</sup> Grade Math

Willows Preparatory School 2020-21

### Subject Aims

- Develop confidence, perseverance and independence in Mathematical thinking and problem solving.
- Communicate confidently and clearly in a variety of contexts.
- Appreciate the contribution of Mathematics in other areas.
- Reflect critically and constructively on your work and the work of others.
- Nurture the skills and knowledge required for students to take their studies in Mathematics beyond the MYP

### Keys to Class

- **OneNote** – We use OneNote to distribute course assignments, readings, links, and reflections. We also use OneNote as means of collaboration and project work.
- **Homework** – Our homework assignments revolve primarily around guiding students through the course material using a combination of applied contexts and practice drills. On average, students should be spending anywhere between 40 minutes to an hour on Math homework a week. This may fluctuate depending on projects taking place in class
- **Collaborative learning environment** – Students are encouraged to engage the class and one another in discussion of principles and their implications

### I.B. Grading Criteria

<b>Objective A: Knowing and Understanding</b>	Do we have access to a selection of methods, processes and techniques? Can we apply them to challenging and unfamiliar problems?
<b>Objective B: Investigating Patterns</b>	Can we generalize patterns and investigate their properties?
<b>Objective C: Communicating</b>	Can we link together the different forms of Maths to produce accurate, coherent solutions?
<b>Objective D: Apply Mathematics in Context</b>	How do we identify what is relevant? Can we justify our answers and reflect on the accuracy of our solutions?

### Content Brief

<b>Semester 1</b>	<b>Semester 2</b>
Matrices Conic sections Parametric equations Polar coordinates Sequences and Series Probability Binomial expansion	3 dimensional coordinates 3d vectors Lines and planes in 3d Limits Intro to Calculus Derivatives