Outwood Academy Danum



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Principal: Mrs Amanda Crane

Dear Parents/Carers

I am writing to you with respect to your child's pathway in GCSE Sciences in the next two academic years. At Easter 2023, we will offer some students the opportunity to pursue GCSE Separate Sciences which lead to 3 discrete qualifications in GCSE Chemistry, Physics and Biology. This is an alternative to the GCSE Combined Science qualification which leads to two GCSE grades (beginning in Y10) and is the most common route students take to science qualifications in England.

Both qualifications prepare students for A-levels in science subjects. Studying separate sciences however, provides a broader scope of subject knowledge and enhancing preparation for A-level. Separate sciences are an excellent choice for those students who demonstrate an aptitude for the subject as well as those for whom a career in a science related field is desirable, for example healthcare, engineering or research.

Students who pursue this pathway will be making a commitment to learn more science in order to meet the demands of obtaining three rather than two qualifications; they need to have a good attitude to learning in the subject, and a drive to be successful. All students will be entered onto the Higher Tier in YII, and a minimum expectation is that they will strive to achieve a Grade 6-9.

Entry criteria for separate sciences:

- (I) Have a minimum Y9 attendance of 90%
- (2) Have an effort grade of E2 or above
- (3) Praising stars© to be at least Exceeding in Y9 at PS2-PS4
- (4) To achieve a minimum Exceeding at the 'End of KS3 assessment' (Early Mar. 2023)

To support your child, we will:

- (I) Provide free revision guide resources from April 2023 at the start of their course
- (2) Create bespoke Separate Science pathway sets
- (3) Ensure students have access to booster tutor groups in KS4
- (4) Ensure students have increased curriculum time

However, we expect from your child:

- (1) To have a minimum attendance to after-school enrichment in Y10 and Y11 of 95%
- (2) To complete weekly homework
- (3) To have minimum attendance of 95%
- (4) To have an effort grade of E2 or above and a Praising stars© grade 6+
- (5) To have a positive, engaging and inquisitive attitude to learning

(6) To positively engage in any intervention strategy to maintain their ambition to achieve at least a grade 6

In order to plan for next year, it is now time that we asked students to state a preference for the pathway that they would like to be on. With this information in mind, I ask that if you and your child desire to be on the Separate Science pathway you complete the form below before Monday 6th March 2023.

No response means that you wish your child to follow the GCSE Combined Science. If you would like more information about the pathways, please refer to the frequently asked

the pathway in future	se do read these with your ch years presents significant cha oker (Head of Science) via en	llenges. If you h	nave any further questions
Yours faithfully,			
we			
A.Crane Principal			
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REPLY SLIP	Expression of interest in Monday 6th March)	separate scie	ence pathway (by
Please make sure you	have read the criteria.		
Name of student:			VMG:
Signed:	P	arent/Carer	Date:

Science Pathway Frequently Asked Questions for Students

Combined science & separate sciences at GCSE: What are they?

To put it simply, the main difference between Combined Science and Separate Sciences is that you will get more GCSEs at the end of the Separate Sciences course (this is because you get three separate GCSEs rather than a combined grade for one or two GCSEs). To get the extra GCSEs, you also have to put in extra work as in the Separate Sciences course there is a lot more content (and sometimes extra topics) for you to learn.

What is combined science?

Combined Science (also known as Double Science) is where you study the sciences together and receive a combined grade of two GCSEs for it. The most common version of combined science is Trilogy. This is where you study the three sciences (Biology, Chemistry and Physics) separately but you still get a combined grade at the end. Combined Science is the most common science GCSE as it tends to be compulsory in secondary school.

What are separate sciences?

Separate Sciences (also known as Triple Award Science or Separate Sciences) is where you study Biology, Chemistry and Physics separately and receive separate GCSEs for them, giving you a total of three GCSEs in science. The separate sciences course is considered a way of preparing students for careers in STEM (Science, Technology, Engineering and Maths). This is because it is a lot more science focused than combined science. Despite this, you can still have a career in STEM without taking the separate sciences course for GCSE.

How hard is separate sciences compared to combined science?

To say how difficult separate sciences is completely depends on the person. You may find it easy or you may think that it is impossible, it completely depends on you- your scientific ability and your attitude to learning. The grading is exactly the same as any other GCSE, just that you get three GCSEs from choosing separate sciences.

How much more work is separate sciences?

You will be expected to do it in the same amount of teaching time as Combined Science and therefore a considerable amount of commitment is required. If Science is a subject that you don't particularly enjoy or feel confident then it is not a good choice.

What are the exams like?

For separate sciences or combined science, you will have to do six exams but the duration of separate science exams is 1hr 45min, whilst for combined science it is 1hr 15min. You will have to do two exams in each science and then you will get separate GCSEs in Biology, Chemistry and Physics.

Do colleges/sixth forms prefer separate sciences?

Colleges and sixth forms will not require you to have GCSEs in each separate science, as they know that not all schools offer Separate Sciences. Colleges and sixth forms tend to vary in their requirements so it completely depends on how competitive it is to get into that college or sixth form and what you are taking. You may find taking Separate Sciences (and getting good grades in each) could help when you are applying to college or sixth form as it gives you more GCSEs at a high level. This could look good on your applications as it shows that you are able to manage the extra workload and the increased difficulty and still succeed. Separate Sciences is a subject that is more based around your ability to remember and apply information. This could make it more useful for STEM based subjects, such as Maths, Biology, Chemistry or Physics. However, it could also be quite useful for subjects such as Psychology or Geography, that link rather closely to the sciences, especially Biology and Chemistry.

Can combined science put you at a disadvantage?

In Separate Sciences you learn more content and so it may make any A level science more accessible as you may have covered some of these topics already. If you take Combined Science, instead, it may be a little more difficult for you when starting A Level science courses as more of the concepts will be brand new to you. As others in your classes are likely to have taken Separate Sciences you may also feel as though you are slightly behind, while you are still getting used to things. However, there are still many completely new topics for science A levels that you would not have previously covered and so having taken Combined Science or Separate Sciences would be irrelevant as it would not give you extra understanding. Also, you will most likely be taught all the content from the beginning, anyway, as there is quite a gap in between finishing your GCSE exams and starting A levels or whatever you want to go onto after Year 11.

What are the main things you should consider when choosing between combined and separate sciences?

You may still be finding this choice rather difficult to make and we would suggest that you do not rush your decision, as you may come to regret it later on. When deciding whether to choose Separate Sciences or Combined Science, there are some questions that you should probably ask yourself to help you make the choice. Such as:

- I) What are the pros and cons of each option? Think about all the things you know about Combined Science and Separate Sciences. What do you like or dislike about each option? You may want to write them down and compare them to make the choice a little easier for you. This may help to make things clearer as you can sort through your reasons for wanting to choose either Combined Science or Separate Sciences more easily.
- 2) What are you planning to do in the future? Do you know what you want to be when you grow up? Or do you know what you want to do after GCSEs? It's perfectly fine if you don't know but having an idea may help you decide if Separate Sciences is something that could help you.

- 3) Would you enjoy it?
- **4)** Can you handle the workload? Separate Sciences is known for being hard and it also has a lot more content than Combined Science, so you have to know if you can handle the extra work and the extra effort that you will have to put into studying Separate Sciences.