

A-Level Biology: Sir Joseph Williamson's Mathematical School

Course information:

You will be taught by two members of staff, one of the teachers will be your main subject teacher and the other will focus on exam feedback and exam techniques.

You will be expected to keep a folder of all your work - at least once a term a folder check will be conducted. This is where we will be checking on the robustness of your revision. Successful revision includes condensing your class notes into concise summaries, and using exam questions to test understanding.

You will be expected to complete at least five hours of extra revision each week, on top of your classes and homework.

A-Level Biology is very different to the GCSE. Whilst it is taught in topics, it is a conceptual subject where the most successful candidates can make links between the most obscure ideas.

When you start Biology at the Maths either as a new student or an existing student, you will be joining a Biology department full of high expectations, with over 60% of the cohort achieving a grade between A*-B.

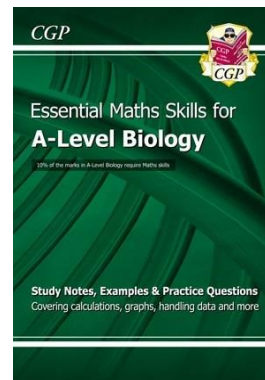
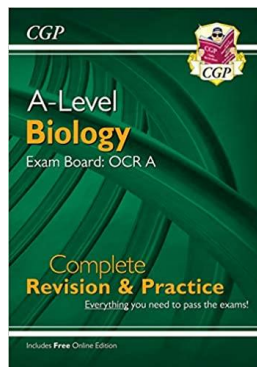
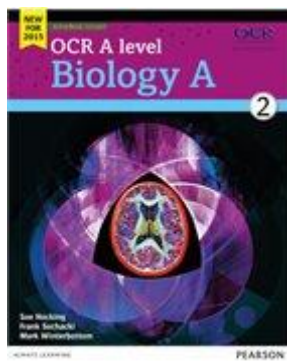
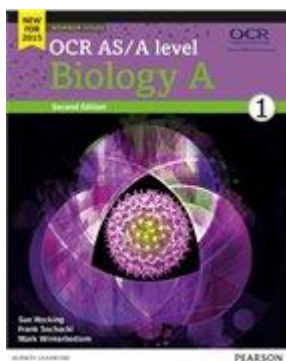
We do not sit any external AS exams, you will instead have three exams at the end of the two year course.

Course structure:

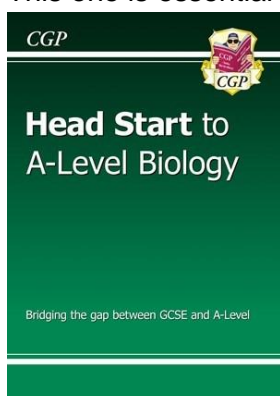
	Year 12		Year 13	
Term	Content	Assessment	Content	Assessment
1	<ul style="list-style-type: none"> ● Cells ● DNA ● Cell membranes 	Entrance exam	<ul style="list-style-type: none"> ● Transport in plants ● Photosynthesis ● Plant hormones ● Classification 	Term 1 exam
2	<ul style="list-style-type: none"> ● Cell cycle ● Biological molecules/biochemistry 	Mock exam (whole school)	<ul style="list-style-type: none"> ● Disease ● Biotechnology ● Genetics 	Term 2 exam
3	<ul style="list-style-type: none"> ● Enzymes ● Maths skills ● Exchange sites 	Term 3 exam	<ul style="list-style-type: none"> ● Genetic analysis 	Whole school mock exam
4	<ul style="list-style-type: none"> ● Transport in animals ● Nervous system ● Respiration 	Term 4 exam	<ul style="list-style-type: none"> ● Revision 	Term 4 exam
5	<ul style="list-style-type: none"> ● Muscles ● Hormones 	Year 12 mock exam	<ul style="list-style-type: none"> ● Revision 	
6	<ul style="list-style-type: none"> ● Excretion ● Biodiversity ● Ecosystems 			

There is no coursework, but instead you have to show competency over a range of practical skills. If you are taking a Science subject at University, you will need to gain a pass in this (there is only pass or fail). The practical assessments are embedded into the lessons, and you will be given plenty of opportunities to show relevant competencies.

We have some text books available for use in class, but we recommend that you purchase the following for use at home:



This one is essential if you did combined Science



Top websites:

<https://senecalearning.com/en-GB/>

<https://www.ocr.org.uk/qualifications/past-paper-finder/>

<https://www.newscientist.com/>

<https://www.rsb.org.uk/>

Successful Biology students have the following attributes:

- Willingness to engage and contribute in lessons. There should be no fear of failure, failure helps to identify misconceptions.
- To question ideas and develop opinions on ethical and contentious issues.
- Conduct meaningful revision regularly, that does not include 'reading your class notes'. Revision techniques will be one of the first things we go over when you start.
- Understanding that initially the course will be hard, even if you achieved a grade 9 at GCSE. The jump between GCSE and A-Level is extraordinary, do not give up straight away. A Level Biology is content heavy, with the expectation of applying this to new and unfamiliar situations. This is not a subject you can just learn by rote; you must be an active learner.

Grade boundaries:

This is a demanding course that is nationally the hardest A level to score highly in. If you need A/A* grades you will need to work extremely hard. If you are not scoring 7 at GCSE, you will struggle with this course.

Average grade boundaries:

- A* 69%
- A 58%
- B 50%
- C 41%
- D 32%
- E 23%
- U 0%

Why take Biology at A-Level:

- You have a fascination with the natural world.
- You want to study Biology further at University
- You are prepared to read around the subject and take an interest in news stories

What we offer you as a department:

- Bespoke learning that adapts to your needs.
- Trips:
 - Camber sands to study the sand dunes
 - Royal institute of Science to extract and sequence a section of your own DNA
 - A-Level Live to hear leading scientists discussing the research they're carrying out
- Regular, accurate assessment
- Open door policy where you can come to us at any time