Biddenham
Upper School

A level Sciences Information

AQA Biology
OCR Chemistry A
OCR Physics B

NB: All assessment is exam-based; demonstrating a set of practical skills is also required to pass the A level

For further information please see Dr McGrath

AQA Biology

What qualifications do I need?

- ✓ The School's minimum entry requirement, plus Grade 6 or above in GCSE Combined Science (or Single Biology), a grade 6 or above in GCSE Mathematics and a grade 5 or above in GCSE English.

What time commitments will there be?

- ✓ Five hours of class work time a week.
- ✓ A **minimum** of five hours homework/independent study a week.
- ✓ Optional (sometimes compulsory) catch-up sessions

What are the additional costs?

- ✓ It is advised that you purchase a textbook and a revision guide, we will offer deals on the suggested books.
- ✓ A scientific calculator is essential if you do not already own one.

Will the course be challenging?

- ✓ Yes! Most students find the course demanding. Students will need to be committed and willing to work hard.
- ✓ Lots of students find the maths requirements surprising and demanding - around 10% of the course is mathematics based.

What could I do after the course?

- ✓ The obvious choice would be a biological based degree such as Biology, Marine Biology, Botany, Zoology, Microbiology, Genetics, Sport Science and many more!
- ✓ Lots of A-level Biology students who take other A-level sciences take a career in Medicine, Law, Veterinary Science, Engineering and Pharmacy
- ✓ Many universities value the A-level sciences, and are therefore a good choice, even if you do not want to take a scientific degree or career

For full specification:

http://www.aqa.org.uk/subjects/science/as-and-a-level/biology-7401-7402

OCR Chemistry A

What qualifications do I need?

- ✓ The School's minimum entry requirement, plus Grade 6 or above in GCSE Combined Science (or Single Chemistry), a grade 6 or above in GCSE Mathematics and a grade 5 or above in GCSE English.

What time commitments will there be?

- ✓ Five hours of class work time a week.
- ✓ A **minimum** of five hours homework/independent study a week.

What are the additional costs?

- ✓ It is advised that you purchase a textbook and a revision guide, we will offer deals on the suggested books.
- ✓ A scientific calculator is essential if you do not already own one.

Will the course be challenging?

- ✓ Yes! Most students find the course demanding. Students will need to be committed and willing to work hard.

What could I do after the course?

- ✓ To study Chemistry or one of the other sciences or related subjects, such as Medicine, Pharmacy, Dentistry, Law, Veterinary Science, Chemical Engineering, Forensic Science, Civil Service, Environmental Science or Agriculture.
- ✓ Many science-based industries are now looking to recruit A level students who show an aptitude for Chemistry and have the right attitude towards a working environment, with a view to giving students the opportunity to study at a higher level through one day a week release.

For full specification:

http://www.ocr.org.uk/Images/171720-specification-accredited-a-level-gce-chemistry-a-h432.pdf

OCR Physics B

Entry Requirements:
In order to gain access to AS or A Level Physics at Biddenham 6th Form you need the following GCSE grades in addition to the school's requirements:
Maths - Level 7 or above (required)
Combined Science - Level 6 or above **OR** **Single Physics** - Level 6 or above (either required)
English - Level 5 or above (preferred)

Time Commitments:
Lesson time - approx 5 hours per week (4 x 70 min lessons)
Independent study time - 5 hours per week minimum; to complete homework, research, projects and independent study.

Additional Costs:

- ✓ It is advised that you purchase a textbook and a revision guide, we will offer deals on the suggested books.
- ✓ A scientific calculator is essential if you do not already own one, and a geometry set is preferred

Challenge and support:
A level Physics is widely considered to be one of the most challenging A Level courses available. Students who take A level Maths in conjunction with A level Physics are at a distinct advantage. Students taking A level Physics will be expected to demonstrate a high level of effort and commitment. To support students, A level Physics teacher offer additional lunchtime and after-school support sessions.

Career Opportunities:
Physics is a seriously useful subject for the majority of STEM(science, technology, engineering and maths) careers and you'll find physicists everywhere, in industry, transport, government, universities, the armed forces, the secret service, games companies, research labs and more. Physics is especially helpful for jobs that involve building things and developing new technologies, including: engineering (flight, buildings, space, you name it…), astronomy, robotics, renewable energies, computer science, communications, space exploration, science writing, sports and games technology, research and nanotechnology.
A spokesperson for the Institute of Physics says: "Physicists are involved in finding solutions to many of our most pressing challenges – as well as studying atoms or making sense of the extra-terrestrial, physicists diagnose disease, model the climate, design computer games, predict markets and design hi-tech goods. Studying physics opens doors."

For full specification:
http://www.ocr.org.uk/Images/171729-specification-accredited-a-level-gce-physics-b-advancing-physics-h557.pdf