



DRAYTON MANOR HIGH SCHOOL

Success at Sixth Form – Subject Specific Tips

Subject	Further Mathematics	
Class and homework expectations		
<p>Students should bring the following items to each lesson:</p> <ul style="list-style-type: none"> • Homework from previous lesson • Textbook • Scientific Calculator • Pens • Ruler • Pencil • Paper/exercise book 	<p>Homework will generally be given every lesson with the expectation that at least 3 hours of private study each week should go towards this homework and general revision of all topics that have been covered. Topics will get assessed throughout the year though these homeworks and regular half termly assessments. It is expected that all students regularly achieve above and beyond their target grades.</p>	<p>Students are expected to arrive on time to all lessons and attend all lessons and any catch up lessons when possible.</p>
Scheme of Work		
<ul style="list-style-type: none"> • Core pure Maths <p>When studying core maths you will be extending your knowledge of pure maths topics such as proof and series as well as learning some brand new concepts such as complex numbers, coordinate systems and matrix algebra.</p>		
<ul style="list-style-type: none"> • Decision and Mechanics <p>You will also be taking two applied modules. Mechanics extends on some parts of Physics learnt at GCSE. Decision will cover topics new to you, accessible straight from GCSE and has many applications to the real world and computer science. You will be studying S1 in your AS Core lessons and this goes towards your AS Mathematics grade.</p>		
Assessment Objectives		
<p>A01 Use and apply standard techniques. Learners should be able to:</p> <ul style="list-style-type: none"> • select and correctly carry out routine procedures • accurately recall facts, terminology and definitions 	<p>A02 Reason, interpret and communicate mathematically Learners should be able to:</p> <ul style="list-style-type: none"> • construct rigorous mathematical arguments (including proofs) • make deductions and inferences • assess the validity of mathematical arguments • explain their reasoning • use mathematical language and notation correctly 	<p>A03 Solve problems within mathematics and in other contexts Learners should be able to:</p> <ul style="list-style-type: none"> • translate problems in mathematical and nonmathematical contexts into mathematical processes • interpret solutions to problems in their original context, and, where appropriate, evaluate their accuracy and limitations • translate situations in context into mathematical models • use mathematical models • evaluate the outcomes of modelling in context, recognise the limitations of models and,

		where appropriate, explain how to refine them
Assessment		
<p>There is no coursework involved and you are therefore only assessed in four exams at the end of the 2 years. These exams are:</p> <p>Core Pure maths 1 Core pure maths 2 Further mechanics 1 Decision Maths</p>		
How to do well in the subject at A Level		
<ul style="list-style-type: none"> • Attend all lessons and catch up with any work missed by seeing your teacher and peers. • Ensure that you revise for all half termly topic exams, endeavouring to achieve at least your target grade. • Use the Mathematics Department to its fullest effect by seeking help from your class teacher or any other maths teacher in your free time. • Practicing past paper questions and the exam skills required to complete the exams in the time limit given. 		
Support available		
<ul style="list-style-type: none"> • The Mathematics Department is always on hand for help before, during and after school. • For those students wishing to study Mathematics or related subjects the Mathematics Department run a STEP Mathematics class preparing students for any extra Mathematics exams. Many of the top universities require this knowledge for entry onto certain based courses (includes Mathematics, Physics, Engineering, Computer Science). 		
How parents can help support		
<ul style="list-style-type: none"> • Please help your son or daughter to organise their folder and keep it up to date. • Check that they are doing homework. • Discuss with them any letter you receive about opportunities provided both in and outside of school. 		
Helpful websites or resources		
<p>www.mathspapers.co.uk/edexcel.html www.examsolutions.net www.mrbartonmaths.com/alevel.htm www.physicsandmathstutor.com www.mathsgenie.com</p>		