Haberdashers' ADAMS

Key Stage 4 booklet 2

# Compulsory subjects and other information

# GCSE BIOLOGY

## NATURE OF THE SUBJECT

This Biology course requires students to have a reasonably large amount of factual information at their disposal which they can then apply through a series of familiar and novel contexts. Therefore, the key to achieving higher grades will be through a thorough grasp of the vocabulary and detail associated with each topic. Students are encouraged to learn the material steadily throughout the course, with understanding being supported through the use of regular practicals and assessment.

## THE SYLLABUS AND OUTLINE OF COURSE

The Course runs through years 9 to 11, and the specification can be viewed on Edexcel's website at http://qualifications.pearson.com/en/qualifications/edexcel-gcses/sciences-2016.html#tab-1. The course builds upon work already covered in years 7 - 8 and hence it is essential that all boys starting this Course are conversant with the material of earlier years. Some of the topics already covered will be revisited and then extended to access the higher level questions associated with the new grading system. As in previous years, theory is delivered through a sequence of units, with regular formal assessments to inform progress and inspire confidence as the terminal exams approach.

## THE EXAMINATION

There are 2 papers. Both are marked out of 100 and will last 1hour 45 minutes each. Paper 1 will test material from topics 1 to 5 and Paper 2 will assess topic 1 again, alongside material from topics 6 to 9 inclusively. We envisage almost all boys being entered for the Higher tier, as this will cover final grades 4 – 9.

## COURSEWORK/CONTROLLED ASSESSMENT

There is no coursework or controlled assessment with this course.

## RELEVANCE

The National Curriculum requires that all students study science to GCSE. At this school they are taught as separate sciences at both Key Stage 3 and Key Stage 4. At the end of Year 11, students are not only well prepared for their GCSE examination, but now better understand the mind-set required for successful A Level study. The more traditional approach taken, with a greater emphasis upon communicating detail precisely, also eases the transition associated with studying Post-16 subjects. An A level Biology Qualification is often a requirement for degree courses in Medicine, Dentistry and Veterinary Science as well as the large number of courses in related areas like genetics, pharmaceuticals, biotechnology, microbiology and the food industry.

# GCSE CHEMISTRY

## NATURE OF THE SUBJECT

The GCSE Chemistry course covers a significant amount of application of knowledge as well as a large amount of factual information. The key to achieving the higher grades in Chemistry will be a thorough knowledge of the factual information along with the understanding to apply it. Students are encouraged to learn the material steadily throughout the course and apply it to a variety of theoretical and practical problems. Where appropriate, chemical concepts are backed up with experimental work in order that the students have the opportunity to observe the reactions discussed.

## THE SYLLABUS AND OUTLINE OF COURSE

The Course followed is the Edexcel GCSE Chemistry Syllabus (1CH0). The Course builds upon work already covered in years 7 – 9 and hence it is essential that all boys starting the Course are conversant with the material of earlier years. Some of the topics already covered will be revisited and then taken to a higher level during years 10 and 11. As in previous years, the subject is taught through a progression of Units with an 'End of Unit Test' for each one. The Course is structured so as to foster the knowledge and understanding of concepts as well as the ability to remember facts.

## THE EXAMINATION

Two Exam papers all taken at the end of the two year course

- Paper 1 - 50% of final mark ( 1hr 45 min)
- Paper 2 - 50% of final mark (1hr 45 min)

## COURSEWORK/CONTROLLED ASSESSMENT

There is no coursework but there are set practicals that all pupils must carry out as part of the course. The knowledge and understanding gained from the practicals will be assessed in the exams at the end of the course.

**Level –** Boys may be entered at two levels known as tiers. It is anticipated that the majority of boys (if not all) will be entered for the higher tier.

## RELEVANCE

The National Curriculum requires that all students study science to GCSE. At this school they are taught as separate sciences at both Key Stage 3 and Key Stage 4. The GCSE Science Courses are traditional style courses and by the end of Year 11 students are not only well prepared for their GCSE Chemistry examination, but are also in an excellent starting position for studying A Level Chemistry. A Post-16 Chemistry qualification is often a requirement for degree courses in Dentistry, Veterinary Science and particularly Medicine, as well as the large number of courses more directly related to the Chemical Industry.

# GCSE ENGLISH LANGUAGE AND ENGLISH LITERATURE

**NATURE OF THE SUBJECT**

At Key Stage 4, all students will take English Language and English Literature GCSE, following the syllabus offered by AQA. Students will be expected to conduct independent research on authors and contexts. Written work will include timed essays, letters, summaries, scripts, diaries, etc. Reading will cover prose, poetry and drama from pre-1914 and post-1914. Students are taught in mixed ability sets.

**THE SYLLABUS**

The syllabus followed for both GCSEs is AQA. Assessment will entail:

- Terminal examinations at the end of the course as follows:

- **English language:**
  **Paper one** (50%): Explorations in creative reading and writing. Two sections examining the reading and writing of fiction. (1 hour 45 minutes)
  **Paper two** (50%): Writers' viewpoints and perspectives. Two sections examining the reading and writing of non-fiction including a comparative and a pre-20th century element. (1 hour 45 minutes)
- Filmed speaking and listening tasks will be accredited by the board but do not impact the GCSE. Pupils are awarded a stand-alone level.

- **English literature:**
  **Paper one** (40%): Shakespeare and the 19th century novel (1 hour 45 minutes)
  **Paper two** (60%): Modern texts and poetry (2 hours 15 minutes)

We expect students to be able to meet the demands of learning and engaging with relevant examination skills and texts. Lively, willing and independent contributors in class and homework will add to the understanding and enjoyment of the different genres in the subject.

**RELEVANCE**

English language and literature allows pupils to develop skills that impact both subject choices post 16 and their careers. Pupils will approach a range challenging texts analytically and comparatively, synthesising information according to a range of tasks. They will plan and write in Standard English, with a focus on spelling, punctuation and grammar in extended tasks. Literature naturally progresses to A level but both impact all curriculum areas.

# GCSE MATHEMATICS

**THE NATURE OF THE SUBJECT**

The Mathematics curriculum covers a wide range of topics including the areas of the national curriculum: number; algebra; ratio, proportion and rates of change; and, geometry and measures. Students will engage in activities designed to ensure that they can use and apply their mathematics to both familiar and unfamiliar problems in a range of numerical, algebraic and graphical contexts, and in open-ended and closed forms.

**THE SYLLABUS**

All pupils are entered for the Higher Tier of the Edexcel GCSE Linear Mathematics (syllabus 1MA1).

**THE EXAMINATIONS**

The final GCSE examination consists of three equally weighted, 80 mark, 1½ hour papers: paper one is non-calculator and the other two are with-calculator paper.

**COURSEWORK**

There is no coursework or controlled assessment for GCSE Mathematics.

**RELEVANCE**

Success in GCSE Mathematics is a prerequisite for A level Mathematics. Students with a grade 8 or 9 will tend to go on and achieve one of the top grades at A level; those with a level 7 will find it much harder to achieve the top grades.

A good grade in GCSE Mathematics is important for a wide range of disciplines in post-16 education including the Sciences, Economics, Business Studies, Computer Science, Engineering, etc.

A large proportion of Year 11 students do continue with Mathematics to AS or full A level. A significant number of students will also take Further Mathematics at AS or full A level.

# GCSE PHYSICS

The GCSE Physics course builds upon work already covered in Key Stage 3, extending and developing ideas and skills, whilst also introducing new ones. The course is linear so all examinations are taken at the end of the Year 11. As well as a subject focus, the syllabus enables students to better understand the technological world in which they live, and take an informed interest in science and scientific developments. Students learn about the basic principles of Physics through a mix of theoretical and practical studies. Students also develop an understanding of the scientific skills essential for further study at A Level, and skills which are useful in everyday life.

As they progress, students learn how science is studied and practised, and become aware of the effects that scientific research can have on individuals, communities and the environment. The subject is taught through a series of topics with an assessment at the end of each one. The course is structured so as to foster the knowledge and understanding of concepts, rather than simply the ability to remember facts. This should be to the liking of any student who enjoys developing basic ideas and applying them to new situations. The GCSE prepares our students particularly well for further study at post sixteen.

**Syllabus-AQA GCSE Physics 8463**

The course will be taught over three years, from year 9 to year 11. Students enrolling in year 10 will be given necessary help to catch up on any gaps in their background.

**Year 9:**

- Forces and their interactions
- Describing motion
- Energy changes and conservation
- Global energy resources
- Static Electricity & circuits basics
- Space Physics
- The particle model of matter

**Year 10:**

- Effects of forces
- Wave properties
- The electromagnetic spectrum
- Electric Circuits
- Domestic electricity
- Energy changes in electrical appliances

**Year 11:**

- Moments, gears, levers & momentum
- Pressure in Fluids
- Heat capacities and internal energy
- Magnetism and Electromagnetism
- Nuclear and Atomic Physics

**The Examination**: 2 exam papers, 2 x 1 h 45 min written paper (each worth 50% of final mark, both containing a mix of multiple choice, structured and open questions. There is no coursework element. Students complete a set of ten required practicals to assess their practical skills over the three years.

*Revised January 2021*

# KS4 CITIZENSHIP

## NATURE OF THE SUBJECT

The government's most recent guidance[1] says that pupils should be taught about:

- parliamentary democracy and the key elements of the constitution of the United Kingdom, including the power of government, the role of citizens and Parliament in holding those in power to account, and the different roles of the executive, legislature and judiciary and a free press
- the different electoral systems used in and beyond the United Kingdom and actions citizens can take in democratic and electoral processes to influence decisions locally, nationally and beyond
- other systems and forms of government, both democratic and non-democratic, beyond the United Kingdom
- local, regional and international governance and the United Kingdom's relations with the rest of Europe, the Commonwealth, the United Nations and the wider world
- human rights and international law
- the legal system in the UK, different sources of law and how the law helps society deal with complex problems
- diverse national, regional, religious and ethnic identities in the United Kingdom and the need for mutual respect and understanding
- the different ways in which a citizen can contribute to the improvement of his or her community, to include the opportunity to participate actively in community volunteering, as well as other forms of responsible activity
- income and expenditure, credit and debt, insurance, savings and pensions, financial products and services, and how public money is raised and spent.

In addition, schools are also (since November 2014, DFE-00679-2014) required to teach students about the British values of democracy, the rule of law, individual liberty, and mutual respect.

## HOW THE SUBJECT IS TAUGHT

Citizenship is taught through a series of off-timetable activities spread through Years 10 and 11. These are taught by a wide range of teachers who have expertise in particular areas. Many of its themes and values are also covered in other parts of school life, such as school assemblies and routine lessons in other subjects.

## ASSESSMENT AND REPORTING

There are no formal assessments or reporting of KS4 citizenship.

## RELEVANCE

Citizenship, perhaps more than any other subject, has a direct relevance to our pupils' lives. Sir Bernard Crick, a distinguished political scientist and educationalist, once wrote the following, which the school whole-heartedly endorses.

*"We aim at no less than a change in the political culture of this country both nationally and locally: for people to think of themselves as active citizens, willing, able and equipped to have an influence in public life and with the critical capacities to weigh evidence before speaking and acting; to build on and to extend radically to young people the best in existing traditions of community involvement and public service, and to make them individually confident in finding new forms of involvement and action among themselves."*

[1] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/908347/SECONDARY_national_curriculum_-_Citizenship.pdf

# KS4 PSHE

## NATURE OF THE SUBJECT

Personal and social health education is designed to educate pupils on making sensible and informed decisions when faced with certain aspects of life that happen both in school and away from it. The subject covers a wide range of topical issues that educates and informs students so that when facing certain situations they know what they are facing and what the consequences of their actions are likely to be. It is not intended to make decisions for students or tell them the right way to behave, although this is generally advised by the teaching staff. Moreover, we aim to allow students to know enough about the wider world and issues that they are likely to face, so that they can step into the world with a greater span of knowledge and the relevant toolkit to make the most out of their lives.

## HOW THE SUBJECT IS TAUGHT

PSHE is taught through a series of off-timetable activities spread through Years 10 and 11. These are taught by the form tutor and a wide range of teachers who have expertise in particular areas. Many of its themes and values are also covered in other parts of school life, such as school assemblies and routine lessons in other subjects.

## THE SYLLABUS

From September 2020, schools must follow the statutory guidelines on *Relationships Education, Relationships and Sex Education (RSE) and Health Education* published by the Department for Education. This covers the following topics:

- Families and people who care for me
- Caring relationships
- Respectful relationships including friendships
- Online relationships and online media
- Being safe
- Intimate and sexual relationships, including sexual health

## ASSESSMENT AND REPORTING

There are no formal assessments or reporting of KS4 PSHE.

## RELEVANCE

PSHE, perhaps more than any other subject, has a direct relevance to our pupils' lives. The issues that will be studied during the course will no doubt present or will have already presented themselves to students by KS4. While we do our best to ensure that we keep students away from drug, tobacco and alcohol abuse, encourage them to make good use of their money and make informed decisions before embarking upon sexual activity, it is the students who are ultimately responsible for this themselves; they cannot be watched and guided all of the time. The programme not only allows students to make relevant decisions that will allow them to get the most out of their school careers it also does this for their whole lives, which have too often been ruined by people being misinformed and making poor choices.

# CAREERS EDUCATION, INFORMATION, ADVICE AND GUIDANCE

Careers education and guidance programmes make a major contribution to preparing young people for the opportunities, responsibilities and experiences of life. A planned progressive programme of activities supports them in choosing from a variety of different options that suit their individual interests and abilities, and helps them to follow a career path and sustain employability throughout their working lives.

Haberdashers' Adams is committed to providing our young people with a programme of careers education, information, advice and guidance (CEIAG) for all pupils in Years 7 – 13 and endeavours to follow the National Framework for CEIAG 11 – 19 in England and other relevant guidance from government agencies.[2]

In addition to careers learning embedded within subject specific areas, the careers programme includes co-curriculum careers consultation events, assemblies, lectures, careers guidance and work experience programmes with the following themes and activities:

**Year 9** - Linking career aspiration to post 14 (GCSE) options, exploring sources of information, self-awareness and decision making.

**Year 10** - Further developing links looking ahead to post 16 progression, one-to-one careers guidance, industry and apprenticeships insights and employability skills.

**Year 11** - Options for progression and building relationships, work experience programme; profiling (optional); making links with further and higher education establishments and apprenticeship providers.

The careers programme is planned and co-ordinated by the Head of Careers. All teachers contribute to CEIAG through their roles as mentors and subject teachers. Delivery of the careers programme is supported by external advisers in the following roles:

- Professional careers advisers (one-to-one guidance)
- Education Business Links team (work experience)
- Careers & Enterprise Company co-ordinator
- Enterprise Adviser
- Network of alumni and industry experts

Provision is made by the Head of Learning Support, Heads of House and Form Tutors for those targeted as needing extra support.

The Careers Library is located within the main School Library and offers a wide range of materials and resources outlining job and career ideas as well as information on further and higher education, apprenticeships, applications, skills and gap year opportunities. The careers programme is also supported by Fast Tomato, a fully integrated careers education and guidance system as well as the Morrisby Profile (optional).

In school, students are encouraged to discuss their ideas with their tutor, subject teachers and the Head of Careers, to consult reference materials in the Careers Library and to investigate online resources. They are also encouraged to share ideas gleaned from school sources with their parents. Collaboratively, in this way, they should be in an informed position to make sensible choices concerning their future.

---

[2] The most recent version of the Department for Education's guidance (October 2018) is available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/748474/181008_schools_statutory_guidance_final.pdf

# Pupil Entitlement Statement For Careers Education, Information, Advice and Guidance

**By the end of Year 9 (Key Stage 3) you will**

- know how to use the Careers Library
- have visited a Careers Convention
- have been to work with a parent for a day
- know how to make decisions about your choice of GCSE subjects
- begin to know what skills you have and how you can use them
- have had access to computer-based information on a range of relevant career opportunities

**By the end of Year 10 you will**

- have visited a Careers Convention
- have had a one-to-one interview with an independent careers advisor
- know what options are available to you when considering post 16 and post 18 education and training
- have further considered self-awareness and how it may affect future plans
- have had the opportunity to visit a university
- have had access to computer-based information on a range of relevant career opportunities
- have had the opportunity to attend a Careers Insights Evening
- have attended an NCS employability skills workshop

**By the end of Year 11 (KS4) you will**

- have visited a Careers Convention
- have attended a post-16 Options Forum
- have visited a UCAS Higher Education & Apprenticeships Fair
- have received help to decide upon appropriate post-16 alternatives
- have had the opportunity to discuss option choices and career paths with the school's Careers Coordinator
- have had the opportunity to enrol with Morrisby to access career and education advice and planning tools
- have had access to computer-based information on a range of relevant career opportunities
- have done work experience and had the opportunity to undertake NCS
- have had the opportunity to meet Old Novaportans to discuss their course, university and career

*Looking ahead beyond GCSEs…*

**By the end of Year 12 you will**

- have had access to a Careers Convention
- have had the opportunity to visit a UCAS Higher Education Fair
- have had the opportunity to visit a university
- have had a one-to-one interview with an independent careers advisor
- have had access to presentations from Old Novaportans, the tertiary sector, the apprenticeship service and a range of career professionals
- have had access to computer-based information about higher education, apprenticeships and career opportunities
- have had the opportunity to explore career areas through self-organised work shadowing or experience
- have had the opportunity to go on higher education/career experience courses
- have had the opportunity to meet Old Novaportans to discuss their course, university and career
- have had the opportunity for interview practice
- have attended an NCS employability skills workshop

***By the end of Year 13 you will***

- have had access to a Careers Convention
- have had the opportunity to make an application for higher education, apprenticeships, or employment
- have had support in making the above choices and applications
- have had access to computer-based information about higher education, apprenticeships and career opportunities
- have had the opportunity to visit University/College open days
- have had the opportunity to apply for sponsorships/bursaries or for gap year placements
- have been briefed on student finances

*At all stages, you will have had access to the Haberdashers' Adams website careers pages to support your career planning.*