



DRAYTON MANOR HIGH SCHOOL

Success at Sixth Form – Subject Specific Tips

Subject	Further Mathematics	
Class and homework expectations		
You should bring the following items to each lesson: <ul style="list-style-type: none">Homework from previous lessonTextbookScientific CalculatorPensRulerPencilPaper/exercise book		Homework is set once each week and will involve you in at least 3 hours of private study each week. If you do not understand a new topic, then you will be expected to do extra work to master concepts and procedures. It is expected that you aim to achieve above and beyond your target grade both in the classroom and when completing homework. You will be expected to attend any catch up lessons when requested to do so.
Scheme of Work		
<ul style="list-style-type: none">Core Pure Mathematics <p>When studying Core Pure 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, matrix algebra and volumes of revolution.</p> <ul style="list-style-type: none">Decision Mathematics and Further Mechanics <p>You will also be studying two applied modules. Decision Maths will cover topics new to you, which are accessible straight from GCSE, and has many applications to the real world and computer science. Further Mechanics extends the concepts you learn about in mechanics in A-level maths.</p>		
Assessment Objectives		
A01 Use and apply standard techniques. Learners should be able to: <ul style="list-style-type: none">select and correctly carry out routine proceduresaccurately recall facts, terminology and definitions	A02 Reason, interpret and communicate mathematically Learners should be able to: <ul style="list-style-type: none">construct rigorous mathematical arguments (including proofs)make deductions and inferencesassess the validity of mathematical argumentsexplain their reasoninguse mathematical language and notation correctly	A03 Solve problems within mathematics and in other contexts Learners should be able to: <ul style="list-style-type: none">translate problems in mathematical and non-mathematical contexts into mathematical processesinterpret solutions to problems in their original context, and, where appropriate, evaluate their accuracy and limitationstranslate situations in context into mathematical modelsuse mathematical modelsevaluate 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 in the Further Maths course. You are assessed through four exams at the end of the course in year 13. The exams, which each last 90 minutes, are:</p> <p>Core Pure Maths 1</p> <p>Core Pure Maths 2</p> <p>Further Mechanics 1</p> <p>Decision Maths</p> <p>Each exam counts for 25% of the marks.</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 or peers. • Ensure that you revise for all half termly topic exams, endeavouring to achieve at least your target grade. • Practise 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"> • You should make an appointment with your teacher to get help in a topic if you are struggling to understand.
How parents can support
<ul style="list-style-type: none"> • Please help your daughter or son 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.examsolutions.net</p> <p>www.mrbartonmaths.com/alevel.htm</p> <p>www.physicsandmathstutor.com</p> <p>www.mathsgenie.com</p> <p>TL Maths</p>