Carmel College Curriculum Implementation – Year 12 Long term plan Subject  **Mathematics Version A**

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|  | **Pure and Statistics Teacher 3 lessons** | **Pure and Mechanics Teacher 2 lessons**  |
| Autumn half term 1Sequential knowledge and skills | Indices and Surds Quadratics, inequalities and DiscriminantGraphs and Transformations | Coordinate Geometry: straight lines, circles and sketching inequalities in two variables |
| Assessment Content and methods used to judge learning | Indices and Surds Test after 2 weeksQuadratics Test after 4 further weeks | Coordinate Geometry Test  |
| Autumn half term 2Sequential knowledge and skills | Representing DataProbability Binomial Expansion and Distribution | DifferentiationIntegrationVectors  |
| Assessment Content and methods used to judge learning | Assessment through homework | Differentiation Test after 5 weeks |
| Spring half term 3Sequential knowledge and skills | Factor TheoremExponential and LogarithmsTrigonometry  | KinematicsNewton’s Laws of Motion  |
| Assessment Content and methods used to judge learning | Mock Exam Homework | Mock ExamHomework  |
| Spring half term 4 Sequential knowledge and skills | Proof Consolidation of AS workBegin A2 workFunctions  | Consolidation of AS workBegin A2 workDifferentiation  |
| Assessment Content and methods used to judge learning | Past Papers as open book tests and in test conditionsHomework | Past Papers as open book tests and in test conditionsHomework  |
| Summer half term 5 Sequential knowledge and skills | TrigonometryRevision for Year 12 Exams | Differentiation Revision for Year 12 exams |
| Assessment Content and methods used to judge learning | Past Papers as open book tests and in test conditionsHomework | Past Papers as open book tests and in test conditionsHomework |
| Summer half term 6Sequential knowledge and skills | Revision for Year 12 examsYear 12 ExamsContinue with Trigonometry | Continue with Differentiation Year 12 ExamsContinue with Differentiation |
| Assessment Content and methods used to judge learningAssessment | Year 12 ExamsHomework | Year 12 ExamsHomework |

Carmel College Curriculum Implementation – Year 12 Long term plan Subject **Mathematics Version B**

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|  | **Pure and Statistics Teacher 2 lessons** | **Pure and Mechanics Teacher 3 lessons**  |
| Autumn half term 1Sequential knowledge and skills | Indices and Surds Quadratics, inequalities and Discriminant | Coordinate Geometry: straight lines, circles and sketching inequalities in two variablesStart Differentiation |
| Assessment Content and methods used to judge learning | Indices and Surds Test after 3 weeks | Coordinate Geometry Test  |
| Autumn half term 2Sequential knowledge and skills | Graphs and TransformationsRepresenting Data | Complete Differentiation IntegrationVectors  |
| Assessment Content and methods used to judge learning | Quadratics Test  | Differentiation Test  |
| Spring half term 3Sequential knowledge and skills | Probability Binomial Expansion and Distribution | Factor TheoremExponential and LogarithmsTrigonometry  |
| Assessment Content and methods used to judge learning | Mock Exam Homework | Mock ExamHomework |
| Spring half term 4 Sequential knowledge and skills | Consolidation of AS workBegin A2 WorkFunctions  | ProofConsolidation of AS workBegin A2 work – Differentiation  |
| Assessment Content and methods used to judge learning | Past Papers as open book tests and in test conditionsHomework | Past Papers as open book tests and in test conditionsHomework  |
| Summer half term 5 Sequential knowledge and skills | Functions continuedTrigonometry Revision for Year 12 exams | DifferentiationRevision for Year 12 Exams |
| Assessment Content and methods used to judge learning | Past Papers as open book tests and in test conditionsHomework | Past Papers as open book tests and in test conditionsHomework  |
| Summer half term 5Sequential knowledge and skills | FunctionsBegin Trigonometry Year 12 ExamsTrigonometry  | Revision for Year 12 ExamsDifferentiation  |
| Assessment Content and methods used to judge learningAssessment | Year 12 ExamsHomework | Year 12 ExamsHomework |

OCR Specification

AS <https://www.ocr.org.uk/Images/308720-specification-accredited-as-level-gce-mathematics-a-h230.pdf>

A2 <https://www.ocr.org.uk/Images/308723-specification-accredited-a-level-gce-mathematics-a-h240.pdf>