## Maths - KS5

At KS5, The Palmer Catholic Academy Maths department offers an environment where students are nurtured and challenged to achieve their best grade possible.
Students follow the Edexcel linear two-year A level course and have 5 lessons per fortnight.
The course consists of Pure $1 \& 2$, Statistics and Mechanics and is taught by a number of well qualified teachers. Our KS5 A level Maths curriculum is structured to allow progression of topics and to build on prior knowledge from GCSE and Additional Mathematics. The modules taught empower students to develop and apply their problem-solving skills by focusing on modelling questions based on various topics. At KS5, students are given the opportunity to communicate mathematically by noticing, making connections, explaining, justifying and proving concepts in different contexts.

| Autumn Term | Spring Term | Summer Term |
| :---: | :---: | :---: |
| P1/P2 Teacher | P1/P2 Teacher | P1/P2 Teacher |
| Baseline Test |  |  |
|  | Pure 1 Chapter 5- Straight Line graphs | Pure1 Chapter 9- Trigonometry |
|  | Pure 1 Chapter 6-Circles | Pure 1 Chapter 10- Trigonometric Identities |
| Pure 1 Chapters 1 - Algebraic Expressions: | Pure1 Chapter 12- Differentiation | and Equations |
| Pure 1 Chapter 2 and 3 - Quadratics, | Pure1 Chapter 13- Integration | Possibly start Chapter 14 |
| Equations and Inequalities | Pure 1 \& Pure 2- Vectors | Pure 1 Chapter 14-Exponentials and |
| Pure 1 Chapter 7 - Algebraic Methods |  | Logarithms |
| Pure 2 Chapter 1- Algebraic Methods |  |  |
| Pure 1 Chapter 4- Graphs \& transformations | Stats/Mech Teacher | Revision classes |
| Pure 1 Chapter 8- Binomial Expansion |  |  |
| Pure 2 Chapter 4-Binomial Expansion | Stats Chapter 6- Statistical Distributions Stats Chapter 7- Statistical Hypothesis | Stats/Mech Teacher |
|  | Testing | Mech Chapter 10-Forces and Newton's Law |
| Stats/Mech Teacher | Mech Chapter 8- Modelling in Mechanics Mech Chapter 9-Kinematics1 (Constant | Mech Chapter 11- Kinematics 2 (Variable acceleration) |
| Stats Chapter 1-Statistical Sampling | Acceleration) |  |
| Stats Chapter 2- Data Representation andInterpretation |  |  |
|  |  | REVISE |
| Stats Chapter 3- Representation of Data |  | MOCK CAP Mech/Stats (1.5 hours) Mock |
| Stats Chapter 4-Correlation |  |  |


|  | Stats Chapter 5- Probability |  | Stats \& Mech teacher: <br> Chapter 2 Probability from Stats 2 <br> Core1/D1 teacher: |
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| Chapter 9 Differentiation \& Integration |  |  |  |


|  | AUTUMN TERM | SPRING TERM | SUMMER TERM |
| :---: | :---: | :---: | :---: |
| $Y$ $e$ $e$ $a$ $r$ $r$ 1 3 | Pure 2 teacher: <br> Chapter 14 Exponentials and Logarithms Chapter 5-Radians Chapter 6- Trigonometry Chapter 7-Trigonometry Chapter 8- Parametric Equations: Chapter 9-Differentiation Chapter 2- Functions and Graphs <br> Applied teacher: <br> Chapter 2- Probability <br> Stats Chapter 3- Normal Distribution Chapter 1-Regression \& Correlation Mech Chapter 5- Forces \& Fiction Mech Chapter 6-Projectiles | Pure 2 teacher: <br> Chapter 11- Integration. <br> Chapter 3- Sequences <br> Applied teacher: <br> Mech Chapter 4 - Moments <br> Start Mech Chapter 7-Applications of forces Mech Chapter 8- Further Kinematics | Pure 2 teacher: <br> Chapter 10- Numerical Methods <br> Revision for summer exams. <br> Exam Booklets for practice. <br> Applied teacher: <br> Mech Chapter 8- Further Mechanics: <br> Stats and Mech 1 and 2 Revision <br> Exam Booklets for practice. |
| Im ct | Mock Exam | Mock Exam |  |

