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	Actuary	Pilot	Analyst
Medical Research	Teaching	(Game Designer
Banking	Football Analytics	_	
Corporate Law	Architect	N	ledicine
Lecturing	IT Consultancy	Tra	ading Currencies
Programmer	Air Traffic Con	trol	Statistician

What maths do you study in the sixth form?

<u>Pure</u>

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*AB 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

<u>Exams</u>

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

4 hours 40 minutes of maths each week2 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 1½ hour exams taken at end of Year 13 2 x Core Pure 1 x F. Mech 1 x 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 C - 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 listening