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

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Pure and Statistics Teacher 3 lessons** | | **Pure and Mechanics Teacher 2 lessons** |
| Autumn half term 1  Sequential knowledge and skills | Indices and Surds  Quadratics, inequalities and Discriminant  Graphs 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 weeks  Quadratics Test after 4 further weeks | | Coordinate Geometry Test |
| Autumn half term 2  Sequential knowledge and skills | Representing Data  Probability  Binomial Expansion and Distribution | | Differentiation  Integration  Vectors |
| Assessment Content and methods used to judge learning | Assessment through homework | | Differentiation Test after 5 weeks |
| Spring half term 3  Sequential knowledge and skills | Factor Theorem  Exponential and Logarithms  Trigonometry | | Kinematics  Newton’s Laws of Motion |
| Assessment Content and methods used to judge learning | Mock Exam  Homework | | Mock Exam  Homework |
| Spring half term 4 Sequential knowledge and skills | Proof  Consolidation of AS work  Begin A2 work  Functions | Consolidation of AS work  Begin A2 work  Differentiation | |
| Assessment Content and methods used to judge learning | Past Papers as open book tests and in test conditions  Homework | Past Papers as open book tests and in test conditions  Homework | |
| Summer half term 5 Sequential knowledge and skills | Trigonometry  Revision 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 conditions  Homework | Past Papers as open book tests and in test conditions  Homework | |
| Summer half term 6  Sequential knowledge and skills | Revision for Year 12 exams  Year 12 Exams  Continue with Trigonometry | Continue with Differentiation  Year 12 Exams  Continue with Differentiation | |
| Assessment Content and methods used to judge learning  Assessment | Year 12 Exams  Homework | Year 12 Exams  Homework | |

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

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Pure and Statistics Teacher 2 lessons** | | **Pure and Mechanics Teacher 3 lessons** |
| Autumn half term 1  Sequential knowledge and skills | Indices and Surds  Quadratics, inequalities and Discriminant | | Coordinate Geometry: straight lines, circles and sketching inequalities in two variables  Start Differentiation |
| Assessment Content and methods used to judge learning | Indices and Surds Test after 3 weeks | | Coordinate Geometry Test |
| Autumn half term 2  Sequential knowledge and skills | Graphs and Transformations  Representing Data | | Complete Differentiation  Integration  Vectors |
| Assessment Content and methods used to judge learning | Quadratics Test | | Differentiation Test |
| Spring half term 3  Sequential knowledge and skills | Probability  Binomial Expansion and Distribution | | Factor Theorem  Exponential and Logarithms  Trigonometry |
| Assessment Content and methods used to judge learning | Mock Exam  Homework | | Mock Exam  Homework |
| Spring half term 4 Sequential knowledge and skills | Consolidation of AS work  Begin A2 Work  Functions | Proof  Consolidation of AS work  Begin A2 work – Differentiation | |
| Assessment Content and methods used to judge learning | Past Papers as open book tests and in test conditions  Homework | Past Papers as open book tests and in test conditions  Homework | |
| Summer half term 5 Sequential knowledge and skills | Functions continued  Trigonometry  Revision 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 conditions  Homework | Past Papers as open book tests and in test conditions  Homework | |
| Summer half term 5  Sequential knowledge and skills | Functions  Begin Trigonometry  Year 12 Exams  Trigonometry | Revision for Year 12 Exams  Differentiation | |
| Assessment Content and methods used to judge learning  Assessment | Year 12 Exams  Homework | Year 12 Exams  Homework | |

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>