

# Year 10 College Maths

## Semester 2 Course Outline

In Year 10 College Mathematics this semester, students will negotiate their learning to meet their individual needs and interests and we will also be studying and brushing up on many mathematical skills to prepare for maths methods (or higher) at college. Some of the concepts covered include fractions, surds, algebra, factorising quadratic trinomials, simultaneous equations, indices and logarithms, matrices and series and sequences. A major focus throughout this semester will be mathematical thinking, communicating and the further development of foundation numeracy skills.

### Learning Outcomes

Students will be assessed on the following Learning Outcomes:

- 9.312 - Applies the index laws to numbers and expresses numbers in scientific notation
- 10.330 - Expands binomial expressions and factorises monic quadratic expressions
- 10.332 - Performs the four operations with simple algebraic fractions
- 10.333 - Solves simple quadratic equations and pairs of simultaneous equations
- 10A.3505 - Applies problem-solving skills and mathematical techniques to solve problems
- 10A.3506 - Applies the logarithm laws
- 10A.3507 - Communicates using mathematical language and conventions to justify solutions
- 10A.3511 - Solves both monic and non-monic quadratic equations
- 10A.3513 - Solves problems involving fractional indices and surds

### Assessment Tasks

Students will be assessed on their participation and completion of classwork and assessment tasks.

Task	Week Due*
Algebra Part 1 - Expanding and Factorising test	Term 3, Week 3
Algebra Part 2 test Index Laws	Term 3, Week 6
Indices and Surds	Term 3, Week 10
More tests/quizzes to be negotiated in term 4	Term 4
Mathspace Tasks	Ongoing

\*Due dates are an estimate only

**Teacher:** Rod Grieve

**Executive Teacher:** Rod Grieve