

# Physics

## What will I study and learn?

Physics explores the deepest questions we have concerning how the universe works, from the strange and fascinating quantum world to the behaviour of entire galaxies. Students will develop their understanding of intriguing topics, such as electric and magnetic fields, particle physics and medical imaging.

## What skills should I have and what will be developed?

Physics is far more than a body of knowledge. The course is designed to develop a range of important skills including problem-solving, data analysis and effective communication, so that learners leave BGS with a qualification that is highly sought after by universities and prospective employers.

## Beyond the classroom

Studying Physics in the Sixth Form at BGS brings with it many exciting opportunities to extend and apply physics outside the classroom. By taking advantage of the variety of guest speakers, clubs, and trips on offer, you will continue to be challenged and inspired. For those who want to be pushed further, the 'Mathematical Physics' and 'Isaac Physics' clubs extend learning beyond the syllabus and are excellent preparation for those looking to go deeper in their learning and tackle complex problems. We have a robotic telescope and conduct multiple observation nights throughout the winter months.

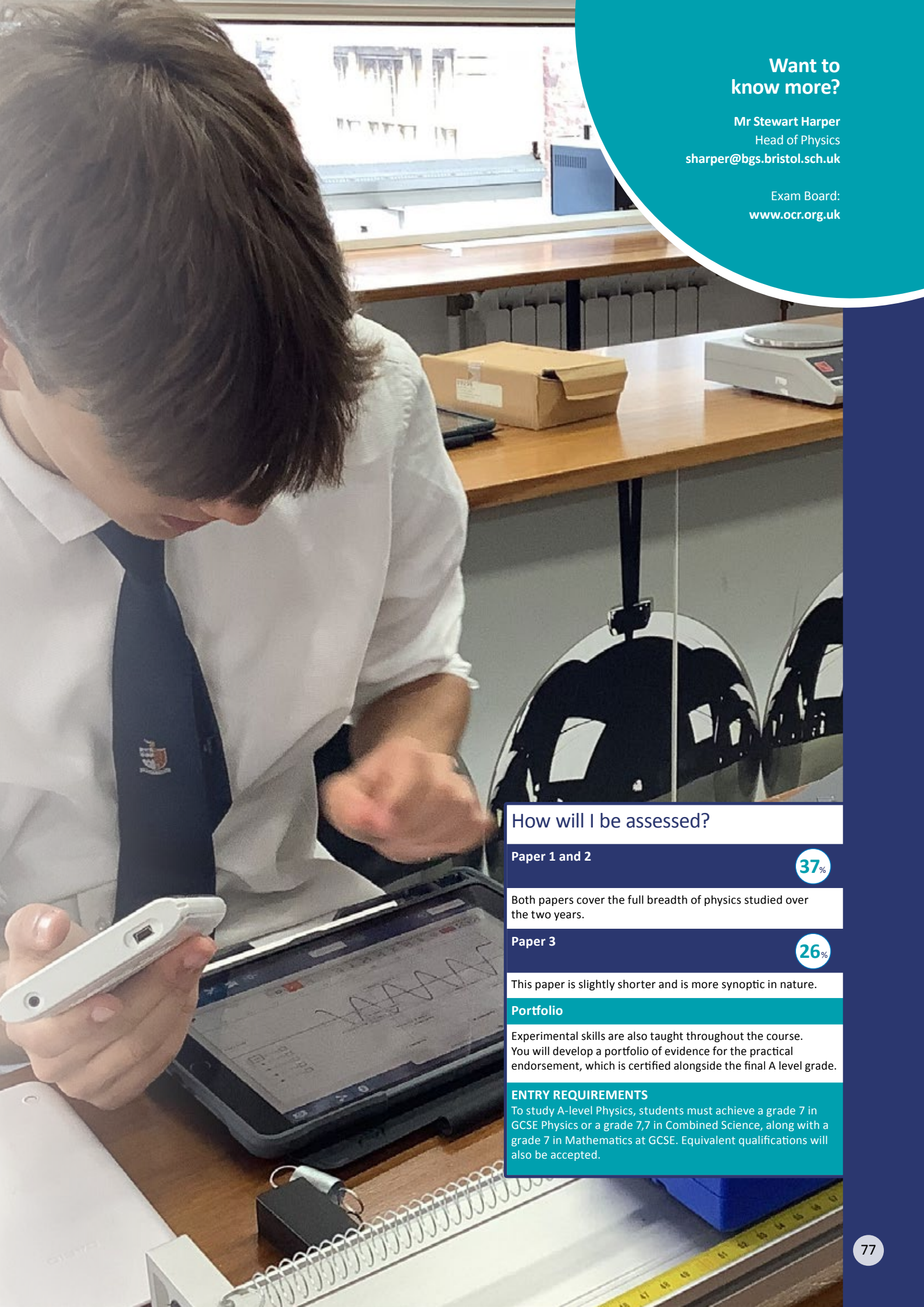
Furthermore, our trips and enrichment programme continues to evolve and grow. Previous physics trips have included a particle physics masterclass, engineering debates over lunch at the House of Lords and a tour of the Diamond Light Source in Oxfordshire. This year we are also going to Belgium for an astronaut training experience and the UK Atomic Energy Authority's fusion research centre in Oxfordshire. Many students who study Physics in the Sixth Form at BGS go on to study courses such as engineering, the physical sciences and architecture at top universities.

“Physics is more mathematical than other sciences, which is great for challenging your learning. There is a good balance of reviewing your own work and having support from the teachers who want you to succeed. There is always an extension question to stretch your learning in our classwork and homework.

**Daniel, OB**

Courses: Chemistry, Mathematics and Physics





## Want to know more?

Mr Stewart Harper  
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Exam Board:  
[www.ocr.org.uk](http://www.ocr.org.uk)

### How will I be assessed?

#### Paper 1 and 2

37%

Both papers cover the full breadth of physics studied over the two years.

#### Paper 3

26%

This paper is slightly shorter and is more synoptic in nature.

#### Portfolio

Experimental skills are also taught throughout the course. You will develop a portfolio of evidence for the practical endorsement, which is certified alongside the final A level grade.

#### ENTRY REQUIREMENTS

To study A-level Physics, students must achieve a grade 7 in GCSE Physics or a grade 7,7 in Combined Science, along with a grade 7 in Mathematics at GCSE. Equivalent qualifications will also be accepted.