

### Course teachers

- Ms Basak, Mr Effah and Mr Stanford

**Exam board:** Edexcel ([www.edexcel.com](http://www.edexcel.com))

### Assessment Scheme

The course is assessed through three examinations at the end of Year 13:

- **Paper 1 & Paper 2 : Pure Mathematics**

Proof, Algebra and functions, Coordinate geometry, Sequences and series, Trigonometry, Exponentials and logarithms, Calculus, Numerical methods, Vectors

- **Paper 3: Statistics and Mechanics**

**Section A: Statistics**

Statistical sampling, Data presentation and interpretation, Probability, Statistical distributions, Hypothesis testing

**Section B: Mechanics**

Quantities and units in mechanics, Kinematics, Forces and Newton's laws, Moments

*All 3 papers are 2-hour written examinations worth 33.33% each. 100 marks per paper.*

### Course expectations

- Complete a **minimum** of 5 hours independent study per week (see middle pages).
- Attend the timetabled additional study sessions - *compulsory if you are below your target grade.*
- Be resilient. Don't give up. Make the effort that is required to be successful.
- Ask for help. Email your teachers when outside lessons and we can arrange one to one sessions as needed.
- Follow our advice...we know what it takes for you to succeed!

Shoeburyness High School

# Sixth Form

Start of Course Information

# Mathematics

*Advanced-Level*

A-Level Mathematics is challenging. It is a highly academic course, with very high expectations. You must be prepared to work exceptionally hard from the start of the course if you want to be successful.

But as a result, Mathematics is also very rewarding. When you successfully solve a problem using skills you have had to develop through hard work and persistence, you will know that your effort was worthwhile.

When you achieve a good grade in A-Level Mathematics, you will open up a world of opportunities.

# Shoeburyness High School Sixth Form September 2024

<p><b><u>Review the week's class notes</u></b></p> <ul style="list-style-type: none"><li>• All notes and examples given in the lesson should be recorded in a separate note book.</li><li>• Revision/prompt cards should be made &amp; revised using these note.</li><li>• Any helpful hints and tips as well as solutions to questions with which you needed help should be included in your notes.</li><li>• Have these with you when you are working independently.</li><li>• <b>Ask for clarification if you do not fully grasp the concepts</b> when you review.</li><li>• Email your class teacher what you need help with and we can plan a time to support.</li></ul>	<p><b>A-Level Mathematicians :</b> You must complete a minimum of 5 hours of independent study per week!</p>	<p><b><u>Read the text book/revision guide/webpages</u></b></p> <ul style="list-style-type: none"><li>• Use the online Activebook at <a href="http://www.pearsonschoools.co.uk">www.pearsonschoools.co.uk</a></li><li>• Use websites such as <a href="http://www.MathsWatch.co.uk">www.MathsWatch.co.uk</a> &amp; <a href="http://www.DrFrostMaths.com">www.DrFrostMaths.com</a></li><li>• Ask for additional material or download worksheets from <a href="http://www.physicsandmathstutor.com">www.physicsandmathstutor.com</a></li><li>• Make good use of examples and explanations in the text book</li></ul>
<p><b><u>Learn everything!</u></b></p> <ul style="list-style-type: none"><li>• All methods and formulae must be learnt, regardless of whether they appear in the formula book (This should only be used as a prompt)</li><li>• The best way to learn maths is to do it! You <b>must do every question that is set.</b></li></ul>	<p><b><u>Complete past paper questions</u></b></p> <ul style="list-style-type: none"><li>• Sample questions appear in the text book exercises and are marked accordingly. <b>All</b> must be done.</li><li>• You will be given past paper and exam-style questions. It is essential that you ask about any you struggle with, regardless of whether you are able to work it out with help from the mark scheme/peers.</li></ul>	<p><b><u>Read around the subject</u></b></p> <ul style="list-style-type: none"><li>• It is helpful to research topics you find difficult, but it is <b>vital that you ask</b> for further explanation from your teachers. They can identify exactly where your stumbling blocks are and give you the personal support you need. <b>Full understanding will enable you to transfer skills and knowledge to other complex questions</b> better than looking at the answers and saying "I think I see"</li></ul>