COURSE INFORMATION Subject: MATHEMATICS & STATISTICS Head of Subject: MISS SUE ROBERTSON

	Year 12 Calculus (12MAC)	Year 12 Statistics (12MAS)
Course Content	This Mathematics course prepares students for further study in areas such as mathematics, physical science and engineering. Students taking Physics are strongly advised to take this course. Students taking Chemistry or Commerce are encouraged to take this course. Students with a love of mathematics are advised to take this course. This course leads into Year 13 Calculus and/or Statistics.	This Statistics course prepares students for further study in areas such as statistics, biology and psychology. This course has a large internal assessment load. This course leads into Year 13 Statistics.
Prerequisites	**Must have:** 1.4 Demonstrate mathematical reasoning (AS91947)	12 Maths credits at Level 1 **Ideally have:** 1.2 Explore mathematical problems that relate to life in Aotearoa New Zealand (AS91945) and/or 1.3 Interpret and apply mathematical and statistical information (AS91946)
Assessment	**<u>Externals</u>** **2.6** Apply algebraic methods in solving problems (**4 credits)** **2.7** Apply calculus methods in solving problems (**5 credits)** **<u>Internals</u>** **2.1** Apply coordinate geometry methods in solving problems (**2 credits)** **2.2** Apply graphical methods in solving problems (**4 credits)** **2.4** Apply trigonometric relationships in solving problems (**3 credits)** **18 credits total**	**<u>Externals</u>** **2.12** Apply probability methods in solving problems (**4 credits)** **<u>Internals</u>** **2.1** Apply coordinate geometry methods in solving problems (**2 credits)** **2.4** Apply trigonometric relationships in solving problems (**3 credits)** **2.5** Use networks in solving problems (**2 credits)** **2.9** Use statistical methods to make an inference **(4 credits)** **2.13** Investigate a situation involving elements of chance using a simulation (**2 credits)** **17 credits total**
Costs	Workbooks - approximate cost $35 Graphics Calculator (e.g. Casio FX9860GIII)	Workbooks - approximate cost $42 Graphics Calculator (e.g. Casio FX9860GIII) is highly recommended for AS2.12. Otherwise, a Scientific calculator (e.g. Casio FX82) is required.