



## Curriculum Outline 2019/20 – Year 10 Mathematics (SJ & AL)

### Autumn 2019

Principal Text: *Edexcel GCSE Maths 4th Edition textbook and practice book*

- prime factorisation
- algebra revision
- circle theorems
- data handling
- algebraic fractions
- Pythagoras
- mensuration
- area and volume
- surds
- probability
- Carroll tables

50 minutes of homework will be set twice per week. This homework is the minimum independent study required and students should expect to do more as and when it is needed in order to keep up with the course.

Links with fundamental values

Students will learn to analyse data and to be able to spot the misuse of data. They will be exposed to misleading graphs and charts.

Social, moral, spiritual and cultural content

Students will be taught to use quantitative reasoning in social contexts and our teaching of Statistics in particular should use examples where data can be used to support inferences in worthwhile real-world contexts. We should also, where appropriate, use financial and economic contexts in arithmetic and graph work so that students get an opportunity to learn something about tax, mortgages, inflation and so on.

Opportunities to independently extend learning  
Mathswatch CD and website  
Hegarty maths  
Revision Guide  
NCETM and Nrich puzzles

### Spring 2020

- trigonometry
- ratio and proportion
- inequalities
- simultaneous equations
- Pythagoras in 3 dimensions
- data analysis using charts and graphs
- transformations
- fractions
- linear graphs
- quadratics

### Summer 2020

- transformations of graphs
- sine and cosine rules
- graph sketching
- probability
- vectors