Carmel College Curriculum Implementation – Long term plan Subject **Level 3 Mathematical Studies**

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|  | **Paper 1 (2 lessons)** | | **Paper 2A (Statistics)** |
| Autumn half term 1  Sequential knowledge and skills | Finance:  Recap on percentages work from GCSE  Calculating Tax and National Insurance contributions and understand that they can change each year.  Know the difference between AER and APR and calculate AER/APR | | Regression:  Calculating PMCC  Finding and plotting the equation of a regression line  Know that regression lines always go through ( |
| Assessment  Content and methods used to judge learning | Assessment on Percentages, Tax, NI, AER, APR | | Regression assessment |
| Autumn half term 2  Sequential knowledge and skills | Finance:  Understanding mortgages and calculate APR  Understand the 2 repayment systems for Student Loans – calculate student loan deductions,  Understand the basic principles of inflation,  Budgeting  Fermi Estimation | | Critical Analysis of Data  Normal Distribution:  Understand the principles of the normal distribution and know the empirical values (68%, 95%, 99.7%)  Finding probabilities using the normal distribution  Working backwards to find missing values |
| Assessment  Content and methods used to judge learning | Percentages and Finance Assessment | | Normal Distribution assessment |
| Spring half term 3  Sequential knowledge and skills | Data Analysis: representing and interpreting data  Draw and interpret stem and leaf diagrams (including back to back), box plots, cumulative frequency diagrams and histograms.  Calculate mean, median, mode and range and interpret/compare results  Calculate standard deviation | | Normal Distribution:  Finding confidence intervals and interpreting results |
| Assessment  Content and methods used to judge learning | Data Analysis assessment | | Mock Exam |
| Spring half term 4 Sequential knowledge and skills | Exploring preliminary materials  Revision | Exploring preliminary materials  Revision | |
| Assessment  Content and methods used to judge learning | Past Papers as open book tests and in test conditions | Past Papers as open book tests and in test conditions | |
| Summer half term 5 Sequential knowledge and skills | Revision | Revision | |
| Assessment  Content and methods used to judge learning | AS External Exam | AS External Exam | |