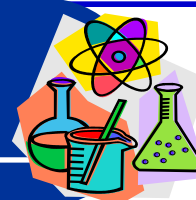


A Level Sciences at Sir John Colfox Academy



The Science Courses—OCR A Courses

Biology Content is in six modules:

- Module 1: Development of practical skills in biology
- Module 2: Foundations in biology
- Module 3: Exchange and transport
- Module 4: Biodiversity, evolution and disease
- Module 5: Communication, homeostasis and energy
- Module 6: Genetics, evolution and ecosystems

Chemistry Content is in six modules:

- Module 1 – Development of practical skills in chemistry
- Module 2 – Foundations in chemistry
- Module 3 – Periodic table and energy
- Module 4 – Core organic chemistry
- Module 5 – Physical chemistry and transition elements
- Module 6 – Organic chemistry and analysis

Physics Content is in six modules:

- Module 1: Development of practical skills in physics
- Module 2: Foundations in physics
- Module 3: Forces and motion
- Module 4: Electrons, waves and photons
- Module 5: Newtonian world and astrophysics
- Module 6: Particles and medical physics

Why A Level Sciences?

A level Science helps student develop the following skills for every day life:

Numeracy, Practical skills

Communication skills, Confidence

ICT skills. Problem Solving

Here at Colfox we study the OCR A specifications in Biology, Chemistry and Physics. These courses look at relevant applications of science to society and is recognized as one of the best set of A Level courses by leading universities.



Students gain practical skills throughout each of these courses. These are assessed in the written examinations and in the practical endorsement (component 04). Activities that count towards the practical endorsement are included in a practical skills booklet which students are provided with at the start of the course.

We have a successful introductory course on practical skills which all students study at the start of the course, as well as practical skills sessions throughout the full 2 years of the course.

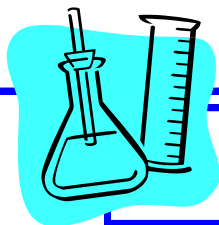
A Level Sciences at Sir John Colfox

What personal attributes are we looking for?

practical independent
 numerate working
 hard working articulate inquisitive
 motivated

Course Requirements

Chemistry, Biology and Physics are hard – probably the hardest subjects at A level due to the complex ideas you will study. It is expected that you will need to complete as many hours of self study as you do lessons in school. You will need to do presentations, essays and assignments using good research skills. You will need to continue to develop your “how science works” skills from the required practical tasks at GCSE. You will be taught by 2 teachers across Colfox and Beaminster who will provide 9 x 60 minute lessons a fortnight. Each teacher will set you 1 hour of homework per week, which will be taken in and feedback provided. On top of this it is expected that you will use the text book, revision guides and internet to extend your own knowledge and add to your own independent learning notes. You will be expected to complete independent learning on top of homework. There will also be assessed tasks through the year.



Which careers and degree courses can Sciences lead you to?

Analytical chemist
 Astrophysicist
 Pathologist
 Forensic scientist
 Chemical engineer
 Environmental scientist
 Cosmetic scientist
 Medicine
 Dentistry
 Optician
 Marine chemist/biologist

Pharmacy
 Biochemist
 Toxicologist
 Teaching
 Journalism
 Science advisors
 Lab technicians
 Law
 Engineering
 Food technologist
 Vet

In 2019 our department achieved the following results:

	% A-E	% A-C	% A-B
Chemistry	100%	62.4%	58.8%
Biology	100%	68.6%	68.8%
Physics	100%	70%	70%

What our students say !!

“The teachers are always willing to help you”

“Everything I need to do well is provided including all the past papers”

“I am told what I need to do to succeed and I can always get help if I need it”

GCSE Subject	Required Grade
Science applied for	7
Maths	6
A second science	7
English	6

If you have studied combined science rather than triple science we would expect a 7-7 at GCSE

Head of Department: Mrs K Hazle
 Contact via email at hazlek@colfox.dorset.sch.uk