



The Gryphon School

Sixth Form

Biology Handbook

Congratulations on choosing Biology



It seems to me that the natural world is the greatest source of excitement; the greatest source of visual beauty; the greatest source of intellectual interest. It is the greatest source of so much in life that makes life worth living.

(David Attenborough)

'We as a team are totally committed to your success. We expect the same commitment from you.' The Biology Department

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How the course is assessed

Overview of OCR A Level in Biology A (H420)

Learners must complete all components (01, 02, 03 and 04) to be awarded the OCR A Level in Biology A.

Content Overview	Assessment Overview	
Content is split into six teaching 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 Component 01 assesses content from modules 1, 2, 3 and 5. Component 02 assesses content from modules 1, 2, 4 and 6. Component 03 assesses content from all modules (1 to 6).	Biological processes (01) 100 marks 2 hour 15 minutes written paper	37% of total A level
	Biological diversity (02) 100 marks 2 hour 15 minutes written paper	37% of total A level
	Unified biology (03) 70 marks 1 hour 30 minutes written paper	26% of total A level
	Practical Endorsement in biology (04) (non exam assessment)	Reported separately (see section 5f)

All components include synoptic assessment.

Link to the syllabus

The OCR syllabus can be downloaded from:

<https://www.ocr.org.uk/Images/687834-download-a-level-specification.pdf>

Access details to VLE (Virtual Learning Environment), blogs, resources areas etc

All course resources, from lesson notes to past exam papers will be available to you on Teams, which will be explained when you start the course in September.

How the course is delivered

You will have 9 hours of timetabled Biology lessons per fortnight, and these will be split between two teachers. Each teacher will teach different chapters of a particular examined unit. In addition to this you will be expected to complete 4 hours of independent study per week. Academic calendars of the course will be available on iLesson.

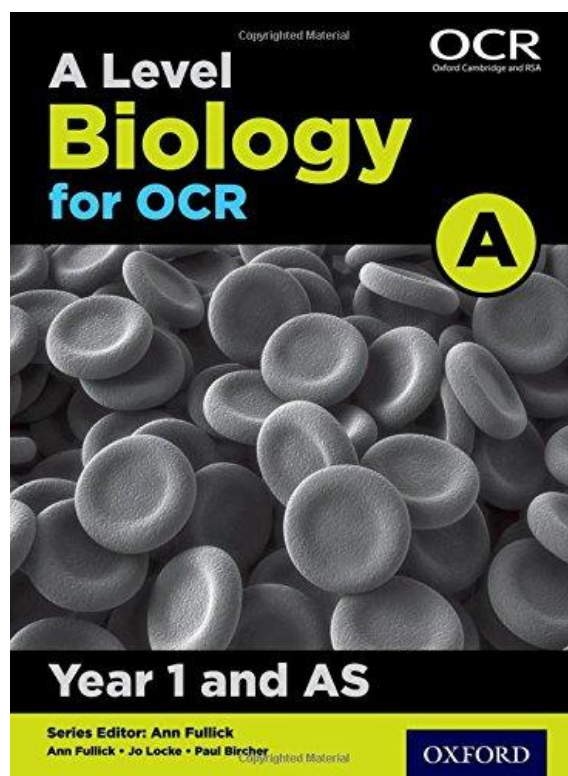
Departmental expectations

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We expect full attendance at all lessons and work to be handed in by the given deadlines. If you are finding some work difficult, we would expect you to seek assistance at the first opportunity, not wait until a lesson or when the deadline has passed. We expect you to complete background reading on a lesson-by-lesson basis using the course texts. You should consolidate your notes using an appropriate method to suit your learning style (examples include: A6 consolidation cards, flow diagrams, bullet pointed sequenced lists, mind/concept maps) using the textbook and additional resources identified by your teacher. If you are struggling to consolidate your knowledge and understanding, then your teacher will help you with this skill.

You will need to purchase the course textbook ready for when you arrive in September. PLEASE order early as there could well be a wait!

Text required:



Product details:

- Paperback: 392 pages
- Publisher: OUP Oxford; UK ed. edition (16 April 2015)
- Language: English
- ISBN-10: 0198351917
- ISBN-13: 978-0198351917
- Product Dimensions: 19.5 x 1.8 x 26.5 cm

Oxford University Press can be contacted on: 01536 452620 if you are struggling to order a copy elsewhere.

We also suggest you buy a CGP revision guide to go with the above text. As a department, we can offer this at the reduced price in September; so, this **does not** need to be purchased before you arrive.

The A Level Biology reading list is available in the LRC or from your Biology Teacher.

Monitoring and recording your progress

During A Level Biology you will complete a minimum of one assessment from each teacher every half term (containing past paper exam questions) and a grade will be allocated. This information will also be recorded on a departmental spread sheet so your teacher can monitor and advise you on your progression with respect to your target grades. This information will form the basis of the information sent home in reviews and profiles throughout the year.

Summer holiday key skills task

As a part of the practical endorsement of the A level, candidates are frequently required to complete biological drawings. Within this skills task you are going to produce a series of biological drawings which your Biology Teacher will assess in September, so remember to bring your drawings to your first biology lesson.

Rules to follow when completing biological drawings:

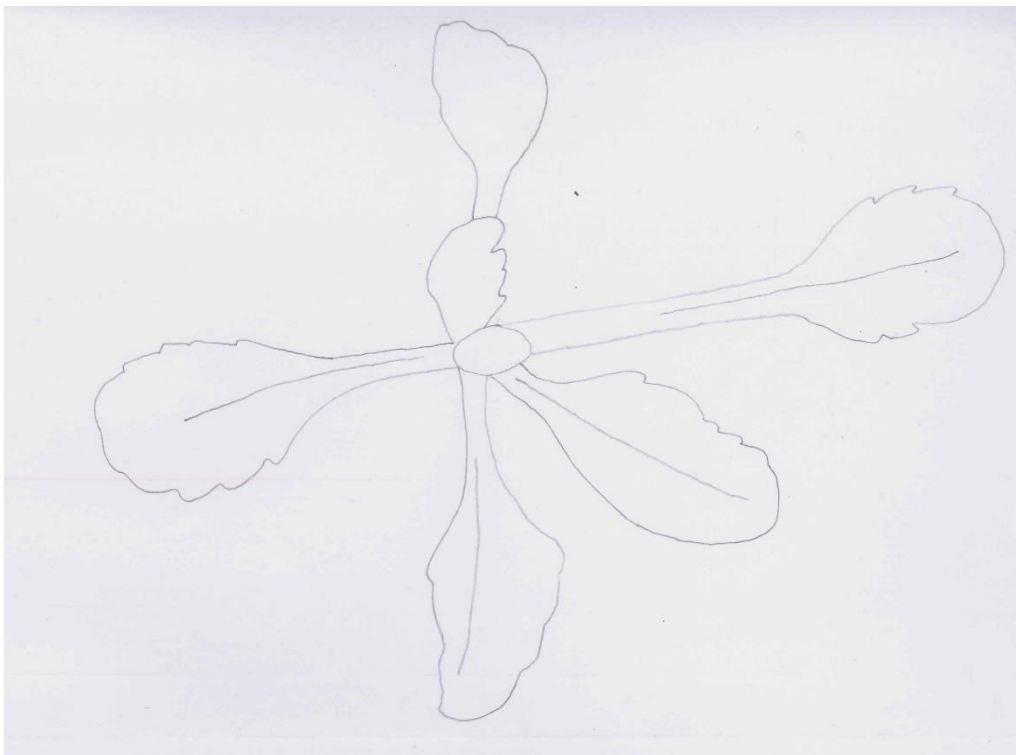
- more than 50% of the available space must be used
- drawings should be completed using a sharp pencil
- lines should be clear and continuous (no rough edges)
- there should be no shading or colouring
- the regions of the subject you are drawing should be in relative proportion to each other
- clear scale bar
- information title

Rules to follow when labelling biological drawings:

- label lines drawn horizontally using a pencil and ruler
- label lines must not overlap
- label lines must touch the feature with no arrow head
- labels and annotations to be written at the end of the label line

See further instructions on page 6.

This is a field photograph of the common daisy plant (*Bellis perennis*).



This candidate has successfully drawn one individual plant applying all of the rules for a biological drawing. Note the diagram has not been over-complicated and only the clear visible features have been drawn, for example the hairs have been omitted as they are not clear to the naked eye.

Now you are going to complete 3 biological drawings of your own and each should be completed on a piece of plain A5 paper. The challenge of the task will increase from drawings 1 to 3.

Drawing 1

Complete a biological drawing of this garden weed.



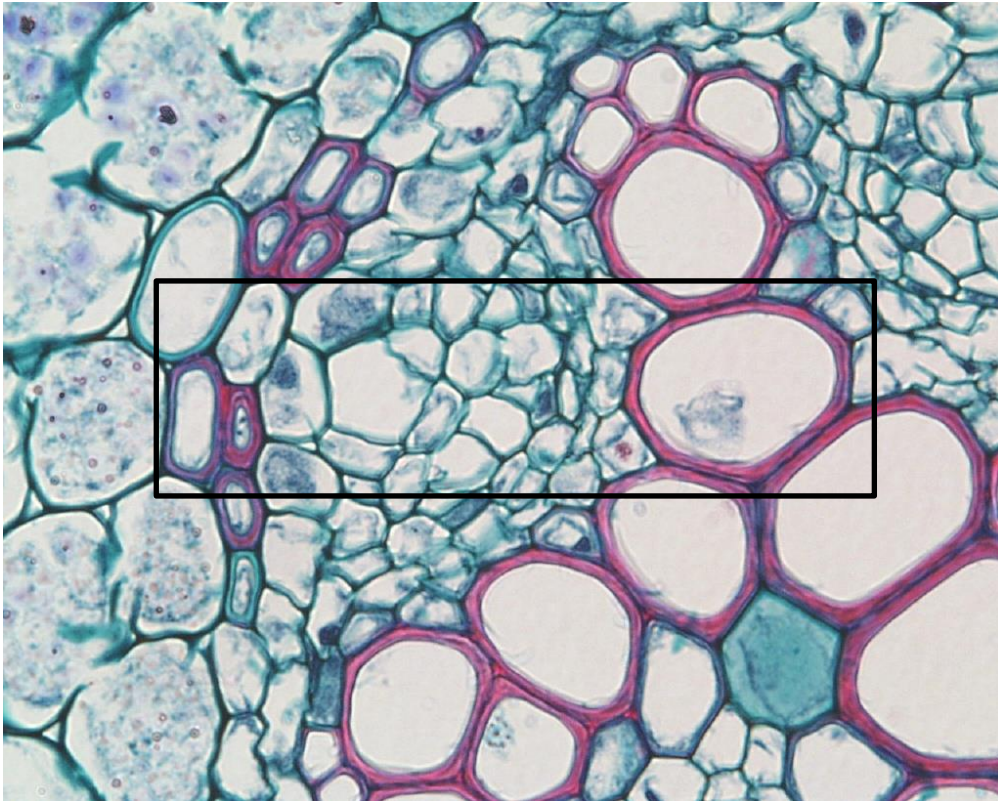
Drawing 2

You are to draw a labelled plan biological drawing of this cross section through a kidney to illustrate the varying tissues within this organ. You will need to complete some independent research to find appropriate labels.



Drawing 3

This is a micrograph of a cross section through a root. Within the rectangle there are varying tissues that you can see at the cellular level. You are to complete an annotated plan biological drawing of the cells within the rectangle. There must be at least 3 annotations that distinguish the differences between the cells. Consider: relative size, shape, thickness of cell wall, staining or presence of cellular content or not.



“We can do science, and with it, we can improve our lives...”

- Carl Sagan

And finally.....

The Biology Department are looking forward to meeting you all in September and hope you have a well-deserved summer break after your GCSEs.