Year 12 Applied Scheme of Learning

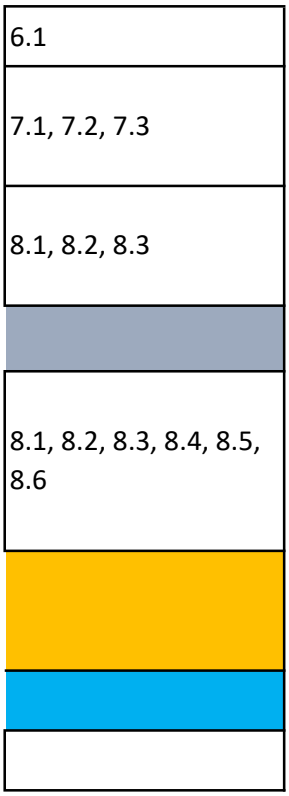
	Week	Topic
Term 1	1	Keywords and sampling methods
	2	Measures of location and spread
	3	
	4	Representing data
	5	Probability
	6	
	7	
	8	Large data set
	9	Statistical distributions
	10	Binomial distribution
	11	
	12	Review and catch up
	13	
Term 2	14	
	15	Normal distribution
	16	
	17	
	18	
	19	Hypothesis testing
	20	
	21	Hypothesis testing
	22	Correlation and regression
	23	
	24	Review and catch up
	25	
	26	

Term 3	27	Modelling in mechanics
	28	Constant acceleration
	29	
	30	Introduction to forces
	31	
	32	Forces and friction
	33	
	34	
	35	
	36	
	37	
	38	Review and catch up

Notes
Go over keywords (e.g. census, population, etc.) and types of sampling methods.
Mean, median, mode, quartiles, percentiles and deciles (linear interpolation). Variance and standard deviation. Coding.
Outliers and cleaning data. Cumulative frequency and box plots. Histograms. Comparing data sets.
Venn diagrams and tree diagrams. Use of probability formulae for mutually exclusive and independent events. Conditional probability ("given that") and extending the use of probability formulae. Use old S1 exam questions.
HALF TERM
Practice interpreting the large data set. Use MEI booklet (book computer rooms).
Probability distributions and functions.
Use old S1 exam questions.
Use year 1 textbook review exercise.
ASSESSMENT 1 (revision)
CHRISTMAS
ASSESSMENT 1 (exam, review)
Finding probabilities from a normal distribution. Inverse distribution functions. Standard normals. Using the normal distribution to approximate the binomial distribution. Use old S1 exam questions.
Finding critical values. Types of test (one and two-tailed). Hypothesis testing with the binomial distribution.
HALF TERM
Hypothesis testing with the normal distribution.
Least squares regression lines. Exponential models. PMCC. Hypothesis testing for zero probability.
Use year 2 textbook review exercise.
ASSESSMENT 2 (revision, exam, review)
EASTER

Constructing a model. Quantities and SI units. Vectors.
Distance-time graphs and velocity-graphs. SUVAT equations (inc. derivation). Vertical motion under gravity.
Drawing force diagrams. F = ma in one and two dimensions. Resolving forces (inclined planes).
HALF TERM
Newton's laws of motion. Connected particles and pulleys. Coefficient of friction. Use year 2 chapter 5 mixed exercise.
ASSESSMENT 3 (revision, exam, review) - IN HALL
Enrichment Week/Year 12 Work Experience

Specification ref.
1.1
2.3
2.1, 2.4
3.1, 3.2, 3.3
1.1, 2.1, 2.2, 2.3, 2.4
2.1
4.1, 4.3
4.2, 4.3
5.1, 5.2
5.3
2.2, 5.1


6.1
7.1, 7.2, 7.3
8.1, 8.2, 8.3
8.1, 8.2, 8.3, 8.4, 8.5, 8.6