

# CHRISTCHURCH BOYS' HIGH SCHOOL

## YEAR 11 MATHEMATICS 2010

- Students will work towards their National Certificate of Educational Achievement.
- 24 credits, of the 80 required for Level 1 of the NCEA, may be achieved in the Mathematics course.  
Note: 2 of these credits, 1.4 Geometric Techniques, were assessed in year 10.
- 8 separate Achievement Standards and 1 Unit Standard make up these 24 credits.
- Each Achievement and Unit Standard is assessed separately.
- Achievement Standards can be passed at Achieved, Merit or Excellence levels or Not Achieved. Only Achieved or Not Achieved can be gained from Unit Standards.
- 2 of the Achievement Standards and the Unit Standard are internally assessed and 6 are externally assessed, by examinations in November.

The table shows the Level 1 Achievement and Unit Standards, the number of credit points each is worth and whether they are internally or externally assessed.

Number	Title	Credits	Assessment Mode
1.1	Use straightforward algebraic methods and solve equations	4	External
1.2	Sketch and interpret linear or quadratic graphs	3	External
5228	Take measurements and solve measurement problems	3	Internal
1.5	Use straightforward statistical methods to explore data	3	Internal
1.6	Determine probabilities	2	External
1.7	Solve straightforward number problems in context	3	External
1.8	Solve right angled triangle problems	2	External
1.9	Use geometric reasoning to solve problems	2	External
1.4	<i>Use geometric techniques to produce a pattern or object</i>	2	<i>Internal Already done in year 10</i>

### ENTRY TO YEAR 12 MATHEMATICS

- To the Level 2 to Achievement Standards course.
  - 1.1 Algebra should be Achieved with Merit, unless there are exceptional circumstances.
  - A minimum of Achieved is also required in 1.2 Graphs (3 credits), 1.5 Statistics (3 credits), 1.7 Number (3 credits), 1.8 Right-Angled Triangles (2 credits) and 1.6 Probability (2 credits).
  - A minimum of 16 to 18 credits is considered necessary to approach this course with confidence.
  - The H.O.D. Maths will make the final judgement.
  - Students performing well can move through to either, or both, Level 3 Mathematics with Calculus or Mathematics with Statistics.
- To the Level 2 Unit Standards course.
  - Students gaining less than 16 credits are better to do this course which is internally assessed by Unit Standards. The opportunity to re-sit Level 1 Achievement Standards also exists.
  - Students performing well can move through to Level 3 Mathematics with Statistics.

### ASSESSMENT

Students must comply with the regulations set done in the C.B.H.S. assessment policy.

Internally Assessed Standards: 5228 Measurement, 1.5 Statistics. (1.4 Geometric Techniques already done).

- There will be no re-assessment opportunity for these.
- Practice assessments will be done in class time to prepare for the one assessment opportunity.

- Students who miss the assessment for a valid, verifiable, reason will have a chance to do the assessment at a later date.

Externally Assessed Achievement Standards.

- There will be some common testing and class testing of the work covered for these Achievement Standards.
- The purpose of this testing is to prepare for the November examinations and to gather data should a student miss the November examination and apply for compassionate consideration.

Assessment Timetable

*Internals*

Measurement	week 8 of term 1	(starting 22 <sup>nd</sup> March)
Statistics	week 5 of term 3	(starting 16 <sup>th</sup> August)

*Externals*

Each external standard will be tested during the year.

*Examinations*

There will be a 3 hour examination towards the end of term 3. Students who score 100, or more, out of 150 in this examination will be guaranteed entry into year 12 Mathematics the following year. Those getting less than 100 will be subject to the Year 12 entry criteria listed above for NCEA results.

**APPEALS:**

Pupils may make an appeal over their grade for an internally assessed Achievement Standard, within 7 days of the assessment task being returned to them.

The appeal should be made to the class teacher who may refer it to the teacher in charge of year 11 Mathematics or the H.O.D. Mathematics for adjudication.

Work written in pencil or containing "white-out" corrections will not be subject to appeals.

An explanation of the adjudication decision will be made to the student.

**TEACHING TOPIC ORDER/TIMELINE**

TERM 1

1.	Number	(A.S. 1.7 external)
2.	Measurement	<b>(U.S. 5228 internal)</b>
3.	Algebra 1	(A.S. 1.1 external - part 1)

TERM 2

	Algebra continued	
4.	Right-Angled Triangles	(A.S. 1.8 external)
5.	Geometric Reasoning	(A.S. 1.9 external)

TERM 3

6.	Statistics	(A.S. 1.5 internal)
7.	Graphs	(A.S. 1.2 external)

TERM 4

	Graphs continued	
8.	Probability	(A.S. 1.6 external)
9.	Revision	

**APPROACH TO THE YEAR:**

Students who work steadily in class, do regular homework and revise thoroughly for assessments will give themselves every chance of success.

Scoring 100, or more, in the term 3 exam is an important focus and will be excellent preparation for the NCEA examinations.

In the NCEA examination student performance is measured against specific criteria, students must be precise and accurate. Marks are not totalled. Markers will be looking for correct working and answers to specific questions, for each of Achieved, Merit and Excellence levels. Hence careless errors will be far more costly than previously.