Rangi Ruru Girls' School

LEVEL 2 TAUANGA MATHEMATICS WITH STATISTICS Programme of Learning 2025

Welcome to Level 2 Mathematics with Statistics. This is a full year course primarily focused on Statistics in which you will learn how to:

- Pose investigative questions that can be answered using statistical methods.
- Collect, collate, and clean data.
- Display data in a meaningful manner.
- Analyse and interpret patterns in data.
- Evaluate and reflect on the Statistical Enquiry process.

You will have the opportunity to gain up to 12 Level 2 credits **and** 4 Level 3 credits for NCEA, with 4 Achievement Standards (12 credits) being internally assessed, and 1 assessed by external examination at the end of the year (4 credits). This is a total of 16 credits available.

During this course, you will work in groups, pairs, and individually on a range of activities. You will build on the skills learnt at Level 1 and engage with data sets to observe the effects of sampling variability, sampling methods, and sampling size. You will plan and conduct statistical experiments to grow your understanding of fair testing, randomness, and study design. You will research the context surrounding a data set and seek to find potential causes for patterns found in data.

Assessment

The first four Achievement Standards of the year will be assessed internally upon the conclusion of the respective topic. Most assessments take place over several class periods with students being allowed to work on them out of class if they wish, however, the conditions and criteria for each assessment will be clearly explained in the week leading up to the beginning of the assessment.

General information about school policies and procedures for assessment is available on the Student Hub. It is important that you are aware of the school policies about assessment. If you are in doubt about anything, please ask your teacher. It is your responsibility to be well informed about the requirements.

The plan below gives a general indication of the timing of assessments, but you will be given at least one week's notice of the exact day and time of a final assessment for the Internal Achievement Standard. Note dates and times carefully in your diary and discuss any problems with timing with your teacher in advance.

Topic Order and Approximate Timing

	Topic	AS	Time	Assessment
Term 1	2.9 Statistical Inference	91264 4 credits	7 weeks	Internal week 7
	2.5 Networks	91260 2 credits	3 weeks	
Term 2	2.5 Networks *(continued)*		2 weeks	Internal week 2
	3.11 Experiments	91583 4 credits (Level 3)	5 weeks	Internal week 7
	2.13 Simulations	91268 2 credits	2 weeks	
Term 3	2.13 Simulations *(continued)*		3 weeks	Internal in week 3
	2.12 Probability	91267 4 credits	6 weeks	External
Term 4	2.12 Probability *(continued)*		3 weeks	External - Derived Grade test in week 2
	Probability			Tuesday 4th November (am)

Achieved, Merit and Excellence Requirements:

It is important that you are fully informed of the requirements for gaining each grade level. Read the marking criteria supplied for each standard carefully. Your teacher will go over this with you.
For the internal Achievement Standards there will be a formative assessment which will be marked and returned to you with feedback. This will enable you to see exactly what the requirements are and do further work, if necessary, before the final task.

There will be no further assessment opportunity for the internally assessed standards.

School examinations

As there is only one externally assessed standard in this course, there will be no school examinations in Term 3.
An assessment for Probability in Term 4 will generate a derived grade for that paper.

Checking and recording your results

Marking will be done carefully and checked, but there is always a possibility of an error. After an assessment, you will have an opportunity to check your results. *During this time, you must not mark the test paper in any way or take it out of the room*.
If you disagree with the marking, you can ask your teacher to check the marking. If you are not satisfied at this stage, then there is an appeal procedure.

When a result for an internal or a school examination result has been checked you should record it on your own progress record, so that at a later date you can check and sign the assessment record kept on the school database. Internal results or derived grades will then be sent to NZQA directly.

Assessed work for the internal standards will be stored at school.

Stationery Required

Students will be ***required*** to have the following items for this course:

- Ring Binder/Clear file/Equivalent
- Laptop with Microsoft Excel downloaded
- Graphics Calculator Casio fx 9750GII or fx 9860
- Refill or a 1B5 exercise book
- Pens, Pencils, and highlighters

Student Workbooks will be ordered throughout the year and charged upon distribution.

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Level 2 Statistics Standards 2025

Achievement Standard Number	Version Number	Title	Mode of Assessment	Credits
91259 2.5	V3	Apply network methods in solving problems	Internal	2
91264 2.9	V3	Use statistical methods to make an inference	Internal	4
91267 2.12	V3	Apply probability methods in solving problems	External	4
91268 2.13	V3	Investigate a situation involving elements of chance using a simulation	Internal	2
91583 3.11	V2	Conduct an experiment to investigate a situation using experimental design principles	Internal	4 (Level 3)