INTEGRITY MANAAKITANGA EXCELLENCE

COURSE OUTLINE - 2026

Course: 9 Mathematics	**Code:** 9MAT	**LPF:** Stage 1	**Contact:** Liz Nock l.nock@wc.school.nz

Course information

Ānō me he whare pūngāwerewere. Behold, it is like the web of a spider.

➔ **Goals**

Mathematics is the abstract science of number, quantity, and space, either as abstract concepts (pure mathematics), or as applied to other disciplines such as physics and engineering (applied mathematics). In the first year of study at Wellington College we provide opportunities for students to:

- develop flexibility and creativity in applying mathematical ideas and techniques to unfamiliar problems arising in everyday life, and develop the ability to reflect critically on the methods they have chosen
- become effective participants in problem-solving teams, learning to express ideas, and to listen and respond to the ideas of others
- develop the skills of presentation and critical appraisal of a mathematical argument or calculation, use mathematics to explore and conjecture, and learn from mistakes as well as successes
- develop the characteristics of logical and systematic thinking, and apply these in mathematical and other contexts, including other subjects of the curriculum;
- become confident and competent users of information technology in mathematical contexts
- develop the skills and confidence to use their own language, and the language of mathematics, to express mathematical ideas
- develop the knowledge and skills to interpret written presentation of mathematics

➔ **To be successful in this course, you should:**

- be prepared to engage in all lessons and attempt all questions
- Complete 25 minutes of Homework 3 times a week

➔ **Recommended prior learning**

Year 9 Mathematics is Mixed ability and has no prior requirements, however, a strong basis in the New Zealand Curriculum Phase 3 is highly recommended

➔ **Assessment in Years 9 - 11**

All courses in Years 9 -11 are assessed using the Wellington College Learning Progressions Framework (LPF). There will be ongoing formative assessment, called 'checkpoints'. You will also be evaluated after each phase of learning, and your Learning Progression will be posted on the portal.

See our school website for more information about assessment and reporting in Years 9 - 11.

➔ **Resources and equipment required**

Casio FX82AU Plus II 2 Scientific Calculator Black
Warwick 1J5 Exercise Book 5mm Quad 36 Leaves
Plastic Ruler 30cm Clear
Protractor 180 degrees 10cm
Blue Retractable Ballpoint Pens 1.0mm Medium Tip
Black Retractable Ballpoint Pens 1.0mm Medium Tip
Retractable Ballpoint Pen 1.0mm Medium Tip
Glue Stick 35g

HB Pencil
Green Retractable Ballpoint Pens 1.0mm Medium Tip

Assessment

You will be assessed on tasks based on your work in class and the homework set.

This course is an excellent foundation for year 10 mathematics.

Topic	Content	Assessment Type	Dates
Number	Māori Number System, Multiples, LCM, Factors, HCF, Primes, Prime Factorisation, Comparing Integers, Adding Integers, Subtracting Integers, Multiplying/Dividing Integers, Powers and Roots, Order of Operations	In class checkpoint	Term 1 Week 1- 8
Measurement	Rounding, Conversions, Perimeter, Area formulas, Circles, Compound Area, Volume of prisms, Liquid Volume	DrFrost Assessment	Term 1 Week 9-10 Term 2 Week 1- 4
Algebra	Words to algebra, Substitution, Like terms, Multiplication rules, Power rules, Division rules, Expanding, Factorising, Solving 1 step,Solving 2 step, Solving x on both sides, Solving with brackets, Solving with fractions, rearranging simple equations	Take home checkpoint In class checkpoint	Term 2 Week 5- 11
Fractions Decimals Percentages	Simplifying fractions, Multiplying fractions, Dividing Fractions, Adding/Subtracting Fractions, equivalent fractions, FDP Conversions, Percentage of, Percentage Inc/Dec,Reverse Percentage, simple interest	In Class checkpoint	Term 3 Week 1-5
Patterns and Graphs	Sequences: next diagram, Sequences: using a rule, Sequences: numbers to rules, Plotting coords, Plotting with a table, Gradient, y=mx+c, Word Problems	In Class checkpoint	Term 3 Week 6-10
Statistics	Reading Graphs, Bar Graphs / Dot Plots, Line Graphs, Stem and Leaf graphs, Histograms / Frequency Table, Mean/median/mode, Box and Whisker, multivariate statistics	In Class checkpoint (TBC)	Term 4 Week 1-4
Geometry	Naming / Measuring Angles, Angles at a pt / line / vert opp, Comp/supp angles, Angles in triangles, Parallel Line, Pythagoras theorem	No assessment	Term 4 Week 5-7
Shape	Nets, Isometric Drawings, Faces Edges and Vertices	No assessment	Term 4 Week 8-9

Course Planner 2026

(note this is subject to change)

Term 1

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
	Number							**Measurement**	

Term 2

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11
Measurement				**Algebra**						

Term 3

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Fractions, decimals, percentages					**Patterns and graphs**				

Term 4

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Statistics				**Geometry**			**Shape**	