

Cambridge O Level Biology (5090) – a summary of the changes

Video transcript

Clare Wilkes:

Welcome to this video on the changes to Cambridge O Level Biology. The new syllabus will be released in September 2020 for examination from 2023. My name is Clare Wilkes and I am a Development Manager in our Qualifications Development team here in Cambridge.

So, what is changing in this syllabus in terms of the subject content? You can see from this slide that we have added some content and removed some content. We have looked at progression from Cambridge Lower Secondary through to Cambridge International AS & A Level Biology. We have removed some learning objectives where there is little or no progression between levels and we have added some learning objectives to improve progression. We have looked across other qualifications and programmes at this level in biology and we have listened to feedback from schools in all our regions about which topics are valued and which are not. We have also taken the opportunity to reorganise some topics into a more coherent structure and to clarify the wording of learning objectives.

So now to look at what has changed in the assessment. For all sciences, there will still be four papers. The number of marks and durations will be standardised across the three subjects. Therefore, students who sit all three sciences will have the same assessment experience for each. All the changes reflect best practice in assessment.

What does this mean for biology? In fact, for biology there is very little change. For Paper 1, the multiple-choice paper, there is no change. For Paper 2, the theory paper, there is no change in the number of marks or the duration. For Paper 3, the practical test, there is an increase in duration by 15 minutes to 1 hour 30 minutes. This will allow students further time for checking their work, or for repeating tests. For the alternative to practical paper, there is no change to duration or the number of marks, but there is a change in paper number. This is now Paper 4, rather than Paper 6, to match the paper numbering in the chemistry and physics syllabuses.

So there will still be four papers with the number of marks and durations standardised across the three subjects. Therefore, students who sit all three will have the same assessment experience for each. This means it is fair for all science students in each discipline.

We have made one change to Paper 2. We have removed the optionality. This decision is based on research and on teacher feedback and is the same for each of the sciences. Research suggests that unless there is very good reason for allowing choice, then it should be avoided for the reasons given here. When we consulted with our schools, 59% of respondents supported this decision. So now I'm going to talk with David Barrett, Product Manager for this syllabus in our Assessment division.

David, can I ask you, what do you see as the biggest change to this syllabus?

David Barrett:

The biggest change to this syllabus is that we have updated the content to improve progression to Cambridge International AS & A Level. In doing so, we have made the content more relevant for today's learners. For example, we have added detail on DNA structure and function and a new section on classification to ensure a smooth transition to Cambridge International AS & A Level content. We have specified learning objectives in more detail to make it clear to you and your learners what should be taught and what will be assessed. This means that the syllabus might look at first glance more substantial. In fact, there is no increase in the volume of content and we have consulted with teachers to make sure that it can be taught within the recommended guided learning hours.

Clare Wilkes:

Thank you David. You mentioned that we have updated the syllabus content so that it is ideal for today's learners. Can you give some examples?

David Barrett:

We received a lot of helpful feedback from schools on the content which informed the changes we've made. We know from feedback from our regions that students worldwide are interested in topics related to the environment and genetics. We've introduced new content on disease and immunity, DNA structure and function, and ecosystems and biodiversity.

These topics are equally relevant for students who are going on to study biology further, those who will be studying other subjects and those who are entering employment or vocational training. We are aware that some of these topics will be new for you and that you will require support in teaching them. I know that we are preparing a support package for teachers.

Clare Wilkes:

Thank you David. I will now hand over to our colleague, David Harrison, to give you further detail on the support that will be available.

David, what support will be available for teachers and when?

David Harrison:

Thank you. My name is David Harrison and I'm managing the development of all the teaching and learning resources supporting this new syllabus. There'll be a comprehensive support package produced which will help teachers deliver an engaging and thorough teaching programme for their learners.

The scheme of work provides a medium-term teaching plan from which detailed lesson plans can be produced. It covers all learning objectives in the syllabus with suggested activities and links to additional resources. New for this edition of the scheme of work are extension activities that are designed to stretch the most able learners and prepare them for Cambridge International AS & A Level study.

Additionally, links to relevant Resource Plus video experiments and teaching packs are included throughout the scheme of work and I'll talk about these in a little while. The scheme of work will be available to download from the School Support Hub in July 2020. Guides for both teachers and learners will also be available to download in July 2020. The Teacher Guide provides extra support for teachers delivering the course.

In particular, it shows how English language learning activities can be integrated into a programme of science teaching, which should better prepare learners for their exams and further study. The Learner Guide gives learners a basic introduction to the syllabus in a very accessible manner. The guide covers information such as what they will study and how they will be examined. It also contains a revision checklist that learners can use to check their understanding and prepare for their exams. For this new syllabus, Cambridge has produced an additional premium resource that hasn't been available for Cambridge O Level Sciences in the past; it's called Resource Plus. Resource Plus is already available to use from the School Support Hub. Resource Plus contains hundreds of specially commissioned experiment videos and associated teaching packs. These contain detailed lesson plans and worksheets designed to encourage the development of practical science skills, and prepare learners for the practical papers, Cambridge International AS & A Level Sciences and higher education study. Even when teachers and their learners don't have access to a lab, Resource Plus can be used to support skills development, so log in and start using Resource Plus today.

After the Specimen Papers are produced in September 2020, the set of Specimen Paper Answers will also be produced. They'll provide example answers for each of the Specimen Paper questions, along with examiner commentaries on the answers and marks. Teachers can use the answers, commentaries and marks to gain a better understanding of the standard required in examinations so that learners can be better prepared when they sit their first exams. Our publishing partner, Hodder, will be publishing endorsed resources for the syllabuses in March 2021. Further details about the textbooks can be found on our public website or the publisher's website.

The last resource to publish from Cambridge's standard support package will be the Example Candidate Responses after the first exams are sat in the summer of 2023. Example Candidate Responses each contain actual student answers to exam questions with a commentary provided by the examiner and a marks breakdown. Cambridge aims to have these available to download from the School Support Hub by the following January 2024, so look out for these documents when they publish. So that summarises the support Cambridge will be providing for this new syllabus. Don't forget to look around the School Support Hub for the many other resources available to use in your teaching and learning. Also, why not take part in the teacher forums, which are also found on the School Support Hub, or even consider entering learners for the science competition? Good luck.

Clare Wilkes:

Thank you for watching this video. If you have any questions or feedback you can submit these using the form below. The form is open for two weeks, after which we will publish further information and guidance.