



Belconnen High School

COURSE OUTLINE Semester 2, 2026

Course Title: **9 Mathematics Inclusion Education** Faculty: **Mathematics**
Faculty Head: Abhinay Chand

Description of Course

Students will learn about and explore concepts taught in mainstream year 9 Maths classes this year, for example integers, rational & irrational numbers, quadratic functions, Pythagoras & trigonometry, scientific notation, enlargement transformation, and surface area & volume calculations. Related content from years 6, 7 and 8 will be re-visited to build knowledge of these year 9 concepts. Students will also revise, develop and consolidate skills and understandings in year 4, 5 and 6 outcomes for practical applications, for example, place value, solving calculations for financial situations, converting time and measurements.

Learning Outcomes

- Recognises and uses rational and irrational numbers to solve problems
- Extends and applies the exponent laws with positive integers to variables
- Solves problems involving addition and subtraction of integers
- Expands binomial products, and factorises monic quadratic expressions
- Orders and represents, adds and subtracts fractions with the same or related denominators
- Represents common percentages and connects them to their fraction and decimal equivalents
- Uses their proficiency with multiplication facts and efficient calculation strategies to multiply large numbers by one- and two-digit numbers and divide by single-digit numbers
- Uses mathematical modelling to solve problems involving change in financial and other applied contexts, choosing to use linear and quadratic functions
- Graphs quadratic functions and solves monic quadratic equations with integer roots algebraically
- Describes the effects of variation of parameters on functions and relations, using digital tools, and makes connections between their graphical and algebraic representations
- Applies formulas to solve problems involving the surface area and volume of right prisms and cylinders
- Converts between 12- and 24-hour time
- Applies Pythagoras' theorem and uses trigonometric ratios to solve problems involving right-angled triangles
- Expresses small and large numbers in scientific notation
- Applies the enlargement transformation to images of shapes and objects, and interprets results
- Uses their understanding of place value to represent tenths and hundredths in decimal form and to multiply natural numbers by multiples of 10
- Uses mathematical modelling to solve financial and other practical problems, formulating the problem using number sentences, solving the problem choosing efficient strategies and interpreting results in terms of the situation
- Uses their proficiency with addition and multiplication facts to add and subtract, multiply and divide numbers efficiently
- Orders common fractions, giving reasons, and adds and subtracts fractions with related denominators
- Recognises equivalent fractions and makes connections between fraction and decimal notations
- Counts and represents fractions on a number line
- Finds unknown values in numerical equations involving addition and subtraction
- Uses scaled instruments and appropriate units to measure length, mass, capacity and temperature
- Measures and approximates perimeters and areas
- Converts between common units of length, mass and capacity

Materials Required

Students will have access to a google classroom where class tasks and assessment items will be displayed, therefore a device is required. The assessment dates for this subject will appear on the students google calendar. Students can refer to the BHS Study Skills Guide and the BHS website for assistance with assessment tasks. The Assessment and

Reporting Policy is available on the school website. Items Required Chromebook or suitable device Notebooks, pencil case and equipment.

Homework Required

Students will be expected to complete a variety of tasks outside of class time. This may include, teacher-set homework, research for tasks, revision for tests, review of class work and more. PLEASE NOTE: We are planning to deliver all of these outcomes, as part of Inclusive Education we cannot guarantee all are delivered by the end of the reporting period as we conduct full learning cycles per outcome. Outcomes not taught will be left off students final report.

Assessment Schedule	Due Date	% Weighting
In-class work samples	20/11/2026	
In-class observations	20/11/2026	