



Liverpool College

SIXTH FORM CURRICULUM HANDBOOK

September 2012

Choosing your A Level subjects

The AQA Baccalaureate

The Sixth Form Curriculum at Liverpool College

The Sixth Form is the culmination of your time at school, and the next two years will provide a rich and varied experience that will help you gain the qualifications, skills and confidence to move on successfully to Higher Education. We offer a high standard of teaching, in small classes, by a well-qualified, experienced and committed staff who will support and encourage you throughout.

We hope that you will get involved in a wide range of activities beyond the relative confines of your A Level subjects. These are an important part of the life of Liverpool College in which Sixth Form pupils normally take the lead. A rich programme of sport, music, drama, the CCF, Community Service, School Council, lectures, debates, societies and clubs is on offer. Every department offers trips out of school, near and far, and there are regular sports tours and expeditions as well. These trips are often a highlight of your time at school. Selection as a Prefect will allow you further opportunity to exercise responsibility and prove your leadership skills.

It is during the Sixth Form that your application to university will be made, and here you will benefit greatly from the expertise and outstanding levels of support of the tutors and of our dedicated Higher Education/ Careers Coach.

However, the main purpose of this handbook is to help you make the important decisions of which subjects to study.

Sixth Form pupils at Liverpool College are expected to study four subjects at AS level in Year 12 (the Lower Sixth). All pupils will be expected to sit the AS examinations at the end of the Lower Sixth year, these making up 50% of each A Level course. An AS is normally made up of two assessed modules.

Pupils then continue with three or four of these subjects in Year 13 (the Upper Sixth), sitting the A2 examination which make up the other 50% of the A Level course. Again, the A2 is normally composed of two assessed modules. Modules are usually taken in the June session of Year 12, and in the January and/or June sessions of Year 13. Details of assessment and weblinks to the specification (syllabus) can be found in the separate subject summaries which follow.

A subject examined at AS level, once certificated, is a qualification in its own right. The A2 is not a separate qualification. At present, retakes of AS modules may be offered to some pupils in Year 13 although, since this can adversely affect a pupil's focus on the A2 course, this may not be recommended.

Year 11 pupils are asked to give an indication of their likely choices in the Lent Term, coinciding with the Year 11 Options Evening, and external entrants to the Sixth Form at the time they are interviewed. You will be asked to complete an Options Form. Once we have this information, blocks of subjects are constructed so as to maximise pupil choice, accommodating as many combinations as possible. Firm choices are then requested. Once GCSE results are published in August, pupils may wish to change their subject choices. A change at this stage will be accommodated providing that it fits in with the finalised option blocks, the pupil is qualified for the course, and there is space in the class.

Detailed course descriptions follow, but the list of A Level subjects on offer is:

Art & Design	French
Biology	Further Mathematics
Business Studies	Geography
Chemistry	History
Computing	Mathematics
Drama & Theatre Studies	Music
Design Technology	Music Technology
Economics	Physical Education
English Language	Physics
English Literature	Spanish

In addition to the chosen A Level subject choices, a Sixth Form pupil will also take a course leading to an AS qualification in General Studies, prepare an Extended Project, take part in a Games afternoon, and attend a weekly Lecture of general interest. A Sixth Form pupil will also have a small number of private study periods.

Choosing AS subjects

You will need to consult many people as you make your decisions about the future. Your House Tutor is a key source of guidance, but you must talk with your individual teachers and Heads of Faculty to discuss the course in more detail and whether you would be suited to it. Your parents will also want to do their research so that they can discuss the options with you and help you make the right choice. The Careers Coach is available to provide specialist information and advice, especially on subject combinations for certain degrees and careers.

Consider the following:

1. Enjoyment of the subject and your aptitude for it are your first considerations. You will be studying the subject for six lessons a week for up to two years. A Grade B in a subject at GCSE is the minimum requirement to continue with it at A Level.
2. A Level provides an opportunity to specialise, but that does not mean that it is necessarily good for you to do so. Sciences can be mixed with Humanities, the Arts and Languages, and you will perhaps become a more rounded individual as a result. No scientific / medical course requires that you study four scientific / mathematical A Levels.
3. Some degree courses specify certain subjects at A Level. You will need Chemistry and at least one other science for Medicine; you will need Maths and/or Physics for Engineering. For most degree courses, however, there is considerable flexibility. Check typical course requirements in discussion with teachers or through the UCAS website www.ucas.com

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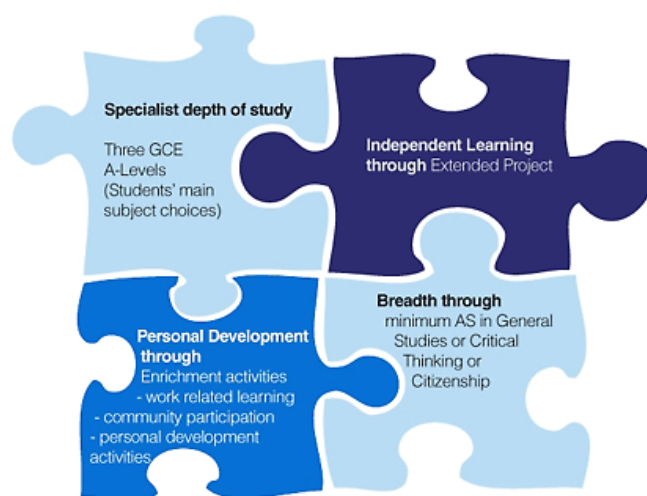
Head of Sixth Form

The AQA Baccalaureate

The AQA Baccalaureate is an additional qualification towards which all Sixth Formers will work. It is offered by the AQA Examining Board, and adds greater breadth to the A Level programme. As well as studying for three A Levels, pupils will:

1. follow a course in **General Studies** at **AS** level, in itself worth up to 70 UCAS points. Examined at the end of Year 12
2. complete at least 100 hours of **Enrichment Activity** (including activities such as work experience, community participation, CCF, Duke of Edinburgh's Award)
3. prepare an **Extended Project** on a topic of their own choosing, in itself worth up to 70 UCAS points. Examined in Year 13.

This qualification gains the pupil further credit for university entry and is of course educationally highly beneficial, since it encourages the development of independent thought and action, determination, a sense of community and teamwork. The structure of the qualification is summarised on the following diagram:



How is the AQA Baccalaureate awarded?

The AQA Bacc is awarded on consistency of achievement, as a Pass, a Merit or a Distinction; the level is determined by each pupil's A-level and EPQ grades.

AQA Bacc Award	Pass	Merit	Distinction
Depth of study - three A-levels	E or above	C or above	A or above
Extended Project Qualification	E or above	C or above	A or above
Enrichment activities	Pass	Pass	Pass
General Studies AS-level	Pass (E or above)	Pass (E or above)	Pass (E or above)

A Level English Language

We follow the AQA English Language B specification. If you choose to study English Language you will have the opportunity to explore the words we use while building on your creative skills. You will do some creative writing but many of the topics will be completely new to you. You will discover how young children learn to speak, how and why men and women speak differently and look at the history of the English Language. During the course you will develop your own written skills, through both creative and analytical writing. You will also improve your ability to discuss and present your ideas. We hope that you will grow more confident in communicating your opinions and in decoding the hidden meanings in the language used all around you.

You will enjoy this subject if you have enjoyed English Language at GCSE. You should be someone who likes both creative writing and analysing texts. We won't be reading books or poems but instead looking at a wide variety of media texts, different kinds of writing and even speech. You will learn about all the different ways in which people communicate with each other and, in the process, improve your own communication skills. English Language combines well with most other subjects and is popular with universities and employers as it shows that you can express yourself clearly in both speech and writing. The course offers a unique insight into the way that we communicate and the power of language.

AS Level:

Unit	What is it worth?	Assessment	Content
Unit 1: Categorising Texts	60% of AS, 30% of A Level	2 hour written exam	Introduction to the study of language, focussing on three specific social contexts: Language and Power, Language and Gender, and Language and Technology.
Unit 2: Creating Texts	40% of AS, 20% of A Level	Coursework	Candidates produce writing in different genres and for different audiences and purposes (2500-3500 words).

A2 Level:

Unit	What is it worth?	Assessment	Content
Unit 3: Developing Language	30% of A Level	2 hour 30 minutes written exam	Builds on AS knowledge and skills, with an additional focus on two new areas of language study: Child Language Acquisition and Language Change.
Unit 4: Investigating Language	20% of A Level	Coursework	Candidates produce two pieces: a language investigation and an informative media text (2500-3000 words).

At AS level we will start by exploring texts - are they spoken or written, formal or informal and how are they affected by audience, purpose and context? You will need to learn lots of new terms and get to grips with grammar! You will also produce a coursework folder of original writing based on topics that you choose. At A2 level we will study the history of the English Language and look at how young children learn to speak. The coursework is a research project into an area of language that interests you, giving you the chance to explore an area of personal interest and preparing you well for the more independent style of work which you will encounter at university.

Course: AQA English Language Specification B: <http://store.aqa.org.uk/qual/gce/pdf/AQA-2705-WV-SP-10.PDF>

A Level English Literature

We currently follow the AQA English Literature B specification, although we are exploring alternative specifications for September 2012. Whichever exam board we use, in English Literature you will study a wide range of plays, poems and prose about a variety of different themes, written in many different styles. During the A level you will develop your written skills through the essays that you write, but also your ability to analyse and to discuss and present your ideas to others. We hope that you will become more confident in communicating your opinions and that you will have a better understanding and knowledge of our great literary heritage.

You will enjoy this subject if you have enjoyed English Literature at GCSE and love reading novels, plays and poetry. You should be someone who likes discussing, analysing and writing about literary texts. You will read a wide variety of literature on the course and we want you to be someone who has opinions about what you are reading. We will look at how writers communicate their ideas to us; how they entertain, educate and sometimes even shock us with their words. English Literature combines well with most other subjects and is popular with universities as it shows you can communicate well in both speech and writing.

AS Level:

Unit	What is it worth?	Assessment	Content
Unit 1: Aspects of Narrative	60% of AS, 30% of A Level	2 hour written exam – open book	Four texts for study: two novels (at least one post 1990) and two poetry texts 1800-1945. The paper has two sections. Candidates answer one question from each section
Unit 2: Dramatic Genres	40% of AS, 20% of A Level	Coursework	Minimum of two texts for study within dramatic genre of Tragedy. A portfolio of two pieces of written coursework (one may be re-creative) each 1200-1500 words.

A2 Level:

Unit	What is it worth?	Assessment	Content
Unit 3: Texts and Genres	30% of A Level	2 hour written exam – closed book	Three texts for study including at least one text 1300-1800. Candidates choose one topic area: Elements of the Gothic, or Elements of the Pastoral.
Unit 4: Further and Independent Reading	20% of A Level	Coursework	Three texts for study including one anthology of critical material. A portfolio of two pieces of written work: comparative study of two texts; application of an aspect of pre-released critical anthology to a literary text.

At AS level the current texts include poetry by Browning and Tennyson as well as the novels 'Birdsong' by Sebastian Faulks and 'The Great Gatsby' by F Scott Fitzgerald. The coursework unit is entitled Dramatic Genres and we will be looking at the genre of tragedy through Shakespeare's King Lear and Anouilh's Antigone. At A2 you will study two units, one looking closely at The Gothic and the other based on your own wider reading.

Course: AQA English Literature Specification B: <http://store.aqa.org.uk/qual/gce/pdf/AQA-2745-WV-SP-10.PDF>

Modern Foreign Languages: A Level French & A Level Spanish

Sixth Form pupils can choose to study **French** and/or **Spanish**:

We follow the WJEC Specification in both **French** (3191) and **Spanish** (3361)

The AS course for both languages covers 2 topic areas:

- **Leisure and Lifestyles**, including travel and tourism, sport, hobbies, entertainment, customs, traditions, healthy living – health and nutrition, diet and exercise; unhealthy living - drugs, aids, smoking, alcohol, etc
- **The Individual and Society**, including relationships and responsibilities, gender issues, youth culture (values, peer groups, fashions and trends etc.), education, vocational training and future careers.

The A2 course for both languages also covers 2 topic areas:

- **Environmental Issues**, including technology, pollution, global warming, transport, energy, nuclear energy, renewable energies, conservation, recycling, sustainability etc
- **Social and Political Issues**, including the role of the media, racism, immigration, social exclusion and integration, terrorism, world of work (employment, commerce, globalization, etc.)

Assessment

Unit	Content	Assessment	Duration	Weighting
FN1/SN1	Speaking	External examiner	15 minutes	40% of AS marks
FN2/SN2	Listening, Reading, Writing	Written	2½ hours	60% of AS marks
FN3/SN3	Speaking	External examiner	20 minutes	40% of A2 marks
FN4/SN4	Listening, Reading, Writing	Written	3 hours	60% of A2 marks

Future Opportunities in Languages

French is the second most commonly-taught second language in the world (after English), with 77 million first language speakers and 51 million second language speakers. It is the official language in 33 countries and, other than English, is the only language spoken as a native language in all 5 continents. French is one of the official working languages in dozens of international organizations, including: NATO, UN, Amnesty International and the Red Cross. Given the widespread usage and importance of French throughout the world the opportunities for those who study it are enormous.

Spanish is the second most natively spoken language in the world. It is the first language of most Latin American countries. Spanish is one of the six official languages of the United Nations, and is used as an official language by the European Union and Mercosur. Another surprising fact is that Spanish is the third most commonly used language on the Internet after English and Mandarin

Those with an A-level **French** or **Spanish** qualification enhance their employment prospects, as more and more companies are now looking for a workforce which can communicate with partners in Europe and beyond. Pupils who do not envisage using the language(s) as an integral part of their career also benefit from the course as they experience the enjoyment and motivation of improving their linguistic level and find foreign travel easier.

As well being available for study as a single or double honours degree, **French** and **Spanish** can also be combined with practically any other subject (Economics, Business Studies, Law, History, Music, Science-based courses to name a few) in numerous Higher Education courses. Many institutions also offer the possibility of study or work experience in a French/Spanish speaking community.

Further Information on French and Spanish

In addition to a previous qualification in French/Spanish candidates at AS/A2 should have an interest in other cultures. Good communication skills and a willingness to participate in class are also essential. The Lower Sixth year begins with thorough revision of GCSE grammar so that all pupils feel confident in their use of the language throughout the AS course. In the Upper Sixth year pupils are exposed to more sophisticated language and prepared for the requirements of Higher Education.

At both AS and A2 pupils are taught by two teachers; in addition, all pupils spend half a period of their free time each week on conversation practice with our native speaker Assistants. In addition to regular homework, written and oral assessments based on the exam format take place throughout the course. Pupils also take a full mock paper both at AS and A2. Coursework no longer forms part of the A-level French/Spanish course; in Year 13 however pupils also study either 2 works of literature or 2 pieces of film (or indeed one of each)

Since September 2011, AS classes have been allocated 6 periods per week. This extra 20% contact time is invaluable in allowing us to access areas which lie outside the restraints of the exam specification.

In French we use the time to study contemporary French literature and cinema. There is also the opportunity for students to have extra sessions with our native speaker French Assistant to work on improving oral skills. In addition, some of the extra lessons are given over to tutorials where less able students can receive individual support and talented linguists can explore more advanced grammar and skills.

In Spanish there is exploration of Spanish and Latin American Poetry with special emphasis on the use of rhetorical devices in Federico Garcia Lorca's 'Romancero Gitano'. We also look at Spanish Film in the Post Franco era. Again the students are given extra time with the Spanish Assistant and the opportunity to come to tutorials to deal with specific language problems or queries.

French - <http://www.wjec.co.uk/index.php?subject=57&level=21>

Spanish - <http://www.wjec.co.uk/index.php?subject=103&level=21>

A Level Geography

Geography is a stimulating and dynamic subject which leads us directly to the key questions of today and tomorrow - the wise management of the environment, resources, conservation and development - on scales that range from local to global. Ours is a fragile world and we are its custodians. If it is to have a future it will be in the hands of the pupils in our school today. It is vital that they develop a keen concern for its wellbeing, an awareness of how decisions are made, and a willingness to make a personal difference. At a time when events and changes in one part of the world can rapidly effect people and environments elsewhere it is essential that we understand these global interconnections. Geography is the only subject that has as a main focus the relationship between people and their environment.

Description of syllabus followed

At A-level we follow the AQA specification - Geography 2031. You DO NOT have to have studied geography at GCSE, although it does help. More important is that you are committed to hard work, and enjoy a variety of types of work from writing essays, to producing graphs and analysing data. More details can be found at the website below:

http://web.aqa.org.uk/qual/gce/humanities/geography_materials.php?id=10&prev=10

Course content and assessment

AS Unit 1 – GEOG1 - Physical and Human Geography

70% of AS, 35% of A Level – a 2 hour written examination in June of year 12
Structured short and extended questions

AS Unit 2 – GEOG2 Geographical Skills

30% of AS, 15% of A Level – a 1 hour written examination in June of year 12
Structured skills and generic fieldwork questions

A2 Unit 3 – GEOG3 Contemporary Geographical Issues

30% of A Level - a 2 hour 30 minutes written examination in June of year 13
Structured short and extended questions, plus an essay

A2 Unit 4 - GEO4B Geographical Issue Evaluation

20% of A Level – a 1 hour 30 minutes written examination in January of year 13
GEO4B – structured questions based on an Advance Information

Other opportunities

The geography department organises field trips to promote social and environmental understanding. It is likely that, pupils will visit Liverpool, Manchester, the Lake District, the Peak District and Northern Ireland.

Where could the subject lead?

It is an ideal subject to take if you want to keep your career path wide open, as it is both a physical and a social science. As a dynamic subject geography combines well with many other subjects. Our three most typical combinations would be geography + maths and a science, geography + economics and maths, geography + history and English.

A Level History

The History Department is delighted to reintroduce the newly amended 4 unit A level syllabus to commence September 2009. The course of study is Edexcel AS level (8H101) and A2 Level (9H101). The pupils complete two units in the AS year and two units in the A2 year. Examinations will be in June of the first year and January and June of the second year.

Course Content – Year I

Unit 1 Historical Themes in Breath – Examination Based

Option F: The Expansion and Challenge of Nationalism

F3 The Collapse of the Liberal state and the Triumph of Fascism in Italy 1896 – 1943 – Examination Based

Unit 2 Option A: Early Modern British History: Crown and Authority

A1 Henry VIII: Authority, Nation and Religion, 1509 – 40

Course Content – Year II

Unit 3 Depth Studies and Associated Controversies – Examination Based

Option E: War and Peace: 20th Century International Relations

Unit 4 Historical Enquiry – Coursework CW 19

Representation and Democracy in Britain c1830 – 1931

Max wording 4000 words

The course is designed to enthuse our young historians and foster the key skills associated with the A level syllabus. This celebrated A level subject encourages independence of thought and a comprehensive understanding of some of the most critical events in World and British History.

Trips and visits

The History department prides itself in providing our pupils with an array of opportunities. For sixth form we run a residential trip during the October half term. In the past we have travelled with our sixth form historians to Moscow and St Petersburg, Krakow, Berlin and most recently a two centre visit to London and Paris. This year we are proposing a visit to Rome. This will include a visit to the Vatican as well as a focus on the ancient and modern history of Italy.

Extra Lessons and Opportunities

We run a series of extra lessons after school to ensure academic success both at A2 and AS. We also offer Saturday school for our youngsters throughout the year to sustain academic excellence. Beyond the academic demands of the course we offer a programme studying ancient civilisations with the University of Liverpool.

The Future

A large percentage of our pupils go on to read history at University. History is extremely adaptable and is suited to a vast array of academic pursuits and professional occupations.

A Level Economics

Economics is a subject that inspires pupils to analyse issues from new perspectives by providing a framework of thinking different to any subject they have studied before. In a world where discussion of recession, public sector cuts, University fees, footballer's wages, the future role of China, house prices, the stock market and pensions dominate the news, Economics helps pupils to gain an understanding of all these issues and more.

Economics complements both Arts and Science subjects, and can make an ideal 4th AS for those pupils who want something to balance out their choices. As part of the course, pupils participate in a Stock Market based Investment Game, enter national competitions in a range of areas, and have the opportunity to learn more about their world.

Economics is a course that prepares pupils for almost any University course, and for a wide range of careers in the future. The analytical and evaluative skills it gives pupils are highly valued by Universities and employers. While it is obviously very useful to those wishing to study Economics, it is also of great use to prospective Management Science, Humanities, Politics, Philosophy, Law and even Science pupils.

Economics AS / A2

Examining Board: EDEXCEL (<http://www.edexcel.com/quals/gce/gce08/economics/Pages/default.aspx>)

UNITS 1&2 (AS):

Unit 1- Competitive Markets- How They Work and Why They Fail- This unit provides an introduction to the nature of economics and examines how the price mechanism allocates resources in markets. It analyses the nature of market failure and, its causes and possible policy remedies. At the end of this unit, pupils should be able to apply supply and demand analysis to real world situations; to understand why markets might not allocate resources efficiently and the methods of dealing with market failure, together with an evaluation of their effectiveness. AS-50%, A-Level-25%

Unit 2- Managing the Economy- This unit introduces the key measures of economics performance and the main objectives and instruments of economic policy. Pupils should be able to use a basic AD/AS model to understand why demand and/or supply side policies may be seen as appropriate ways of managing an economy; predict the possible impact of such policies and to recognise the assumptions involved; argue for different approaches and identify criteria for success. AS-50% A-Level-25%

UNITS 3&4 (A2):

Unit 3- Business Economics and Economic Efficiency- This unit develops the content of Unit 1 and examines how the pricing and nature of competition between firms is affected by the number and size of market participants. At the end of this unit, pupils should be able to analyse the pricing and output decisions of firms in different contexts. They should also be capable of making an appraisal of government intervention aimed at promoting competitive markets. A-Level- 20%

Unit 4- The Global Economy- This unit develops knowledge and skills gained in Unit 2 so that they can be applied in a global context. The application, analysis and evaluation of economic models is required as well as an ability to assess policies which might be used to deal with economic problems. An awareness of trends and developments in the global economy over the last 10 years is required. A-Level- 30%

Special Entry Requirements- Mathematical ability is important, even though there is little actual Maths involved, as is an ability to write good English. Therefore a B in Mathematics and a B in English GCSE are required.

A Level Business Studies

In a world where the Apprentice and Dragon's Den are amongst the most popular shows on TV, Business Studies gives pupils the chance to learn more about the business world. The Business Studies A-Level attempts to give pupils an insight into what it takes to be a successful entrepreneur, from the basic idea to running a multi-national. Business Studies is a hugely popular subject in school, and pupils tend to really enjoy learning the subject. It is taught using as many real life examples as possible, from Apple, Nike, Coke, Pepsi to local restaurants and shops. It gives pupils an insight not only into what makes a successful business but what factors can affect even the best businesses.

To learn more, pupils visit businesses, enter competitions such as the BASE event and benefit from visiting speakers sharing their experiences of the business world.

Business related University courses are very popular with our pupils and indeed are the most popular choice for our 6th Form. The Department provides full guidance through this process.

Examining Board: WJEC (<http://www.wjec.co.uk/index.php?subject=34&level=2>)

Content:

Units: AS- The AS units focus on small to medium-sized businesses operating within national, as opposed to international markets.

BS1 covers the issues involved in a business start-up, such as research and planning, as well as the factors that determine success. (40% AS, 20% A2)

BS2 focuses on how established businesses might improve their effectiveness by making tactical decisions at a functional level. (60% AS, 30% A2)

Units: A2- The A2 Business Studies specification builds on the AS specification. The A2 specification has two units, BS3 Business Decision-Making and BS4 Business Strategy and Practice.

The aim of **BS3** Business Decision-Making is to provide an overview of business strategy. Business organisations need to assess their own strengths and weaknesses and consider how they can best respond to the threats and opportunities posed by changes in the external environment. (25% A2)

The aim of **BS4** Business Strategy and Practice is to focus on how business objectives are to be achieved once they have been decided. This unit focuses on the methods that businesses can use in order to meet their objectives. It breaks these methods down into functional areas: marketing, finance, human resources and operations management (including purchasing and stock control). (25%A2)

The transferable skills underpinning Business Studies include: carrying out calculations, interpreting data, making and presenting arguments, making and justifying business decisions, identifying problems and proposing solutions, recognising that a problem exists, conducting research and challenging assumptions.

Assessment

Units 1&2 will be examined in June of Year 12, and Units 3&4 in June of Year 13.

Special Entry Requirements

Pupils are ideally required to have at least a grade 'B' in GCSE English Language and Mathematics.

A Level Biology

Biology literally means 'the study of life'. It is such a vast subject, covering from the workings of microscopic cells and their molecular components, to the interactions of several ecosystems in the world's many biomes. In recent years, the human genome (sequence of bases in DNA) has been deciphered, DNA profiling has allowed murder and rape cases to be solved, the health risks or benefits of some of our favorite food have been identified, the use of herbal remedies has been developed and the cure for certain diseases has been found.

All examinations in AS and A2 comprise a mixture of; short answer questions, longer questions involving: comprehension, data handling and *How Science Works*.

AS level AQA (1411)

Unit 1: Biology and Disease (BIOL 1) (Examination- 1 ¼ hrs worth 33.33% AS)

In this unit you will study the digestive, gas exchange and blood systems of mammals. To understand the physiology behind these systems you will also cover the basic principles of enzyme action and the mechanisms used to transport substances across membranes i.e. diffusion, osmosis and active transport. You will also learn how the body defends itself from common diseases such as cholera.

Unit 2: The variety of living organisms (BIOL 2) (Examination- 1 ¼ hrs worth 46.67% AS)

In this unit you will study the structure of DNA and genetic diversity. You will learn how factors such as size and metabolic rate affect organisms and how this gives rise to adaptations such as specialised gas exchange surfaces and mass transport systems.

Unit 3: The centre assessed unit (BIOL 3) (Examination- Worth 20% AS)

The main skills involve being able to: Plan, Collect Data, Analyse and evaluate.

A2 level AQA (2411)

Unit 4: Populations and the environment (BIOL 4) (Examination- 1 hour 30 min worth 16.7% A2)

This unit explains how populations can be affected and how energy is made and transferred between organisms. The biochemistry of photosynthesis and respiration are studied.

Unit 5: Control in cells and in organisms (BIOL 5) (Examination- 2 hours 15 min worth 23.3% A2)

Homeostasis is coordinated by detecting stimuli and stimulating appropriate responses. Animals increase their chances of survival by avoiding harmful environments. Therefore, an in depth study of the nervous system and muscle contraction will also take place.

Unit 6: A2 centre assessed unit (BIOL 6) (Examination- Worth 10%)

As with AS the main skills involve being able to: Plan, Collect Data, Analyse and evaluate.

Future Opportunities

Biology is a rapidly growing and exciting science. With the discovery of new and improved biochemical techniques such as electron microscopy, biotechnology, DNA sequencing and genetic engineering, new opportunities are opening all the time. Biology qualifications can lead on to a huge variety of different careers from Neurosurgery, Dentistry, Veterinary Science and Medicine to Forestry, Environmental Studies, Food Science, Sport Science, Horticulture and Laboratory work.

http://web.aqa.org.uk/qual/gce/science/biology_materials.php?id=03&prev

A Level Chemistry

Chemistry is often described as the central science, since it combines elements of physics, biology and medicine. It is concerned with all aspects of molecules and materials, their physical and chemical properties, how we determine their composition and structure, and how we make and modify them for use in a modern society. Many of our pupils go on to study medicine and other chemistry-related degrees at University.

At Advanced level we follow the AQA AS/A level specification (2420). This is divided up into six units based around physical, inorganic and organic chemistry. Two of these units (one in each Year) assess the pupils in their investigative and practical skills, both of which are externally marked.

At AS Level (Y12) pupils are given a solid grounding in foundation Chemistry. The specification introduces the chemical reactivity of atoms and molecules and provides an understanding of their structures. The development and use of periodic table is explained.

Unit 1 - CHM 1 - Foundation Chemistry	70 raw marks 100 UMS	4-5 short answer questions plus 1 longer structured question	1.25 hours	33.33% AS 16.66% A level marks
Unit 2 - CHM2 - Chemistry in Action	100 raw marks 140 UMS	6 - 8 short answer questions plus 2 longer structured questions	1.75 hours	46.66% AS 23.33% A level marks
Unit 3 - CHM3t - Investigative and Practical Skills in AS	50 raw marks 60 UMS	. ISA Based Practical		20% AS 10% A level marks

At A2 Level (Y13) the specification develops the concepts of physical chemistry introduced at AS. Pupils study kinetics, equilibria, organic chemistry and spectroscopic techniques to determine the molecular formulae and structures of organic compounds.

Unit 4 - CHM4 - Kinetics, Equilibria and Organic Chemistry	100 raw marks 120 UMS	6-8 short answer questions plus 2 longer structured questions. Some of the questions will have synoptic elements.	1.75 hours	20% A level marks
Unit 5 - CHM5 - Energetics, Redox and Inorganic Chemistry	100 raw marks 140 UMS	5 - 7 short answer questions plus 2-3 longer structured questions. Some of the questions will have synoptic elements.	1.75 hours	20% A level marks
Unit 6 - CHM6T	50 raw marks 60 UMS	ISA Practical		20% AS 10% A level marks

A Level Physics

Physics is at the heart of everything and is a highly rewarding discipline to study at school, university and beyond. Physics explores questions like how did the universe begin? How will it end? What is a black hole? Is time travel possible? No other subject covers such a breadth of scale - from the constituents of the atom to the shape of the universe. If you have an enquiring mind, always asking why things happen, then physics will help you find the answers. It forms the basis of most modern technologies and holds the future to global well being. The course has a good balance of practical and theory, mixed with a wide range of teaching and learning styles.

We teach the AQA Physics course

Resources and Facilities

- Two dedicated Physics labs and a computerised laboratory
- Almost every topic is supported by practical investigations
- Pupils are taught by two IOP award winning Physics teachers who share the A-level teaching.

Assessment

	Module Title/Code	Nature of Assessment	Notes
Year 12 AS	Unit 1 - Particles, Quantum Phenomena and Electricity (PHYA1)	Written exam (1¼ hours)	40% of AS, 20% of A Level marks
	Unit 2 - Mechanics, Materials and Waves (PHYA2)	Written exam (1¼ hours)	40% of AS, 20% of A-level
	Unit 3 - Investigative and Practical Skills in AS Physics (PHYA3)	Centre Assessed Unit	20% of AS, 10% of A-level
	Unit 4 - Fields and Further Mechanics (PHYA4)	Written exam (1¾ hours)	20% of A-level
Year 13 A2	Unit 5 - Nuclear and Thermal Physics and one of these options: A - Astrophysics (PHA5A) B - Medical Physics (PHA5B) C - Applied Physics (PHA5C) D - Turning Points in Physics (PHA5D)	Written exam (1¾ hours)	20% of A-level
	Unit 6 - Investigative and Practical Skills in A2 Physics (PHYA6)	Centre Assessed Unit	10% of A- level

Progression Opportunities

Not just a wide range of scientific, medical and engineering careers, but anywhere a logical, thorough approach is valued.

A level Mathematics

Examination Board: Edexcel

We aim to provide a broad experience of Mathematics at this level, inspiring and encouraging all pupils to fulfil their potential through high standards of teaching, and also emphasising the importance of Mathematics in everyday life.

Six modules are studied. Pupils have to study Core Mathematics 1, 2, 3 and 4. The other 2 modules chosen are at the discretion of the faculty and details follow below.

Who is A Level Mathematics for?

Those who enjoy Mathematics and whom are considering a degree where it plays a vital role such as Engineering.

Year 12

Core Mathematics 1

Algebra and functions; coordinate geometry in the (x, y) plane; sequences and series; differentiation; integration.

Examination Non-Calculator

Time 1 hour 30 minutes

Core Mathematics 2

Algebra and functions; coordinate geometry in the (x, y) plane; sequences and series; trigonometry; exponentials and logarithms; differentiation; integration.

Examination Calculator

Time 1 hour 30 minutes

Statistics 1

Mathematical models in probability and statistics; representation and summary of data; probability; correlation and regression; discrete random variables; discrete distributions; the Normal distribution.

Examination Calculator

Time 1 hour 30 minutes

Year 13

Core Mathematics 3

Topics Covered

Algebra and functions; trigonometry; exponentials and logarithms; differentiation; numerical methods.

Examination Calculator

Time 1 hour 30 minutes

Core Mathematics 4

Topics Covered

Algebra and functions; coordinate geometry in the (x, y) plane; sequences and series; differentiation; integration; vectors.

Examination Calculator

Time 1 hour 30 minutes

Mechanics 1

Topics Covered

Mathematical models in mechanics; vectors in mechanics; kinematics of a particle moving in a straight line; dynamics of a particle moving in a straight line or plane; statics of a particle; moments.

Examination Calculator

Time 1 hour 30 minutes

A Level Further Mathematics

Examination Board Edexcel

Further Mathematics is an impressive A Level to achieve and is a must for those considering a degree in Mathematics or completing an Engineering course in one of the top universities. It goes into more depth than A Level Mathematics and deals with more complex ideas. Further Mathematics can only be completed if taken alongside the A Level Mathematics.

Six modules are taught. Pupils have to study Further Pure Mathematics 1 and 2. The other four modules chosen are at the discretion of the faculty and details follow below.

Year 12

Further Pure Mathematics 1

Inequalities; series; complex numbers; numerical solution of equations; first order differential equations; second order differential equations; polar coordinates.

Examination Calculator

Time 1 hour 30 minutes

Statistics 2

The Binomial and Poisson distributions; continuous random variables; continuous distributions; samples; hypothesis tests.

Examination Calculator

Time 1 hour 30 minutes

Discrete Mathematics 1

Algorithms; algorithms on graphs; the route inspection problem; critical path analysis; linear programming; matchings; flows in networks.

Examination Calculator

Time 1 hour 30 minutes

Year 13

Further Pure Mathematics 2

Coordinate systems; hyperbolic functions; differentiation; integration.

Examination Calculator

Time 1 hour 30 minutes

Further Pure Mathematics 3

Complex numbers; matrix algebra; vectors; Maclaurin and Taylor series; numerical methods; proof.

Examination Calculator

Time 1 hour 30 minutes

Mechanics 2

Kinematics of a particle moving in a straight line or plane; centres of mass; work and energy; collisions; statics of rigid bodies.

Examination Calculator

Time 1 hour 30 minutes

A Level Art and Design

The Art & Design Department is accommodated in a large building which provides ample space for pupils to work in. Recently a Creative Media Suite was added, and there is also a welding bay at the back of the building.

You will be given the opportunity to work in a wide range of media which includes: Oil Painting, Mixed Media/Fashion and Textiles, Digital Lens based Photography, Sculpture – ranging from plaster/Card to Welded Metal and you will be encouraged to create works of scale and ambition.

You will also be required to visit art galleries and you will be given the opportunity to attend study visits to London and Paris each year. Partnerships have been created with business and industry, which have received recognition for the department on both a local and national scale. Commissions for public sculpture included last year two large pieces for university garden of the Vice Chancellor of the University of Liverpool.

The department runs an extensive extra- curricular programme during lunchtimes, weekends and in the holidays throughout the year.

Examination board: OCR, AS (unendorsed) Art & Design H160 – A (unendorsed) Art & Design H560

AS Units:

The coursework Portfolio: 60% of the total AS mark

- Pupils are required to produce a portfolio of work from starting points, topics or themes that they can choose
- The focus is on exploration, research and the acquisition of techniques

The Controlled assignment: 40% of the total AS mark

- Pupils select one starting point from an early release question paper
- Pupils have a minimum of three weeks in which to prepare followed by a 5 hour practical controlled test

A2 Units:

Personal Investigation: 30% of the total Advanced GCE mark

- Pupils submit one major project that has personal significance
- The investigation comprises between 1000 and 3000 words

The controlled Assignment: 20% of the total Advanced GCE mark

- Pupils select one starting point from an early release paper
- They have a minimum of three weeks in which to prepare
- They are given 15 hours of controlled time to realise their ideas into a final outcome.

A Level Music

At both Advanced Subsidiary Levels (AS) and A2, pupils experience all three main musical disciplines of performing, composing and listening and understanding. Pupils will develop performance skills (solo and/or ensemble), compose music and learn about harmony (the basics at AS and stylistic studies at A2). They will build up their aural and analytical skills by studying selections from the *New Anthology of Music*.

EDEXCEL Advanced Subsidiary GCE in Music (8MU01)

<http://www.edexcel.com/quals/gce08/music/music/Pages/default.aspx>

AS UNIT 1 Performing (30%)

This unit gives pupils the opportunities to perform as soloists and/or as part of an ensemble. Teachers and pupils can choose music in any style. Any instrument(s) and/or voice(s) are acceptable as part of a five-six minute assessed performance. Notated and/or improvised performances may be submitted.

AS UNIT 2 Composing (30%)

This unit encourages pupils to develop their composition skills leading to the creation of a three-minute piece in response to a chosen brief. Pupils also write a CD sleeve note to describe aspects of their final composition and explain how other pieces of music have influenced it.

AS UNIT 3 Developing Musical Understanding (40%)

This unit focuses on listening to familiar music and understanding how it works. Set works from the anthology provide the focus for the first two sections, through listening and studying scores. It is recommended that pupils familiarise themselves with each work as a whole, before learning how to identify important musical features and social and historical context. In the third section, pupils use a score to identify harmonic and tonal features and then apply this knowledge in the completion of a short and simple passage for SATB.

EDEXCEL Advanced GCE in Music (9MU01)

A2 UNIT 4 Extended Performance (30%)

This unit gives pupils with opportunities to extend their performance skills as soloists and/or as part of an ensemble. Teachers and pupils can choose music in any style. Any instrument(s) and/or voice(s) are acceptable as part of a 12-15 minute assessed performance of a balanced programme of music. Notated and/or improvised performances may be submitted.

A2 UNIT 5 Composition and Technical Study (30%)

This unit has two sections: composition and technical study. The composition section further develops pupils' composition skills, leading to the creation of a final three-minute piece in response to a chosen brief. The technical study section builds on the knowledge and awareness of harmony gained in Unit 3 section C through the medium of pastiche studies. Pupils must complete two tasks in this unit choosing from *either* one composition and one technical study *or* two compositions *or* two technical studies.

A2 UNIT 6 Further Musical Understanding (40%)

Set works from the anthology provide the focus for much of the unit. It is recommended that pupils familiarise themselves with each work as a whole, before concentrating on important musical features, context and/or elements of continuity and change. Between works pupils should also listen to a wide range of unfamiliar music which relates to the two compulsory areas of study. They should learn how to compare and contrast pairs of excerpts, contextualise music and identify harmonic and tonal features.

A Level Music Technology

A passion for the subject and being able to play a musical instrument is essential for this course, as pupils tend to play for each other's recordings. The ability read music will help a great deal.

The Music Technology department occupies a suite of rooms in Beechlands which consist of two computer rooms and a fully operational recording studio. A mixture of practical work in the studio and using computer-based sequencing software is combined with a programme of listening and theory. PowerPoint presentations and DVDs are also included when relevant. Independent listening and research is essential at both AS and A2. Music Technology at 'A' Level will equip pupils going on to study subjects involving audio processing and Music Technology at University.

<http://www.edexcel.com/quals/gce/gce08/music/tech/Pages/default.aspx>

AS Music Technology 8MT1

Unit 1 Music Technology Portfolio 1 *Unit code: 6MT01
70% of the total AS marks
35% of the total GCE marks

Pupils will learn and use a variety of music and music technology skills in order to complete this unit. MIDI sequencing and multi-track recording as well as arranging skills are all key components assessed through the practical work carried out.

Pupils must complete three tasks which together make the Music Technology Portfolio 1:

Task 1A: Sequenced Realised Performance
Task 1B: Multi-track Recording
Task 1C: Creative Sequenced Arrangement

Unit 2 Listening and Analysing *Unit code: 6MT02
30% of the total AS marks
15% of the total GCE marks

This unit provides pupils with an opportunity to study the styles most common in popular music. Pupils will have the opportunity to demonstrate this knowledge using aural discrimination skills. Pupils are required to study the development of popular music styles from 1910 through to the present day. This is not intended to be a comprehensive and in-depth study of every popular, jazz or rock music style, but an overview of the main styles and trends during the development of popular music.

A2 Music Technology 9MT01

Unit 3 Music Technology Portfolio 2 *Unit code: 6MT01
60% of the total A2 marks
30% of the total GCE marks

Unit 3 builds on skills acquired in Unit 1, and extends these to include a composition task. It involves detailed study of Area of Study 3: The Development of Technology based Music.

Pupils must complete three tasks which together make the Music Technology Portfolio 2:

Task 3A: Sequenced Integrated Performance
Task 3B: Multi-track Recording
Task 3C: Composing using Music Technology.

Unit 4 Analysing and Producing *Unit code: 6MT04
40% of the total A2 marks
20% of the total GCE marks

Pupils will be expected to demonstrate their knowledge of music and the principles of music technology through a series of written commentaries, manipulations and production tasks using material provided on an examination paper and recorded on an audio CD.

A Level Design Technology: Product Design

Course: GCE Product Design: Resistant Materials Technology (9080)
Codes: Unit 1: 6RM01 Unit 2: 6RM02 Unit 3: 6RM03 Unit 4: 6RM04
<http://www.edexcel.com/quals/gce/gce08/dt/product/Pages/default.aspx>

If you are considering A Level Design and Technology, ask yourself these questions and read on:

- Can I apply knowledge from D&T and other subjects to solve problems?
- Do I like creating products that will potentially have an impact on society?
- Am I thinking of pursuing a career in Engineering, Product Design, Surveying, Stage Set Design or Architecture?
- Will I probably achieve a good GCSE grade in Design and Technology?
- Do I prefer an even balance of coursework and examination assessment?

This is a recently revised action-packed A Level course which follows on from GCSE Design and Technology: Resistant Materials or Product Design. It allows the pupils to use the excellent facilities in the D&T Department to develop their products whilst increasing their knowledge base in a variety of areas.

Course Content AS:

Unit 1: Portfolio of Creative Skills

This unit allows the pupils to develop their creative, technical and practical skills through a series of product investigation, design and manufacturing activities. They will produce one portfolio with three distinct sections that demonstrate their ability in each activity.

Unit 2: Design and Technology

In this unit pupils will develop a knowledge and understanding of a wide range of materials and processes used in the field of design and technology. They will also learn about industrial and commercial practices, quality assurance and health and safety. The knowledge acquired by studying this unit can be applied to Unit 1.

Course Content A2:

Unit 3: Designing for the Future

This unit enables pupils to develop their knowledge and understanding of modern design and manufacturing practices, contemporary design issues, design eras and key designers as well as focussing on sustainable product design.

Unit 4: Commercial Design

This unit consists of a 'Design and Make' activity. Pupils identify a client or user group from which they must design and make a product that meets the original need. A wide range of materials and processes may be used during this activity.

Assessment:

Unit	Title	Assessment	% of AS/A2	% of total marks
AS	Unit 1	Portfolio of Creative Skills Coursework	60%	30%
AS	Unit 2	Design and Technology In Practice External Exam 90 min. paper	40%	20%
A2	Unit 3	Designing for the Future External Exam 2 hour paper	40%	20%
A2	Unit 4	Commercial Design Coursework	60%	30%

Opportunities:

The Department is open every day during lunch and after school (Monday to Thursday) for pupils to develop their products and to receive help for the theory examination, particularly in the Summer term. We organise a Sixth Form DT trip to London every other year which is action packed and follows much of the syllabus content. The College currently has one Arkwright Scholar, a national scholarship sponsored by all the major national companies, to assist budding engineers.

A Level Drama and Theatre Studies

Exam Board: Edexcel.

How does a director give life to the ideas in the play? How do you interpret an ordinary script into a stunning visual performance? On this course, you will learn not only the answers to these questions but also how to do it yourself. You will be shown the wonderful diversity in theatre and will learn to analyse, interpret and create imaginative, original theatre, whilst increasingly becoming a competent theatre practitioner. While this A level is rigorously academic, it is essentially practical and offers a unique approach to learning. It is an active and creative course which aims to nurture your enthusiasm for and interest in theatre, both as an audience member and as a spectator.

Year 12

You will begin by exploring two contrasting plays and learning about one recognised theatre practitioner. The approach is mostly practical with a high level of analysis. Through written and practical coursework assessment, you will demonstrate your understanding, practical skills and ideas. We will also visit the theatre to review plays and here you will learn to critique all aspects of the production with skill.

Year 13

At the beginning of the A2 year, you will embark on an exciting project where you will draw on all of your experience, research and ideas to develop an original piece of theatre. You will be assessed on your rehearsal process, your performance and on a detailed written evaluation you will write.

For your written exam, you have the wonderful opportunity to explore a play from the point of view of a Director. You will develop your own production ideas. Within the bounds of relevance, you are free to be as imaginative and daring as you wish. You will also write a critique of a historic play you have seen, drawing comparisons with the plays original performance context.

Whom does the subject suit?

You need to be really enthusiastic about acting and theatre: watching it, doing it, talking about it and writing about it. Team-work is an essential element to the course. Students need to be very reliable in their attendance and punctuality, they need to like working creatively in teams and enjoy sharing and experimenting with ideas. There needs to be a willingness and independence in taking direction and developing both practical and academic skills. If you love drama and theatre and are able to commit your time and energy to your work, you will have a wonderful time on this course!

What might the subject lead onto?

Drama & Theatre Studies is accepted by universities. It is excellent preparation for a degree in Drama or Drama School training; however, the skills developed through this course are relevant to many different academic and professional areas. It combines very well with other Arts, Humanities and English.

A Level Computing

This year, we are changing from Applied ICT A Level to A Level **Computing**. The Computing syllabus is very different from ICT.

What's the difference between ICT and Computing?

ICT is concerned primarily with the end use of a computer system and computing is concerned with the inner workings of the computer. Put another way, ICT shows you how to **use** the available applications whereas, in computing, you'll be **programming your own** applications.

Why the change?

Over the past few years, students have enquired about computing as an option and there has been a general move in the education sector to fill a skills gap that is widening in producing competent students who can continue the UK's historic contribution to the computer industry. An Englishman called Charles Babbage invented the *Difference Engine* during the Victorian era which was technically the world's first programmable computer (albeit mechanical not electronic). Mathematician Alan Turing together with Post Office engineer Tommy Flowers created the world's first electronic computer to crack German cyphers during the World War II. And, more recently, Tim Berners-Lee saw the potential of the Internet by inventing the World Wide Web. The UK has also been a world leader in computer game design. A Level Computing provides students with the tools required to gain a strong foothold in this area which is attractive to both universities and employers alike. "Apps" are all the rage these days so there are plenty of opportunities for students who want to pursue this career path.

Course Structure

This specification is designed to:

- allow students to demonstrate knowledge of the fundamental principles of the subject
- develop problem-solving abilities in a computing context using an algorithmic approach
- demonstrate knowledge of programming through a problem solving scenario
- develop an understanding of the hardware and software aspects of Computing.

AS outline

Candidates **do not need to have prior knowledge** of Computing or ICT. In the specification there are two units which allow candidates to demonstrate their knowledge of the fundamental principles of Computing:

- Unit 1: Problem Solving, Programming, Data Representation and Practical Exercise
- Unit 2: The Computer Components, The Stored Program Concept and The Internet.

A2 outline

The A2 specification builds on the content of AS with focus on programming and problem solving including communication and networking. For the coursework unit, candidates are required to complete a report on a computer-based solution to a real problem that they have identified:

- Unit 3: Problem Solving, Programming, Operating Systems, Databases and Networking
- Unit 4: The Practical Project.

A full specification can be downloaded from here:

<http://web.aqa.org.uk/qual/gce/pdf/AQA-2510-W-SP.PDF>

A Level Physical Education

AS Examination 1580

PHED 1

Opportunities for and the effects of leading a healthy and active lifestyle.

60% of AS, 30 % of A2

2 hour written examination

84 marks

Two sections

Section A – six structured questions

Section B – application of theoretical knowledge to a practical situation

These cover the areas of Applied Exercise Physiology, Skill Acquisition and Opportunities for Participation

PHED 2

Analysis and evaluation of physical activity as a performer and / or in an adopted role/s

40 % of AS, 20 % of A2

Internal assessment with external moderation

100 marks

Candidates perform, analyse and evaluate the execution of core skills / techniques in isolation and in structured practice as either a player / performer and in an adopted role or two adopted role

A2 Examination - 2580

PHED 3

Optimising performance and evaluating contemporary issues within sport

30 % of A2

2 hour written examination

84 marks

Three sections

Section A – how exercise physiology can optimise performance

Section B – how application of psychological knowledge can optimise performance

Section C – contemporary influences in sport and their impact on the performer

PHED 4

Optimising practical performance in a competitive situation

20 % of A2

Internal assessment with external moderation

100 marks

Candidates perform, analyse and evaluate their own performance, identify weaknesses and suggest causes and appropriate corrective measures

The content will address current contemporary topics in sport such as the impact of technology, commercialisation, ergogenic aids and barriers to participation. Both As and A2 will study in depth, skill acquisition, physiological and psychological factors affecting participation and performance, the organisation and history of sport and factors affecting training and actual performance at elite level.

It is hoped that several lectures, visiting speakers and local trips to sports clubs will be incorporated in the delivery of the course.

General Studies

This is a compulsory course for all Sixth Formers

Awarding Authority AQA
Specification 2760

http://web.aqa.org.uk/qual/gce/humanities/general_studies_a_noticeboard.php?id=10&prev=10

The General Studies course is an integral component of the AQA Baccalaureate, broadening and complementing the AS programme. As a pupil, you will be encouraged to think across specialist subjects, engage with important contemporary issues, and develop your thinking skills, capacity to construct arguments and ability to draw conclusions. Through General Studies, you will improve your debating, communication and presentation skills.

At AS, the specification builds upon the wide base of knowledge you acquired through studying a broad range of subjects at GCSE. You will consider the nature of knowledge, truth and belief; analyse data; information, ideas, opinions and argument; examine questions, form values, make judgements and draw conclusions. There are two units:

Unit 1: Culture and Society.

The topics include the place of culture in society, creativity and innovation, beliefs and values, media and communication, politics and society, law and ethics.

Unit 2: Science and Society.

The topics include the scientific method, social responsibility of scientists, science and technology, social and economic progress, social science and mathematical reasoning.

Each Unit is assessed through a written paper of 90 minutes duration. Each paper comprises a comprehension section with objective questions, followed by structured questions requiring a written response based upon source material.