

A pile of colorful wooden blocks with numbers and mathematical symbols. The blocks are in various colors including orange, pink, blue, green, and purple. Some blocks show numbers like 1, 9, 7, 0, 6, 2, 3, and 4. Others show mathematical symbols like a plus sign, a minus sign, a multiplication sign, and a division sign. The blocks are scattered and overlapping on a light-colored surface.

How to support your child with A Level Further Mathematics

Jo Locke

How does the course look?

- We are currently very short of A level mathematics teachers and so have an online curriculum offer with the AMSP. This involves a one and a half online session with a tutor and access to a wide range of online resources on the Integral platform.
- We fund the on-line provision but do ask that students buy textbooks.
- There is a drop-in session every Thursday until 4pm (although we are usually able to support until 4:30)
- We do try to support at other times by prior arrangement

What else
are we
doing?

- Our A level capacity should increase after Christmas so we will do our very best to timetable a lesson a week to support our students
- We will teach students in year 13 face to face, building on the work that the AMSP have begun.

Expectations of students

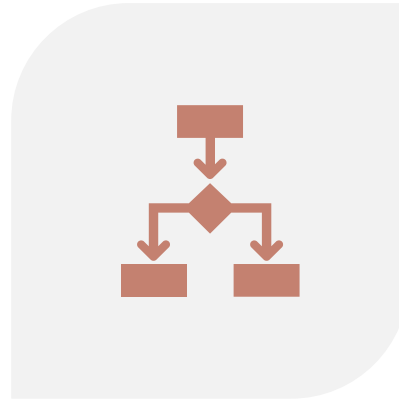
At this stage it is important to appreciate what we will expect you to do each week

- Watch between 4-7 short videos that will introduce concepts (1 hour)
- Use other related resources in Integral (our learning platform) such as the walkthroughs (1 hour)
- Attempt the 'level' exercises for this week's topic (2-3 hours)
- Attend the weekly online tutorial live (it will be recorded but you must make every effort to attend live). This will last for an hour or so and will be scheduled to start between 5pm and 7.00pm. You must tell us if you cannot make the sessions and we will try to arrange a time to suit everyone. (1 hour)
- After the lesson complete the section test (1 hour)
- Submit review exercises (topic assessments) to your tutor upon request. These won't necessarily be every week (2 hours).

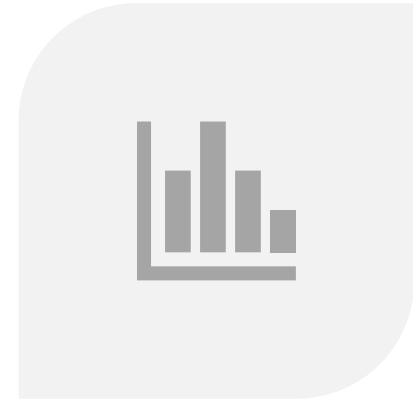
Units we are studying



PURE CORE 1



DECISION 1



STATISTICS 1

Scheme Of Learning

- Students are about to begin the Decision section of the course – this is very straightforward
- The Statistics element is also very straightforward
- The students should find the next few weeks a lot easier.

A pile of colorful wooden blocks with numbers 1 through 9 on them. The blocks are in various colors including orange, pink, blue, green, and purple. The numbers are printed in white or contrasting colors on the top surface of each block. The blocks are scattered and overlapping on a light-colored surface.

How to support your child with A Level Mathematics

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What will they be learning?

Pure Mathematics

6 lessons a fortnight with Mrs. Locke:

- Algebra
- Graphs
- Calculus
- Trigonometry

Applied Mathematics

3 lessons a fortnight with Mrs. Gould:

- Statistics
 - Probability
 - Summary statistics
 - Statistical distributions
- Mechanics:
 - Forces and Newton's laws
 - Constant acceleration formulae
 - Variable acceleration



Details of the course:

- We use the Edexcel exam board. At the end of the two years, your child will sit three exam papers. All papers allow the use of a calculator.
- Paper 1: Year 1 and Year 2 Pure mathematics content
- Paper 2: Year 1 and Year 2 Pure mathematics content
- Paper 3: Year 1 and Year 2 Applied content

What is expected of them?

- We recommend that for every hour spent in the classroom learning, the students consolidate this with one hour of independent study time. This can either be completing more questions to aid their fluency, answering exam questions, watching videos online for some more worked examples.
- This should be individual to each student and their needs. We want the students to become independent learners so this will not always be directed, but students should take on the ownership of ensuring this is completed.



What is expected of them?

- The students will have homework and private study work each week.
- These will alternate between the two teachers
- Students should ensure that this is completed within the deadline and to their highest standard.
- Work will be recorded on Edulink



What is expected of them?

- Students will have a topic test at the end of most units.
- They will be told a couple of weeks in advance of this so that they have time to prepare.
- These dates will also be posted to teams.



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How can you help them?

- Try to ensure that they have the correct equipment – calculator and textbook are the most important. Please let Mrs. Locke know if there are any difficulties in getting these.
- Have the conversation with them about any upcoming unit tests – have they started revision? Do they know specifically which topics they will need to revise?
- Check with them that they have done work after the lesson to consolidate the new knowledge learnt that lesson.
- After a unit test – do they know which areas they are strong at, and any room for improvement?



Resources

- The textbook – these have excellent questions. There will be so many that we haven't had a chance to do in class.
- Exam questions – there are thousands of exam questions online. Please tell your child to ask for the links if they're not sure where to find them.
- Websites – there are a huge number of websites that support A level Mathematics

What will they be learning? (Further maths)

They will start off by learning pure maths. This includes:

- Complex numbers
- Matrices
- Proof
- Vectors

They will then move onto studying applied mathematics. This will include:

- Statistics
 - More statistical distributions
 - Hypothesis testing
 - Chi-Squared tests
 - Quality of tests