

TEACHER WEBINAR

NEW: EFFECTIVELY TEACHING MATHEMATICAL ELEMENTS OF THE CURRICULUM

FOCUS

Mathematics is an extremely significant component of A level Physics. Although strong GCSE Maths grades are generally expected of students intending to study A level Physics, and most take A-level Maths alongside Physics, there are many students who are not entirely successful in applying mathematical techniques correctly to Physics problems. The webinar will suggest methods to enable students to make these links and maximise their performance problem-solving exam questions.

PROGRAMME

	TIME
Why are Maths skills so important in Physics?	4.00 - 4.05pm
<ul style="list-style-type: none"> Identify the range of skills taught in GCSE Maths and how this matches the requirements of A level Physics students Identify the differences between the maths for Physics and maths taught in Maths lessons 	
What is the essential mathematical skill set for A level Physics?	4.05 - 4.35pm
<ul style="list-style-type: none"> Activity: Brainstorm the key mathematical skills Summary of tool kit Activity: Classify skills in terms of student confidence Develop a priority list to address key weaknesses identified 	
How can we effectively develop these skills in our students?	4.35 - 5.00pm
<ul style="list-style-type: none"> How to get students to layout their calculations in the optimum manner How to increase understanding of basic numeracy – sig figs, standard form etc How to develop algebraic and trigonometric fluency How to help students make links between physics problems and mathematical solutions 	
Supporting students with poor basic mathematical skills	5.00 - 5.15pm
<ul style="list-style-type: none"> Diagnostic testing of Physics students at start of course Developing a remediation maths course tailored to Physics Coordination with A-level Maths teachers to present a common approach 	
How can we effectively develop these skills in our students?	4.35 - 5.00pm

WHY SHOULD YOU BOOK A TEACHER WEBINAR?

- ✓ **Get focused feedback** on the most important areas for improvement for 2020/2021
- ✓ **Take away new approaches** to tackling specific challenging topics that take a different angle
- ✓ **Gain new techniques** for enhancing the performance of specific groups of students
- ✓ **Led by current examiners and academic experts**, giving the best possible advice
- ✓ **Interact and ask questions directly** to the examiner expert leading the webinar

DATE

Thursday 15 October 2020

WEBINAR LEADER

Tony Dunn has taught for over 30 years in secondary schools and sixth form colleges, mainly in inner city areas, specialising in A-level Physics. He was Head of Science for 12 years and spent several years training Physics teachers in SE Asia. He has been an examiner for OCR A-level Physics for the past five years and developed CPD courses, webinars and student conferences for Keynote for over a year.

WHO SHOULD ATTEND?

- The course might suit Physics teachers from non-mathematical science background (eg ex-Chem/Bio teachers). Otherwise, any teachers who have mixed ability groups with significant maths deficits.

BENEFITS

- Identify the key mathematical skills needed to succeed in A level Physics
- Develop strategies for improving the relevant mathematical skills
- Identify common pitfalls in students' mathematical methods
- Build confidence in supporting students with mathematical shortcomings