Turramurra High School - 2024 - Year 10 5.2 - Scope and Sequence

Term 1 2024

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

| 29/1 30/1 | 5/2 | 12/2 | 19/2 | 26/2 | 4/3 | 11/3 | 18/3 | 25/3 | 29/3 3/4 | 10/4 |

SDD 2 | **Year 7, 11 & 12 return**

Swimming Carnival

GOOD FRIDAY | **EASTER MONDAY**

Topic 1: Algebraic Techniques and Equations

Review simplifying algebraic expressions (including a review of basic index laws) and solving equations.

Topic 1: Algebraic Techniques and Equations

MA5.2 1WM, MA5.2 2WM, MA5.2 3WM, MA5.2 8NA

Apply the four operations to algebraic fractions with numerical denominators and extend to pronumeral denominators.

Solve linear equations involving simple algebraic fractions.

Topic 2: Trigonometry

MA5.2 1WM, MA5.2 2WM, MA5.2 13MG

Review trigonometry basics (finding an unknown side and angle) and build student skills in doing trigonometry in degrees and minutes.

Introduce students to reading and interpreting bearings (both compass and three-figure) and solving trigonometric problems involving bearings.

Introduce students to two triangle problems.

Topic 3: Measurement Surface Area & Volume & Equations

MA5.2 1WM, MA5.2 2WM, MA5.2 11MG, MA5.2 12MG

Solve problems involving surface area for a range of prisms, cylinders and composite solids.

Solve problems involving the volumes of a range of prisms, cylinders and composite solids.

Solve equations arising from the substitution into area, surface area and volume formulae.

Topic 3: Measurement Surface Area

MA5.2 1WM, MA5.2 2WM, MA5.2 11MG,

Solve problems involving surface area for a range of prisms, cylinders and composite solids.

Solve problems involving the volumes of a range of prisms, cylinders and composite solids.

Topic 4: Non-Right Trigonometry

MA5.3 1WM, MA5.3 2WM, MA5.3 3WM,

● Use the sine, cosine and area rules for any triangle and solve related problems.

Term 2 2024

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6		Week 7	Week 8	Week 9	Week 10
	29/4 30/4	6/5	13/5	20/5	27/5	3/6	10/6 11/6		17/6 24/6		1/7

S.D.D.	Topic 4: Non-Right Trigonometry MA5.3 1WM, MA5.3 2WM, MA5.3 3WM,	Topic 5: Linear & Non-Linear Relationships MA5.2 1WM, MA5.2 3WM, MA5.2 9NA, MA5.2 10NA	Public Holiday	Topic 6: Simultaneous Equationsa MA5.2 1WM, MA5.2 2WM, MA5.2 3WM, MA5.2 8NA	Term 2 Assessment	Topic 6: Simultaneous Equationse MA5.2 1WM, MA5.2 2WM, MA5.2 3WM,
	● Use the sine, cosine and area rules for any triangle and solve related problems.	Review and build on skills learnt in Year 9 to interpret and graph linear relationships. Introduce students to perpendicular lines and solve problems involving parallel and perpendicular lines. Graph and simple non-linear relationships (parabola, exponential and circle) Connect algebraic and graphical representations of simple non-linear relationships.		Uses graphical and at least one analytical technique to solve linear simultaneous equations.		Uses graphical and at least one analytical technique to solve linear simultaneous equations.

Term 3 2024

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
22/7 23/7	29/7	5/8	12/8	19/8	26/8	2/9	9/9	16/9	23/9

S.D.D.

Topic 7: Data Analysis	Topic 8: Probability	Topic 9: Financial Maths
MA5.2 1WM, MA5.2 3WM, MA5.2 15SP, MA5.2 16SP	MA5.2 1WM, MA5.2 2WM, MA5.2 3WM, MA5.1 13SP, MA5.2 17SP	MA5.1 1WM. MA5.1 2WM, MA5.1 3WM, MA5.1 5NA, MA5.2 1WM, MA5.2 2WM, MA5.2 4NA
Review constructing and interpreting box plots and use them to compare data sets Compare shapes of box plots to corresponding histograms and dot plots Investigate and describe bivariate numerical data where the independent variable is time Use scatter plots to investigate and comment on relationships between two numerical variables	Calculates relative frequencies from given or collected data to estimate probabilities of events involving "and" or "or" Interpret and use venn diagrams and two way tables. List all outcomes for two-step experiments, with and without replacement, using tree diagrams or arrays; assign probabilities to outcomes and determine probabilities for events. Describe the results of two- and three-step chance experiments, with and without replacement, assign probabilities to outcomes, and determines probabilities of events; investigate the concept of independence. Use the language of 'if .... then', 'given', 'of', 'knowing that' to investigate	Solve problems involving simple interest Connect the compound interest formula to repeated applications of simple interest using appropriate digital technologies Solves problems involving compound interest and depreciation. Solves equations arising from substitution into financial maths formulae.

Term 4 2024

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
	14/10	21/10	28/10	4/11	11/11	18/11	25/11	2/12	9/12	16/12 / 20/12
Topic 10: Algebra- binomial expansions			**Topic 11: Quadratic Equations**	**Semester 2 Assessment**	**Topic 11: Quadratic Equations**	**Topic 12: Networks**		**Work Experience**	**Prep for Year 11 - review algebra and other important content, financial mathematics & measurement**	S. D. D.
MA5.2 1WM, MA5.2 3WM, MA5.2 6NA			MA5.2-1WM, MA5.2-2WM, MA5.2-3WM, MA5.2-8NA		MA5.2-1WM, MA5.2-2WM, MA5.2-3WM, MA5.2-8NA	MA5.2 1WM, MA5.2 2WM				
Expand binomial products and factorise monic quadratic expressions using a variety of strategies			Solve simple quadratic equations using a range of strategies. Review solving equations and formulae.		Solve simple quadratic equations using a range of strategies. Review solving equations and formulae.	Examine the basics of networks and the terminology used.				