## Mathematics

## Department Years 12-13 The Latymer School

# What are the options? 

## Single maths

A level Maths

## Double maths

A level Maths
A level Further Maths

## Why study maths in the sixth form?

Maths can lead to many fantastic careers...
Engineering Accountancy Project Management

Psychology
Medical Research

Banking Football Analytics
Corporate Law
Lecturing
Programmer
Architect
IT Consultancy
Air Traffic Control

Actuary Pilot
Analyst
Teaching
Game Designer

Medicine
Trading Currencies

Statistician

What maths do you study in the sixth form?

## Pure

Beautiful maths that is abstract but can have applications to the real world or problem solving

Mechanics
Maths relating to motion and forces, good for those doing Physics

Statistics
Maths relating to data, good for those studying Humanities/Biology/Economics

## What is expected for single maths?

## Grade 7 in GCSE Maths

The data suggests a minimum of grade 8 is needed to give you the best chance of $A^{*} A B$ in $A$ level Maths

Summer holiday algebra work after GCSEs Edexcel level 3 algebra papers

Competence in basic algebra
Summer holiday + first two weeks = algebra revision
third week = algebra test

## Hard work

A level is a big step up from GCSE

## How does single maths work?

## Content

$2 / 3$ Pure + $1 / 3$ Mech/Stats

## Exams

Three 2 hour exams taken at end of Year 13
Papers 1 \& $2=$ Pure $\quad$ Paper $3=$ Mech/Stats

## Teaching

4 hours 40 minutes of maths each week
2 teachers (1 Pure/Stats, 1 Pure/Mech)

## What is expected for double maths?

Grade 8 in GCSE Maths
Priority given to students with grade 9
Remaining places offered to those with grade 8
Summer holiday algebra work after GCSEs Edexcel level 3 algebra papers

Expertise in basic algebra
Summer holiday + first two weeks = algebra revision third week = algebra test

Hard work
Double maths is a big step up from single maths

## How does double maths work?

Year 12 complete A level Maths (single maths)

## Content in Year 12

$2 / 3$ Pure $+1 / 3$ Mech/Stats
Exams in Year 12
Three 2 hour exams taken at end of Year 12
Papers 1 \& 2 = Pure Paper 3 = Mech/Stats

## How does double maths work?

## Year 13 complete A level Further Maths

## Content in Year 13

$1 / 2$ Core Pure $+1 / 2$ Further Mech/Stats
Exams in Year 13
Four $11 / 2$ hour exams taken at end of Year 13
$2 \times$ Core Pure $1 \times$ F. Mech $1 \times$ F. Stats
Teaching
9 hours 20 minutes of maths each week 4 teachers (2 Core Pure, 1 F. Mech, 1 F. Stats)

## If you choose double maths

You will have 4 A levels by the end of Year 13

You cannot pick double maths with the intention of not taking A level Further Maths in Year 13 as you are depriving someone else of a place on a heavily over-subscribed course

If you achieve grade $\mathrm{C}-\mathrm{U}$ in A level Maths in Year 12 you may not progress to Further Maths in Year 13 but will instead repeat A level Maths

## How is maths taught?

In a typical 1 hour 20 minute lesson students are taught something new in the first half and practise what they've learnt in the second half

Homework is based on the class work, and at least one hour of independent study per day is essential

There are regular assessments and revision for these is done online using Dr Frost Maths

# How are the classes arranged? 

Majority of Year 12 students study maths
Students are split into 9 groups:
7 single maths ( $\approx 17$ per class)
2 double maths ( $\approx 24$ per class)
Classes are arranged similarly in Year 13

Maths or maths related degrees
Double maths is expected at many universities eg. Oxford, Cambridge, Warwick, Imperial, UCL, KCL, Bath, Bristol, Durham

Maths entrance papers may also be required eg. MAT (Oxford) or STEP (Cambridge)

Single maths is sufficient at some universities but TMUA/MAT/STEP may then be required

Double maths is not required for medicine

## Exam results 2022 headlines

Year 12 A level Maths (45 students)
53.3\% A*
82.2\% A*A

Year 13 A level Maths (148 students)
35.8\% A*
$77.0 \% A^{*} A$

Year 13 A level Further Maths (48 students) 43.8\% A*

## Further questions can be answered in room 57 after this presentation or visit our website.

https://www.latymer.co.uk/national-curriculum/stem/mathematics

## Thanks for

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