

Welcome to the Nishkam Science department



Head of Department welcome



Miss A . Hafeez

Welcome to Applied Science !

Applied Science covers a wide range of topics across Biology, Chemistry and Physics. It allows you to acquire a high level of practical laboratory skills from which the theory is then drawn.

An Applied Science Diploma will provide you with a broad range of skills to prepare you for employment or higher education. You will build on your previous studies of science by widening your knowledge of scientific investigation and practical techniques.

You will develop the following :

- Numeracy skills required in a scientific setting.
- Gain knowledge about working in the science industry.
- Examine perceptions of science in the wider community.
- Gain skills needed for completing research projects.



Meet the department

• Miss A. Hafeez (myself) – Head of Ks3 / Applied Science

Miss M.Shabir – Teacher of Chemistry (fellow Applied Science teacher)





Miss M.Shabir





Miss A . Hafeez

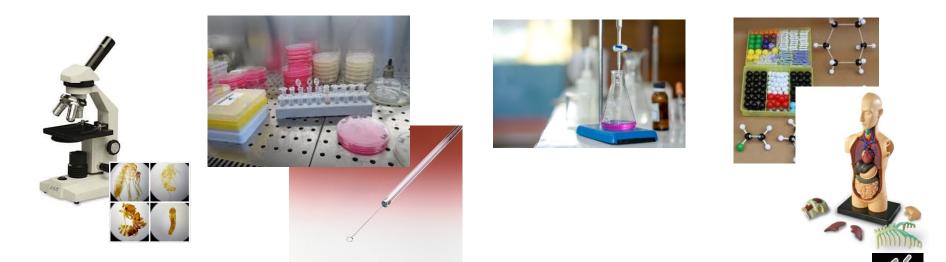
Photo tour of the department



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What you can expect in your Applied Science lessons



Taught by subject specialists, with laboratory experience, you will learn by completing laboratory-based practical assignments, supported self-study assignments, presentations and discussions that are based on real workplace situations, activities and demands. Staff will implement a range of teaching and learning styles to help you succeed within your lessons.

This will be done through :

- Modelling
- Exam questions / paper (individual feedback)
- Range of practical's
- Online platform
- Pre-reading / Homework

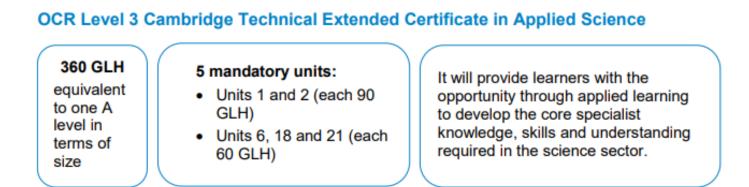
You will have a very clear understanding of your progress throughout the course, to help you plan and achieve your next steps.



What you will study in Applied Science

<u>5 Modules :</u>

- Unit 1 Science Fundamentals (90 GLH Exam based)
- Unit 2 -Laboratory techniques (90 GLH Exam based)
- Unit 6 Control of hazards in the laboratory (60 GLH internally assessed)
- Unit 18 Microbiology (60 GLH internally assessed)
- Unit 21-Product testing technique (60 GLH internally assessed)







An example unit from Applied Science

<u>Unit 18 – Microbiology</u>

The study of Microorganisms (those too small to be seen with the naked eye).

Studied through specialised techniques : Microscopes, culturing , genetics and serology.

Microbes are found everywhere including inside and outside the body, on your laptop keyboard, on your phone screen and in your food.

You will cover the structures and functions of key microorganisms, processes used for identification and classification of microbes, as well as the beneficial uses of microbes in agriculture, food and medicine.















Extra-curricular opportunities in Applied Science

- Guest speakers.
- Q & A with relevant employers.
- Trips and visits (i.e Laboratory).



General Studies is not considered for this course.

Where	can	Appl	ied	Sc

The Level 3 Extended Certificate in A same size as one GCE A level.

Some of the pathways you can take

 University - nursing, radiography, engineering, biochemistry, veterir forensics.

Subject requirements	GCSEs 5 GCSEs grades 5 -9 (or grades A* - C if assigned according to previous grading format), which must include English Language, Maths and a Science. Please note that Science dual award is acceptable. Core Science and Applied GCSEs are also considered. All GCSEs should be obtained in one sitting.
BTEC Level 3 National Extended Diploma	 BTEC nationals are considered in addition to 5 GCSEs grades 5-9 (or former A* - C), which must include English Language, Maths and a Science. Science dual award, Core Science and Applied GCSEs will also be considered. We will accept one BTEC Level 3 National Extended Certificate (60 credits) at a minimum of Distinction. This must be accompanied by two A2 at Grade B, of which one subject should include Biology/Human Biology, Physics, Maths or Chemistry. Three separate subjects must be taken between the two qualifications.
	BTEC National Diploma (120 credits) in Health and Social Care or Applied Science/ Medical Science graded at DD will be accepted. This must be accompanied by a science A Level (biology, physics, chemistry and maths) at grade B In total, between the two qualifications; two separate subjects must be taken.
	Alternatively BTEC National Extended Diploma (180 credits) in either Applied Science/ Medical Science or Health and Social Care at DDD. The student is required to achieve 120 credits out of 180 at Distinction by the end of their second year.

2) Apprentiship / Work (Paid) - Laboratory technician





What we expect from you

- Accountability Organised
- Trust Independent
- Determination Pre reading / Homework / Extra work
- Enthusiasm Love for the course
- Diligence Meeting coursework deadlines



Student perceptions



- <u>Enthusiasm</u> Enjoy the content within the course Very relatable.
- "I enjoy the challenge in lessons and a sense of accomplishment I get from the lesson content"
- <u>Committed</u> Exceptional effort apparent in folders.
- " I always know what ill be studying and the teacher guides us through step by step"
- <u>Optimism</u> Exams were not their strong point , allowed them find a sense of belonging.

"I enjoy how the course allow me to demonstrate my understanding through course work and projects."

Science is a way of thinking much more than it is a body of knowledge.



Qualification details



- OCR Cambridge technical (2 year course).
- 5 Mandatory units.
- 2 Exam based / 3 course work based.
- Exam based units Unit 1 & 2 , Near-Pass , Pass, Merit & Distinction (January & June).
- Internal units Unit 6,18,21,Pass, Merit & Distinction (Split over the two years).
- Each grade equates to points which helps in calculating the final grade.

Assessment method/model	Units 1 and 2 are assessed by exam and marked by us. Your centre staff will internally assess all the other units and we will moderate them.
Grading	Examined units are graded Near-Pass, Pass, Merit and Distinction. Internally assessed units are graded Pass, Merit and Distinction. The qualification is graded Pass, Merit, Distinction, Distinction*





All of the Nishkam Sixth Form Open Evening resources can be found on the school's website within the Sixth Form section.

<u>Applications are also now open</u> and are available to complete <u>electronically</u> through the 'Apply' section of our Sixth Form page.





We look forward to welcoming many of you to our classrooms in September 2021

