

<b>Subject:</b>	<b>Statistics and Modelling</b>		
<b>NCEA Level:</b>	<b>Three</b>		
<b>Teacher to Contact:</b>	<b>Mr D Kitchingman</b>	<b>Code: SAM330</b>	

Standard		Title	Credits
AS 90641	I	Determine the trend for time series data.	3
AS 90642	E	Calculate confidence intervals for population parameters.	3
AS 90643	E	Solve straightforward problems involving probability.	4
AS 90644	E	Solve equations	4
AS 90645	I	Complete a statistical investigation involving bi-variate data.	3
AS 90646	E	Use probability distribution models to solve problems.	4
AS 90647	I	Use mathematical models involving curve fitting to solve problems.	3

**E means the Achievement Standard is examined externally at the end of the year.  
I means the Achievement Standard is examined internally.**

#### **What will I learn?**

Approximately two thirds of the course is Statistics and Probability, the rest is finding mathematical models for situations.

#### **How will I learn?**

Students will develop their mathematical skills by working on problems in class. Regular homework is essential to complete all aspects of this course. Assignments are required for internal assessment during the year.

#### **What should I have already done?**

Achieved NCEA Level 2 Mathematics with at least 14 credits.

#### **Where does the subject lead?**

If students plan to take Mathematics, Economics, Biology, Accountancy, Geography, Engineering or Medicine or any other discipline that requires statistics at a tertiary level, then they would benefit from this course. It would be an appropriate background to any job that involves practical applications for any of the above topics.

#### **How is the course assessed?**

Four of the standards are assessed in a three hour external exam at the end of the year worth a total of 15 credits. The other three are internally assessed standards worth a total of 9 credits.

#### **Other details: (costs, field trips etc)**

A graphics calculator and a study guide are essential.

Stationery: 1J5 exercise book.

#### **End of course qualifications.**

Credits towards the National Certificate of Educational Achievement Level 3.