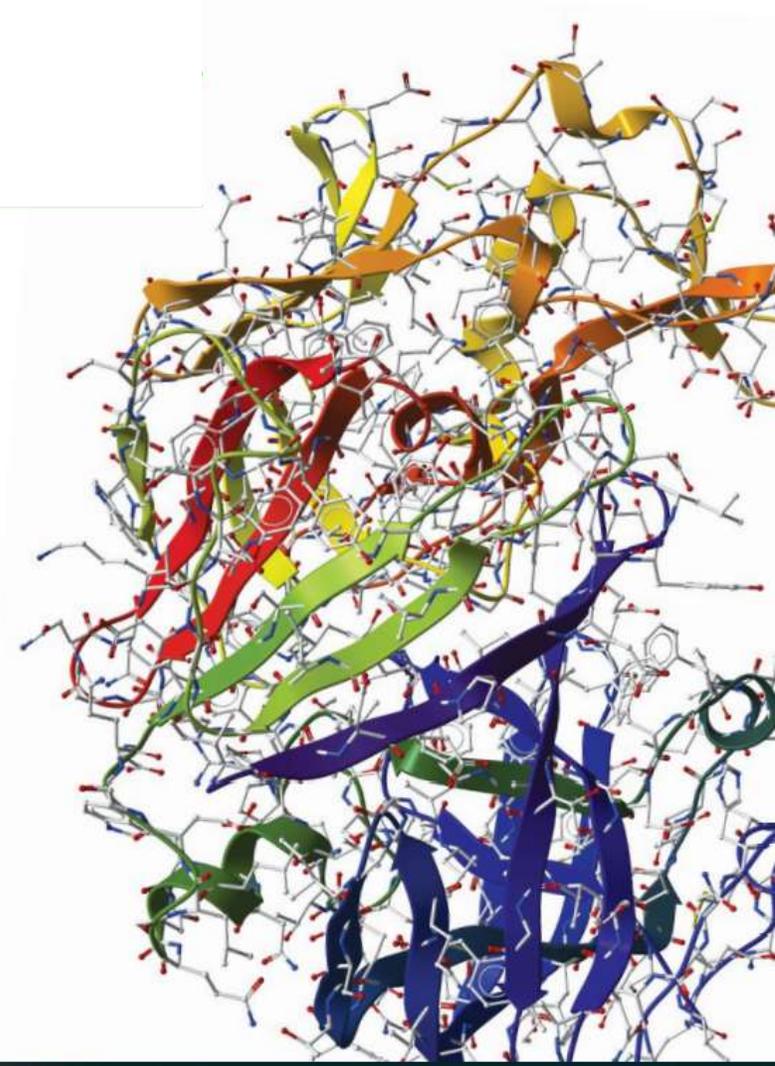


A-Level Biology

Introduction

Why have you chosen A-Level Biology?



Why study A-level Biology?

Biology A-level will give you the skills to make connections and associations with all living things around you.

Biology literally means the study of life - and if that's not important, what is?

Being such a broad topic, you're bound to find a specific area of interest, plus it opens the door to a fantastic range of interesting careers.

Many people use an AS or A-level in Biology in their future studies or work.

Even if you don't decide to work in biology, studying it still develops useful and transferable skills for other careers.

You'll develop research, problem solving and analytical skills, alongside teamwork and communication.

Universities and business regard all of these very highly.

Next Steps...

Possible Degree Options

The top seven degree courses taken by students who have A-level Biology are:

- Biology
- Psychology
- Sport and exercise science
- Medicine
- Anatomy
- Physiology and pathology pharmacology
- Toxicology and pharmacy chemistry.

This list is by no means exhaustive. Biology can prove useful for a wide variety of degree courses.

Which Career Appeals To You?

Studying Biology at A-level or degree opens up all sorts of career opportunities, such as

- doctor
- clinical molecular geneticist
- nature conservation officer
- pharmacologist
- research scientist
- vet
- secondary school teacher
- marine biologist
- dentist.

Specification At A Glance

AS (year 1)

1. Biological molecules.
2. Cells.
3. Organisms exchange substances with their environment.
4. Genetic information, variation and relationships between organisms.

A-level only (year 2)

1. Energy transfers in and between organisms.
2. Organisms respond to changes in their internal and external environments.
3. Genetics, populations, evolution and ecosystems.
4. The control of gene expression.

Assessment Framework

The assessment for the AS consists of two exams:

Paper 1	+	Paper 2
<p>What's assessed</p> <ul style="list-style-type: none">• Any content from topics 1–4, including relevant practical skills		<p>What's assessed</p> <ul style="list-style-type: none">• Any content from topics 1–4, including relevant practical skills
<p>Assessed</p> <ul style="list-style-type: none">• written exam: 1 hour 30 minutes• 75 marks• 50% of AS		<p>Assessed</p> <ul style="list-style-type: none">• written exam: 1 hour 30 minutes• 75 marks• 50% of AS
<p>Questions</p> <ul style="list-style-type: none">• 65 marks: short answer questions• 10 marks: comprehension question		<p>Questions</p> <ul style="list-style-type: none">• 65 marks: short answer questions• 10 marks: extended response questions

Assessment Framework

The assessment for the A-level consists of three exams:

Paper 1	+	Paper 2	+	Paper 3
What's assessed <ul style="list-style-type: none">Any content from topics 1–4, including relevant practical skills		What's assessed <ul style="list-style-type: none">Any content from topics 5–8, including relevant practical skills		What's assessed <ul style="list-style-type: none">Any content from topics 1–8, including relevant practical skills
Assessed <ul style="list-style-type: none">written exam: 2 hours91 marks35% of A-level		Assessed <ul style="list-style-type: none">written exam: 2 hours91 marks35% of A-level		Assessed <ul style="list-style-type: none">written exam: 2 hours78 marks30% of A-level
Questions <ul style="list-style-type: none">76 marks: a mixture of short and long answer questions15 marks: extended response questions		Questions <ul style="list-style-type: none">76 marks: a mixture of short and long answer questions15 marks: comprehension question		Questions <ul style="list-style-type: none">38 marks: structured questions, including practical techniques15 marks: critical analysis of given experimental data25 marks: one essay from a choice of two titles

Practical Assessment

During the course of the two years, you will participate in 12 required practicals. Each practical will focus on a different CPAC skill (Common Practical Assessment Criteria) that you must master before the end of the course and achieve endorsement for your practical skills in order to pass A-Level Chemistry.

What will I be assessed on?

1. Ability to follow written instructions
2. Ability to apply investigative approaches and methods when using instruments and equipment
3. Can safely uses a range of practical equipment and materials
4. Can make and record observations
5. Appropriately research, reference and report

KS4 Recap and Triple content:



Cells:

- Culturing microorganisms

Infection and response:

- Monoclonal antibodies
- Plant disease

Homeostasis and response:

- The brain
- The eye
- Control of body

temperature

- Maintaining water and nitrogen balance in the body
- Plant hormones

Inheritance, variation and evolution:

- Advantages and disadvantages of sexual and asexual reproduction
- DNA structure
- Speciation

- Role of Biotechnology
- Cloning
- Theory of evolution
- The understanding of genetics

Ecology:

- Decomposition
- Impact of environmental change
- Trophic levels in an ecosystem
- Food production

Places to go for help

- The AQA website is a great place to start:
- [Biology webpages](#) are aimed at teachers, but you may find them useful too. Information includes:
 - The [specification](#) – this explains exactly what you need to learn for your exams.
 - [Practice exam papers](#)
 - Lists of [command words](#) and subject specific vocabulary – so you understand the words to use in exams
 - [Practical handbooks](#) explain the practical work you need to know
 - [Past papers and mark schemes](#) from the old specifications. Some questions won't be relevant to the new AS and A-level, so please check with your teacher.
- [Maths skills support](#)

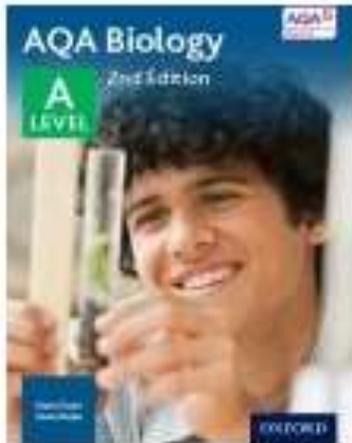
Help is also available at:



Text Books

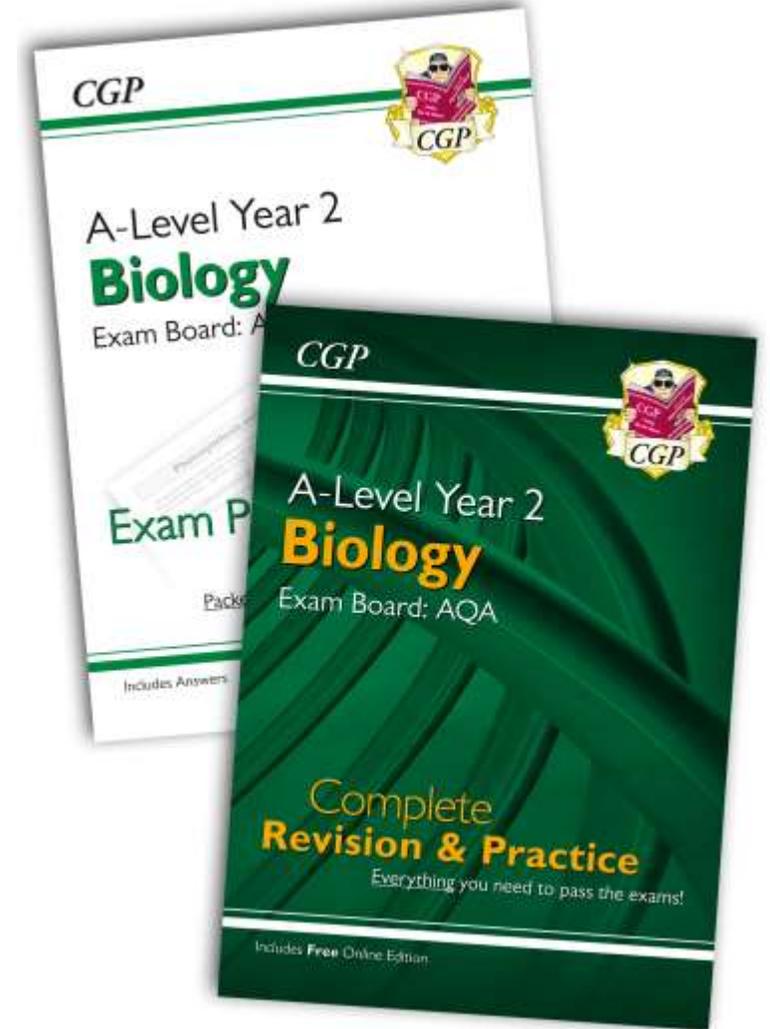
You will all have access to a digital copy of the Biology Text Book:

AQA A Level Biology (2nd edition)



Authors: Glenn Toole, Susan Toole
Publisher: Oxford University Press (including Nelson Thornes)
ISBN-13: 978-0-19-835177-1
Publication date: June 2015 - out now
Digital version - out now

The CGP revision guide is also useful:



General Expectations

Attend every lesson.

If you are absent, ensure that you liaise with your teacher and catch-up on any work missed – it is your responsibility to action this.

Keep a well organised folder that contains all notes, CPAC tracking sheets, topic assessments, homework etc. We will conduct routine folder inspections.

It is recommended by AQA that for every hour spent in the classroom, you spend a further hour on independent study; completing homework, summarising class notes and reading ahead – this is 4 hours per week.

Before I see you next...

1. Research *Cornell Notes*. How might this benefit you for A-Level Study?
2. Work through the [GCSE-A Level](#) section on Seneca:
<https://app.senecalearning.com/dashboard/join-class/bdny08ak0e> (this will link you to the transition classroom and assignment)
3. Revisit Biology Paper 1 content. Identify any topics that you wish to revise at the beginning of A-Level.
4. Revisit Biology Paper 2 content. Identify any topics that you wish to revise at the beginning of A-Level.
5. Identify the areas that are in the [GCSE Triple Biology](#) content that you have not visited yet.
6. Begin to read/work through the [Induction Task Booklet](#) (this will be due in during the first week of Term 1!)
7. Prepare to feed back in our next session!