

**Advanced Higher
Course Outline
June 2015**

	Calculus and Vectors	Algebra, Geometry and Proof
June (4 weeks)	Partial fractions Differentiation	Binomial theorem Introduction to complex numbers
Summer Holidays		
Aug – Oct (7½ weeks)	Differentiation continued	Sequences and series Summations and Mathematical proof
October Holidays		
Oct – Dec (8 weeks)	Integration Rectilinear motion and optimisation Volumes of revolution	Properties of function Matrices and systems of equations
Christmas Holidays		
Jan – Feb (4 weeks)	Differential equations	Matrices and systems of equations continued Complex numbers
Prelims		
Feb – Mar (7 weeks)	Vectors	Complex numbers concluded Number theory Indirect proof
Easter Holidays		
Apr (2½ weeks)	Course revision	