## 想 <br> SOLIHULL

# Sixth Form Subject Choices 2021-23 



## SOLIHULL

## Sixth Form <br> September 2021

There are approximately 300 pupils in the Sixth Form at Solihull, a third of whom usually enter the Lower Sixth from other schools. The school offers a very wide range of subject choices for A Level and achieves outstanding academic results. Historically, approximately $90 \%$ of our leavers secure places at their chosen university and we have a very strong record in gaining offers from Oxford, Cambridge and in the fields of Medicine and Engineering.

Academic success is clearly very important for pupils. However, the school also provides a wealth of cocurricular opportunities through the ASPire programme, sport, drama, debating, music, outdoor education and a very wide range of other activities. Pastoral care in the Sixth Form is also of the highest standard with a number of dedicated staff on hand to ensure the well-being of students.

In recent years the school has made substantial developments to its facilities. 2015 saw the opening of our Sixth Form Centre, The Cooper Building. This four-storey innovative building is a major development for the school and provides state-of-the-art facilities for advanced study and all aspects of Sixth Form life.

Solihull School Sixth Form aims to challenge its students, not only through its academic programme, but also through the many ways in which students at this level can contribute to the wider community. Students are encouraged to involve themselves in an array of co-curricular activities and to lead the rest of the school by example. It is through such diversity and responsibility that our students explore their potential and discover their strengths.

## Contents

THE SIXTH FORM CURRICULUM ..... 1
NON-ACADEMIC LIFE ..... 2
ENTRY ..... 4
SIXTH FORM SUBJECT CHOICES 2021-2023 ..... 5
ART AND DESIGN - FINE ART ..... 6
BIOLOGY ..... 7
BUSINESS ..... 8
CHEMISTRY ..... 9
CLASSICAL CIVILISATION ..... 10
COMPUTER SCIENCE ..... 11
DESIGN AND TECHNOLOGY - PRODUCT DESIGN ..... 12
DRAMA AND THEATRE STUDIES ..... 13
ECONOMICS ..... 14
ENGLISH LITERATURE ..... 15
GEOGRAPHY ..... 16
HISTORY ..... 17
LATIN ..... 18
MATHEMATICS/FURTHER MATHEMATICS ..... 19
MODERN LANGUAGES ..... 20
MUSIC ..... 22
PHOTOGRAPHY ..... 23
PHYSICAL EDUCATION ..... 24
PHYSICS ..... 25
POLITICS. ..... 26
PSYCHOLOGY ..... 27
RELIGIOUS STUDIES (PHILOSOPHY AND ETHICS) ..... 28
the Aspire programme ..... 29

## The Sixth Form Curriculum

Members of the Sixth Form will usually study three A Level subjects over two years. For the most able pupils there is the possibility of studying four subjects to A Level. All A Levels are studied as linear courses. In addition to this, all students will take part in our ASPire programme.

It must be noted that the passage from the Lower Sixth to the Upper Sixth is not automatic. Passage to the Upper Sixth and the second year of A Level study requires sustained high levels of effort and appropriate attainment throughout the Lower Sixth as evidenced by internal assessments, reports and ongoing teacher feedback. Excellent conduct, a purposeful attitude to work and co-curricular activity, and role model qualities are expected of all members of our Sixth Form community.

The range of subjects is set out below. We cannot guarantee every possible subject combination, but it is rare that a pupil's choice cannot be accommodated.

Art and Design - Fine Art
Biology
Business
Chemistry
Classical Civilisation
Computer Science
Design and Technology - Product Design
Drama and Theatre Studies
Economics
English Literature
French
Geography

German
History
Latin
Mathematics/Further Mathematics
Music
Photography
Physical Education
Physics
Politics
Psychology
Religious Studies (Philosophy and Ethics)
Spanish

External candidates will be asked to indicate their choices prior to the application interview. There is the opportunity to change those choices, timetable allowing, up until the GCSE results although late changes cannot be guaranteed. The school is willing to offer guidance about subject choice throughout the year, even before acceptance. We will discuss subject choices as part of our interview process. Advice on choices may be obtained from the Head of Careers.


#### Abstract

ASPire In addition to lessons specifically directed at A Level subjects, students follow an Advanced Skills Programme, known as ASPire (see page 29). This comprises certificated courses and enrichment activities. The latter allow students to discover and explore new interests and develop skills such as leadership, critical thinking, and creativity. Students in both years also attend a series of lectures by outside speakers.

Please note that whilst the school covers the cost of set texts and many in-school activities, in certain situations there may be separate additional costs. For example, there may be costs associated with trips or necessary equipment (e.g. field trips, theatre trips and a camera in photography). For further details, please speak to the Head of Department or person in charge of the club or society.


## Non-Academic Life

At Solihull we aim to encourage as varied a life beyond lessons as we can so that our students not only have the pleasure of activity when they are young, but also find and develop essential skills which will form a vital part of their adult lives. This could involve a love of the outdoors, a passion for the performing arts, learning a new skill in sport or pursuing an area within academic enrichment. Students at Solihull should see their co-curricular activities as something that they love taking part in and leave Solihull having enjoyed their experiences, taking with them a lifelong passion for something outside of the classroom. The programme also aims to provide opportunities to develop key skills such as leadership and teamwork, with the scope to work with peers, staff and pupils from other year groups. Students in the Sixth Form are encouraged to lead on cocurricular activities, perhaps after consultation setting societies up themselves or running activities for pupils in other parts of the school community.

## Co-Curricular Activities

## Academic Societies

There are over thirty academic societies which complement and enhance the academic experience of our students outside the timetabled curriculum. Academic societies and clubs that take place during the school day help to create a series of opportunities where pupils can explore new ideas, learn new skills or simply have a space in which to develop interests and passions. In addition to this, lectures by visiting speakers and a wide range of trips and visits aim to inspire pupils and to help foster a love of learning. Solihull also has one of the largest debating societies in the country. In addition to the weekly internal debates, pupils have been highly successful in a number of university competitions and have represented Central England at Oxford Finals Day for the last 7 years. Michael Buerk, award winning BBC journalist and Old Silhillian, is the Patron of this society.

## Community Relations

Throughout the year there are numerous opportunities for pupils to become engaged in and actively support charitable initiatives. These may be events, volunteering opportunities, fundraising activities and collections or donations, and are often organised by the pupils themselves. The Community Ambassadors, a student group led by Head of Community Relations, and a team of staff, are central to this organisation and pupils are encouraged to take a proactive and thoughtful approach to this key area of school life. The school is very proud of the links fostered with local, regional and international charities, and the concept of giving and being supportive, generous and altruistic are central to our school ethos and aims.

## Music

The school has a very strong tradition in music with about a third of all pupils studying a musical instrument in school. There are over forty musical ensembles meeting weekly, comprising vocal and instrumental groups. Provision is also made to support students' aural and theory progress. Involvement in ensembles is open to all pupils, whether they have instrumental lessons in or out of school. The school is also part of the Steinway Initiative and has three Steinway grand pianos. Some twenty concerts/recitals are given each year, in addition to regular outside musical engagements. A programme of workshops and masterclasses by visiting professional musicians further enhances our students' musical development and outlook. Considerable success is achieved by individuals at local and national music competitions as well as in graded music examinations. Singing in the School Chapel is strong, with highlights being the Festival of Nine Lessons, Carols at Christmas and visits to Cathedrals nationwide to sing services. A full-scale musical production is presented each year in conjunction with the Drama Department (such as Made in Dagenham, Joseph, Carousel, The Phantom of the Opera, Les Misérables and Twelth Night).

## Outdoor Education

Outdoor education is an important, very valued and continuously expanding part of school life at Solihull. Many pupils join the Combined Cadet Force in the Sixth Form, which comprises both an Army and a RAF Section. This weekly training is open to all pupils. Frequent camps take place throughout the year which include both military and outdoor pursuit activities. The Duke of Edinburgh's Award scheme is also open to pupils in the Sixth Form. Many complete their Silver and Gold Awards, even if they have not had the opportunity beforehand. The school is very lucky to have a Mountain Cottage in Snowdonia which is often used as a hub for such activities. Highly ambitious, overseas expeditions have taken place and locations have included Thailand \& Cambodia, the Himalayas and Alaska. These take pupils to incredible places, are very challenging and help young people to develop personal qualities such as leadership, resilience, independence and selfbelief, characteristics which are more important now than ever as pupils move into higher education and the world of employment. Student leadership again forms an important part of outdoor education, with some Sixth Form students becoming trained as instructors to assist with the running of Terriers (a timetabled program of Outdoor Pursuits) for the Third Form.

## Performing Arts

The school has an enormously vibrant theatrical calendar with numerous productions a year, as well as clubs, trips and workshops. Sixth Formers play a leading role in events, directing plays, playing lead roles and leading backstage and design teams. Venues such as the SMArt Performing Arts Centre, the Bushell Hall and the Drama Studio are all used for productions. The production schedule is extremely varied with a large scale musical every year, classic plays, adaptations, comedies as well as devised and contemporary work, all staged in ambitious productions of varied cast sizes. Pupil involvement and engagement in such productions lie at the heart of these activities, which command a very strong reputation for quality.

Dance also forms a vital part of school life, with this activity feeding into the vibrant performing arts scene that take place at Solihull. Dance Society is a popular and thriving activity, with numerous student leadership opportunities available.

## Sport, Health and Fitness

We aim to be a physically active school community through a range of different sports and other health and fitness related activities. The benefits of partaking in these are crucial to maintaining a balanced lifestyle, and the link between physical and mental wellbeing is something that we are keen to support throughout a student's time here. There is a compulsory games afternoon once a week with many different activities on offer from sports such as rugby, hockey and netball, (with cricket and rounders in the summer term), and activities such as Zumba, yoga, squash and badminton. Further games options are available off the school site that will incur a termly cost, such as clay pigeon shooting, golf, water sports and climbing. Whilst games afternoons are compulsory for all, there's a choice of sport, health and fitness activities for all that are run before school, at lunch and after school. These range from House sport, such as the annual One Mile Run, and $5 k$, to lunchtime activities such as badminton, cross country, squash, strength and conditioning and athletics. There are also fixtures throughout the week and at the weekend in other sports such as netball, hockey, cricket and rugby. Teams regularly compete at local, regional and national levels. Some clubs, such as sailing, also take place at the weekend. Solihull has developed a tradition of international tours, and our rugby, hockey, cricket and netball teams have toured parts of Holland, New Zealand, South Africa, France, Sri Lanka, Singapore and Malaysia in recent years.

## Entry

## Age

Candidates should normally be sixteen years of age, but not yet seventeen on 1 September 2021.

## Entry qualifications

Offers for admission to the Sixth Form will be made on the basis of an interview, a confidential report from the Head of the candidate's current school, or the Head of Middle School for internal applicants, predicted and/or mock GCSE results and a brief personal profile provided by the candidate. Such an offer will be conditional on the following minimum entry requirements:

1. School report(s) which indicate high levels of effort and attainment, excellent conduct and a positive attitude to school life, reflected in a notable contribution to curricular and co-curricular activities.
2. A minimum of two Grade 7's and four Grade 5's at GCSE, normally including Grade 5's or equivalent in English and Mathematics.
3. The required minimum grades for each A Level choice. For Further Mathematics, a grade 8 In GCSE Mathematics is required. For Biology, Chemistry, Mathematics, Physics or a Modern Foreign Language a Grade 7 in the subject is required. For all other subjects a Grade 6 in the appropriate facilitating subject is required; however, a grade 7 is recommended.

All of the above criteria 1-3 must be met.
In certain circumstances, we reserve the right to refuse an individual student's A Level combination if evidence suggests that this is not in line with his/her academic profile. This decision would only be taken after consultation with the student and his/her parents. The Headmaster will consider all aspects of each candidate's application and is the final arbiter in all cases.

## Scholarships

Sixth Form Scholarships are available to pupils with exceptional academic ability or specific areas of cocurricular talent. Further details on these scholarships are available from the Admissions Team.

## EXTERNAL CANDIDATES ONLY

## Interviews

Interviews will be held between 5 and 10 February 2021. Provisional offers of admission will be made in early March.

## Applications

Registration forms, scholarship application forms, and other details are available from and should be returned to Mrs Nicolette Mullan, Admissions Registrar, Solihull School, Warwick Road, Solihull, B91 3DJ. Telephone: 0121705 4273, e-mail: admissions@solsch.org.uk. They can also be downloaded from the school's website: www.solsch.org.uk.

The closing date for all external Sixth Form applications, including scholarship applications, is Thursday 7 January 2021.


## SOLIHULL

## Sixth Form Subject Choices

## 2021-2023

# ART AND DESIGN - FINE ART 

## The Course

The A Level specification consists of two components

## Component 1 Personal Investigation (60\%)

## Component 2 Externally Set Assignment (40\%)

In the first two terms of the Lower Sixth students work through a series of focused projects to develop their confidence, creative thinking and technical skills as emerging artists. In the final term students must set their own theme and begin the research and initial practical work for the Personal Investigation. This major body of work is developed until December of the Upper Sixth. The theme for the Externally Set Assignment is set by the exam board and students develop a body of work over several weeks which culminate in a 15 hour controlled exam in the art studios where they produce a final outcome for Component 2.

All students will experience the following range of media and techniques to develop their skills to a high standard:

- Drawing, painting, printmaking, sculpture, photography and mixed media.
- Weekly life drawing instruction.
- Guidance on composition, medium, and the most appropriate scale for their work.
- Contextual research and analysis and how to analyse artworks using formal language to express their views and opinions.
- Professional artist workshops.
- Exhibition/lecture visits.

The primary aim of this course is to develop mature and creative individuals who have the confidence to express themselves. Part of that confidence comes from being able to use media in a skilful and accomplished manner and we make no apologies for putting particular emphasis on traditional skills. Time and again our students return from university interviews smiling, having been complimented on the quality of their portfolio and then offered a place on their chosen degree course.

## Why choose Art?

This subject is essential for students wishing to continue their studies in Art and Design related courses at university including Fine Art, Sculpture, Illustration, Architecture, History of Art, Design, Product Design, Graphic Design, 3D Computer Generated Imagery, Computer Modelling and Animation, Automotive and Transport Design, Fashion Design, Theatre and Costume Design, Special Effects Makeup Design, Interior Design, Art Education and many more.

Alternatively you may choose to study Art because you love the subject, are good at it and want to keep creative thinking as part of your future. The study of Art can complement your other chosen subjects in a positive way and give you a better appreciation of the world around us. It can make you more socially and emotionally aware which in turn will make you a better colleague, manager or boss. The level of creative autonomy within the course will enable you to express your ideas effectively and develop new methods of problem solving. It will also improve your organisation and independent study skills as well as many other transferable skills that are useful in a whole range of careers.

## The Teaching Staff

All staff within the department are Bachelors or Masters of Fine Art with specialisms in figurative painting, drawing, sculpture, installation and photography. Our department technician is also a professional illustrator and can often be found advising students on ideas and techniques.

## The Facilities

The Fine Art studios occupy the entire top floor of the art department and students are given their own work space for the duration of the two year course, much like a university degree experience. Life drawing instruction is undertaken each week with a range of experienced professional models. We are able to offer students the opportunity to work in a much larger scale than is usually seen at A Level if their skills and ambition lead them down this path. Workshops by visiting artists and sculptors are an integral part of the course along with visits to relevant exhibitions. Students are also encouraged to enter local and national competitions.

What do I need to study A Level Art and Design - Fine Art?
A minimum Grade 6 in GCSE Art is required and a Grade 7 is strongly recommended.

## BIOLOGY

## The Course

Biology follows the OCR Advancing Biology (Biology B) specification. The content is as follows:
Module 1 Practical skills - this module will include planning, implementing, analysing, evaluating, independent thinking, use \& application of scientific methods \& practices, research \& referencing as well as use of instruments \& equipment. All students will also have to collate a portfolio of practical work covering 12 practical activity groups. This is not coursework but will be monitored by the awarding body and students are granted a pass/fail in addition to the academic grade.

Module 2 In this module you will learn about topics such as blood smears \& staining, flow cytometry, blood clotting, enzymes used in medical diagnosis, blood donation \& storage, the cardiac cycle, ECGs, heart attack/cardiac arrest, defibrillators, resuscitation, transpiration \& translocation.

Module 3 In this module you will learn about topics such as stem cells \& their uses, pregnancy, fetal development \& disorders, DNA bar-coding, TB, HIV/AIDS, role of the HPA, immunity, vaccinations, antibiotic resistance, lung, bowel \& breast cancer, MRI, CT scans, PET scans, bronchitis, emphysema, asthma \& asbestosis.

Module 4 In this module you will learn about topics such as exercise \& training programmes, muscle contraction, EPOC, gametogenesis, pregnancy testing, IVF, donor sperm insemination, menopause, prostate hyperplasia, crop production, food fraud, food crime, food safety, pollination and cell signaling.

Module 5 PKU, Huntington's disease, sickle cell anaemia, CF, blood groups, Down's syndrome, gene therapy, PCR, brain injuries, strokes, ethics of brain death, psychological and physical drug dependency, colour vision, Alzheimer's, control of heart rate \& body temperature, hypothermia \& hyperthermia, diabetes, kidney failure, \& kidney organ donation.

## Why study Biology?

This new A Level course is an exciting and stimulating course which builds on your knowledge gained at GCSE and looks at real world situations. You will study Biology using a context-based approach. The course is designed in such a way as to give you relevant and interesting settings in which to set your study of complex biological ideas. These range from stem cells, genetic engineering and cloning, to developments in treating the diseases that affect the world.

## What skills will I need?

The course has an emphasis on practical skills with many opportunities of practical work to encourage the development of hands-on practical skills and problem solving in a practical context. These skills, including planning, drawing, analysing and evaluating, will be assessed in a written paper at the end of the A Level course. You will develop biological literacy skills which are assessed at the end of the course using an Advance notice article. A minimum of $10 \%$ of the assessment papers will assess Level 2 Mathematics (above GCSE), but it is not a requirement to also study A Level Mathematics.

What do I need to study Biology?
Students will require a Grade 7 in either Biology GCSE or in both Core and Additional Science GCSE. In addition, a Grade 7 in Chemistry would be an advantage.

## BUSINESS

## The Course

The AQA specification consists of 10 Modules
The new AQA specification is more academically rigorous. The course content relies on your independent research into a variety of different businesses and application of business theories in the real world. This will equip you with the essential research skills required for success on university courses.

## Business Year 1

In the first year you are introduced to basic business concepts in 6 modules:

## Module $1 \quad$ What is business?

Module 2 Managers, leadership and decision making
Module 3 Decision making to improve marketing performance
Module 4 Decision making to improve operational performance
Module 5 Decision making to improve financial performance
Module 6 Decision making to improve human resource performance
This will include business aims, structure, leadership styles and approaches to risk and decision making. You will then look at the four main functional areas of a business: finance, marketing, operations management and human resource management, with a specific focus of improving business performance in each of the four areas through the use of short term business tactics.

As you are expected to apply your business knowledge to a variety of local, national and global business contexts in both manufacturing and service sectors it is essential that you keep up to date with business stories in the news. You should also have an awareness of how the wider economy influences these businesses and critically evaluate your own experiences of interacting with a variety of firms.

## Business Year 2

In the second year, you will build upon the basic business concepts to look at the long term strategic direction a business might pursue. Teaching is split across 4 modules:

## Module 1 Analysing the strategic position of a business

## Module 2 Choosing strategic direction

## Module 3 Strategic methods: how to pursue strategies

## Module 4 Managing strategic change

This will include the internal and external factors that might influence the decisions taken and how any changes might be implemented. This strategic focus will be driven from your detailed analysis of current business performance.

Assessment is based around the analysis of real business situations and you should be prepared to read widely to understand a variety of business contexts so that you can demonstrate your understanding. You should also be able to compare and contrast the approaches taken by different businesses.

## What do I need to study Business?

A minimum Grade 6 in GCSE English Literature or Language is required and a Grade 7 is strongly recommended. You will need an organised and logical approach and have the ability to manipulate, analyse and interpret quantitative and qualitative evidence. An interest in current business issues is vital. It is possible to take Business alongside Economics at A Level and a number of our pupils do so each year. However, for a small number of courses some universities prefer that only one of these subjects is studied. You do not need to have studied Business at GCSE Level to pursue the course.

## CHEMISTRY

## The Course

The OCR A specification consists of 6 modules

## Module 1 Development of Practical Skills in Chemistry

Module 2 Foundations in Chemistry
Module 3 Periodic Table and Energy
Module 4 Core Organic Chemistry and Analysis
Module 5 Physical Chemistry and Transition Elements
Module 6 Organic Chemistry and Analysis

## Why study Chemistry?

- If you enjoy abstract thinking, analysis, problem solving and the application of ideas to new situations, Chemistry is an excellent A level choice.
- Chemistry supports other subjects, in particular Biology, and it is a requirement for students wanting to study Veterinary Science, Dentistry, Pharmacy or Medicine.

As well as being an academic subject, Chemistry involves a good deal of practical work, preparing candidates for the practical endorsement.

## Medicine

Chemistry, one other science, and one other subject is the general requirement at A Level. Most universities require Biology as the second science. We would advise students, therefore, to include both Chemistry and Biology in their choices at A Level, to give them access to the full range of courses available.

## Veterinary Science

Chemistry and Biology are required at A level along with one other academic subject.

## Dentistry

All of the universities require Chemistry as one of the necessary A levels and the majority require Biology along with one other subject.

## Other Careers

Pharmacy, Forensic Science, Medicinal Chemistry, Astrochemist, Atmospheric Chemist, Fine Fragrance Evaluator and Chemistry combined with lots of other subjects or options to name but a few.

[^0]
## CLASSIGAL CIVILISATION

## The Course

Modules will be chosen from a wide range of topics, including literature, philosophy and thought, and material culture.

## What is Classical Civilisation?

- The world of Classics is all around us: in our literature, our theatre, our art, our philosophy and still there to be seen at Hadrian's Wall, Bath and Lunt Fort outside Coventry (to name but a few sites in this country). Classics is thriving in schools and universities. Indeed, television and film are showing an increasing interest in the Ancient world, on topics such as gladiators, Pompeii, the Trojan War, Boudicca, Alexander the Great, and the society and culture of Greece and Rome, and more and more theatres are putting on productions of not only Ancient Drama, but also drama inspired by the Ancient World and the people who were part of that world.
- The modules have been chosen to encompass as much of the Classical World as humanly possible looking at the literature, society and people of the Classical World.

The World of the Hero: In this module students will study both Homer's lliad and Virgil's Aeneid, epics which are the foundation of Western, if not World, literature. Students will develop an increasingly sophisticated knowledge and understanding of the epics themselves, the way in which they were composed and the religious, cultural and social values and beliefs of its society. The idea of heroism will be discussed, allowing students to consider what makes a hero, as well as the similarities and differences between an ancient and a modern hero. The history and politics of these epics will be explored, looking at how history and politics influenced both Homer and Virgil, and at how we can use these epics as a prism through which we can analyse and understand our own history and politics.

Culture and the Arts: In this module students will either study the Greek Art of the 6th-4th centuries BC, or the Greek Theatre of the same time period. This was a period of great change in the Greek world and this is reflected in the art and theatre that was produced. This module will allow students not only to gain a thorough knowledge of Greek Art or the Greek Theatre, but also to develop their understanding of, and insight into, the context in which the art, both in term of pottery and sculpture, and in terms of the plays produced, was created, particularly the areas of religion, society, values, history, war and politics. This study will hone students' visual, analytical and literary skills, develop their ability to offer critical analyses, and enable them to articulate an informed personal response to a variety of different works.

Beliefs and Ideas: Love and Relationships: Ideas about love and relationships are key aspects of the literature, thoughts, and ethics of any society. In this module students will be given the opportunity to recognise and relate to the passions, frustrations and delights of love in the ancient world, and explore the ethical questions raised by these ideas - questions that are still wrestled over today. A study of both philosophy and poetry will underpin this module, as students grapple with both ancient and modern ideas about men, women and marriage, as well as exploring the nature of the 'right' and 'wrong' ways to love and be loved. Whenever possible, trips will be made to see performances of Greek Drama and relevant sites and exhibitions, and visits will be arranged to a variety of museums including the Birmingham Museum and Art Gallery, and the British Museum. Trips will also be made to different universities to hear talks by leading scholars, and every two years the Department runs a trip to a Classical site, such as Greece, or Rome and Pompeii.

## What do I need to study Classical Civilisation?

A minimum Grade 6 in GCSE English Literature, Language or Classical Civilisation is required and a Grade 7 is strongly recommended. It is not necessary to have studied GCSE Classical Civilisation or Latin to pursue the A Level course.

## COMPUTER SCIENCE

## The Course

The A Level specification consists of 3 components

## Component 1: Computer Systems - 40\%

Component 2: Algorithms and Programming - 40\%

## Component 3: Programming Project - 20\%

A level Computer science is split into two complementary sections, programming and theory which are assessed across the three components. On the programming side of the course, students can learn a programming language (chosen by your teachers from C\#, Java, Pascal/Delphi, Python and VB.Net). You will cover the fundamentals of programming, data structures, algorithms, and object-orientated programme design. The theory side of computer science teaches about the internal workings of a computer, right down to the basics of how all data is stored using binary, whether that data consists of numbers, text, pictures or even music. It goes on from there to cover aspects of computer architecture, showing exactly how data is accessed from main memory using assembly language instructions and the fetch-execute cycle. As well as covering programming the course aims to promote good programming practices such as avoiding global variables, sensible variable naming, structured programming, good re-use of code through procedures and functions, and proper commenting of code. It also covers higher level concepts such as the social and legal impact of computers, and how to go about breaking down a big problem into individual programmable steps.

## Summary of Course Content:

## Computer Systems

- The characteristics of contemporary processors, input, output and storage devices
- Software and software development
- Exchanging data
- Data types, data structures and algorithms


## Algorithms and Programming

- Elements of computational thinking
- Problem solving and programming
- Algorithms to solve problems and standard algorithms


## Programming Project

The learner will choose a computing problem to work through according to the guidance in the specification

- Analysis of the problem
- Design of the solution
- Developing the solution


## Where can it lead?

A level Computer science is naturally a strong subject to take if you wish to go on to do computer science at degree level, and although most computing-based degree courses don't require Computer science A level there are a number of software engineering courses which do. There are also other degree courses such as information technology and information systems which will be served well by a Computer science A level.

After university, there are numerous interesting fields of study and professions that you can go in to. Computer science will lead on to robotics, artificial intelligence, machine learning, cloud computing, big data processing, networking, ethical hacking, computer game development, home automation or even teaching. So much of the world uses computers nowadays that having a good understanding of how computers work and how to program them will set you up for success in many strands of life.

Numbers of computers are also increasing in many developing countries too, meaning that your skills in computer science will be very portable. The most popular programming languages in the world are based on the English language using statements such as for, while, if, else, repeat so studying computer science in an English speaking college will give you a good foundation if you wish to travel and find a job working with computers in another country.

## What do I need to study Computer Science?

Minimum grade 7 at GCSE Computer Science. Computer Science uses mathematics to express its computational laws and processes and therefore a strong mathematical grade is required.

## DESIGN AND TECHNOLOGY PRODUCT DESIGN

The Course<br>Unit 1: Technical Principles - External Exam (30\%)<br>Unit 2: Design and Making Principles - External Exam (20\%)<br>Non-examined Assessment (50\%)

This course offers you the opportunity to develop essential skills such as planning, communication, and will help you to manage complex technical problems. The course is recommended by Russell group universities for someone who is planning to apply for a degree course in Engineering or Architecture as well as a range of other creative subjects.

Product Design allows you to explore ideas of originality, to question and challenge, to envisage what could be done. In the first year you will undertake focused tasks to develop practical, graphical and analytical skills and learn about a wide range of contemporary issues including:
a. Materials, applications and performance characteristics
b. Modern industrial and commercial practice
c. Digital design and manufacture
d. The requirements for product design and development
e. Potential hazards and risk assessment
f. Protecting designs and intellectual property
g. Responsible design for manufacture, maintenance, repair and disposal
h. Enterprise and marketing in the development of products
i. Design Communication
j. How technology and cultural changes can impact on the work of designers
k. National and international standards in product design

The majority of the second year is devoted to exploring a project of your own choice. Throughout both years you will make industrial visits to well-known companies such as Morgan and Mini. Students have also recently visited local injection moulding and aluminium casting manufacturers to gain a greater understanding of these types of production.

## Why Design and Technology?

Most students go on to university to study engineering, product design, industrial design, architecture, set design or fashion. Engineering is in high demand and there are many opportunities for sponsorship or apprenticeships.

The course is academically demanding and is excellent preparation for life at university. It offers many rewarding and interesting career paths. Engineering is the fourth most common subject taken at university for the top 250 FTSE CEO's after Economics, Business and Law.

We have a dedicated Computer Aided Manufacture room equipped with commercial facilities such as 3D printers, a 3D router and laser cutters. This is complimented by excellent ICT, wood and metal workshop facilities. We offer teaching on CAD/CAM and you will learn to utilise industry standard software such as SolidWorks in your portfolio.

## What type of projects do students do?

Students choose their own design briefs and have undertaken some innovative projects in recent years. Over the last 3 years four students have been invited to finals of the Triumph Design Awards and another to the TDI Challenge Finals as recently as this year. Students have produced a variety of products including contemporary furniture, medical aids, lighting, a land yacht, sporting equipment, and many other items.

What do I need to study Design and Technology?
A minimum Grade 6 in GCSE Design and Technology is required and a Grade 7 is strongly recommended.

## DRAMA AND THEATRE STUDIES

## The Course

The Edexcel specification consists of 3 components

## Component 1: Devising (Practical)

- You will study an extract from a play and devise an original piece of drama from it, applying the methods of a theatre practitioner to your work.
- As well as the performance you will create a written portfolio and be marked on both the performance and portfolio.
- For this component you can choose to perform as an actor, or can undertake the role of a designer (costume, lighting, set, sound).
- This component is internally assessed by your teacher and externally moderated.


## Component 2: Text in Performance (Practical)

- In this component you will perform 2 pieces; a monologue or duologue from a play of your choice and a group piece of an extract from a different play.
- As part of this component you can choose to perform as an actor, or can undertake the role of a designer (costume, lighting, set, sound).
- This component is externally assessed by a visiting examiner.


## Component 3: Theatre Makers in Practice (Written)

- The 2 and a half hour written exam covers 3 areas:

1. A live theatre evaluation.
2. Page to stage realisation of one extract from a performance text as an actor and designer. (Modern play)
3. The creation of a directorial concept for a complete performance text, using the methodology of a practitioner, making the text relevant for a contemporary audience (Classic Text)

## What is Drama and Theatre Studies?

Drama and Theatre offers students the opportunity to explore drama as a practical art form, in which ideas and meaning are communicated to an audience through choices of form, style and convention. As part of the course, Theatre Studies students are required to watch and analyse live productions, often attending at least ten a year, developing their ability to understand theatrical conventions and articulate their understanding of how theatre makers communicate meaning to an audience. There are also a variety of opportunities for students to create their own drama, both as a response to text and from their own collective imaginations. You will learn to collaborate effectively and creatively whilst maintaining a rigorous self-reflection and ambitious intellectual curiosity. You will explore the context and production history of texts as well as remaining independent of thought and original in your approach to realising those texts for audiences.

## Why Drama and Theatre Studies?

Theatre is possibly the most powerful and dynamic means of communication available to mankind and the A Level course encourages students to develop an independent and enthusiastic interest in the theatre arts, both within and outside school. Theatre Studies is well known as a subject that produces confident and creative thinkers who are excellent at working collaboratively, powerful problem solvers and capable of intellectual risk taking; as such it is highly valued at every institution of higher learning in the country bar none.

## What do I need to study Drama and Theatre Studies?

A minimum Grade 6 in GCSE English or Drama is required and a Grade 7 is strongly recommended. The nature of the syllabus demands that you have strong independent learning skills. It is a challenging and immensely rewarding course; a high degree of personal motivation and organisation is required. You do not need to have studied Drama at GCSE Level to pursue the A Level course.

## ECONOMICS

## The Course

The AQA specification consists of:
Individuals, firms, markets and market failure - Microeconomics (Paper 1)
The national and international economy - Macroeconomics (Paper 2)
Economic principles and issues (Paper 3 - all content examined)

## Why Economics?

"Until studying a course like economics not a lot of people are aware of how the world works, including industries, businesses and governments. I was curious about the big issues facing society today. Studying economics satisfies my curiosity."

Economics allows students to develop a new view of the world and an insight into the ways in which society operates, from the day-to-day decisions made by consumers and businesses, to the macroeconomic issues at both national and international levels. Economic theory is taught and applied to real-world current affairs and issues.

Economics is a social science which incorporates Mathematics and Statistics as well as having connections with many other disciplines (Politics, Law, Geography, Psychology etc). Its application into real life is visible and constant through many streams: politics, education, the environment, health care or simply your living costs.

The types of issues you will study include: How do markets work? Should the government intervene in the market for junk food? What is the economic case for a city congestion charge on motorists? What factors determine the level of unemployment in an economy? How do large firms dominate markets? Do we, as consumers and workers, benefit from having multinational companies operating in our economy? How can a government attempt to make markets more competitive? Why does the UK trade with other countries? Why does the value of the pound sterling fluctuate on the foreign market? How does the UK's decision to exit the EU impact on the UK economy? What are the economic effects of migration? What is globalisation and how does it affect the UK economy?

## What do I need to study Economics?

A minimum Grade 6 in GCSE English Literature or Language is required and a Grade 7 is strongly recommended along with a Grade 5 in GCSE Mathematics. Economics is an essay-based subject with an increased focus on quantitative skills in the reformed specification. Certain skills are required and will be developed by the course:

- Writing in a structured way in order to develop arguments and present evaluated solutions.
- Thinking logically and being able to discuss economic issues; this requires the use of data and numerical skills.
- A willingness to read and keep up with current affairs.

It is possible to take Economics alongside Business at A Level. However, for a small group of courses some universities prefer that only one of these subjects is studied. In order to study a single honours course in Economics at a Russell Group university, A Level Mathematics is usually required. For joint honours courses (Economics \& Politics, Economics \& French, Economics \& Geography) A Level Mathematics is often not mandatory. You do not need to have studied Economics at GCSE Level in order to pursue the A Level course.

## ENGLISH LITERATURE

## The Course

English Literature A Level strives to develop the students' appreciation of the ways in which literature written in English has developed from the fifteenth century onwards. The course will allow opportunities for students to study a range of prose, drama and verse from a number of different genres and historical periods. There will also be opportunities for the pupils to develop their creative writing skills through original and recreative tasks.

## Unit 1: Poetry

Written examination: 2 hours (30\% of A Level)
Section A: Study of a pre-1900 poet, e.g. Chaucer, John Donne, John Keats, John Milton, Christina Rossetti.
Section B: Study of a pair of post-1900 poets, e.g. Thomas Hardy \& T.S. Eliot, Philip Larkin \& Carol Ann Duffy.

## Unit 2: Drama

Written examination: 2 hours (30\% of A Level)
Section A: Study of a single Shakespeare play, e.g. King Lear, Hamlet, The Tempest, Antony and Cleopatra
Section B: Study of a pair of plays - one pre-1900 play, and the other post-1900, e.g. Harold Pinter's Betrayal and Oscar Wilde's Lady Windermere's Fan

## Unit 3: Unseen Prose \& Poetry

Written examination: 2 hours (20\% of A Level)
Section A: Analysis of an unseen prose passage. Candidates choose whether to analyse a passage from the period 1880-1910 or rather to select one from the period 1918-1939.
Section B: Candidates will respond to their reading of an unseen poem. The poem may be taken from any period or genre.

Unit 4: Prose Study (Coursework)
Coursework: 2500-3000 words (20\% of A Level)
The candidates will write a coursework piece based on their reading of two prose texts. The texts must be by different authors. One must be published pre-2000 and the other post-2000, e.g. The Great Gatsby and The Reluctant Fundamentalist.

## Why English?

- Our aim is to develop independent thinkers who love debate and exploring literature, as well as helping you to write fluent and coherent answers to challenging questions.
- English literature explores ideas relating to ethics, identity, history and philosophy
- In recent years, students have studied Shakespeare, F. Scott Fitzgerald, Geoffrey Chaucer, John Donne, Mohsin Hamid, John Keats, Philip Larkin, Carol Ann Duffy, Oscar Wilde, and Harold Pinter.
- Students consider not only the written word, but also the contexts in which the texts were written and received
- English is a discussion-based subject, encouraging you to express your own opinions and to learn the value of those expressed by others.


## What can I do with a qualification in this subject?

The study of literature is recognised as not only furnishing the student with skills in communication, interpretation and debate, but also providing a springboard into a wide range of university and career choices, including Law, Journalism, Philosophy, Politics and Social Sciences. All jobs are to do with communication and relationships. Analysing detail and organising disparate ideas into a coherent argument are crucial skills in many areas of work. Understanding words and contexts is an invaluable skill, as is the ability to discuss and appreciate matters of an ethical nature.

## Co-Curricular Opportunities

In recent years, students have had the opportunity to see theatre productions at the National Theatre, as well as the RSC. There have also been trips to Derby and Leicester. In addition, students have attended lecture days at other schools and also welcomed a wealth of visiting speakers to Solihull to address the English Society.

## GEOGRAPHY

## The Course

Edexcel A Level

## Paper 1 - Physical Geography:

## - Tectonic Processes and Hazards

An exploration of the causes of tectonic hazards, the degree to which they can be managed, and how successful responses that can mitigate social and economic impacts can allow humans to adapt to hazard occurrence.

## - Glaciated Landscapes and Change

An exploration of how ice sheets and glaciers operate within a landscape system as glacial processes combine with meteorological, climatological, geological and lithological processes to produce distinctive landscapes.

## - The Water Cycle and Water Insecurity

An exploration of the water cycle across a variety of spatial scales and also at short and long term timescales, from global to local. The idea of water insecurity will also be analysed, as a global issue with serious consequences.

## - The Carbon Cycle and Energy Security

An exploration of the carbon cycle, and how changes to carbon stores and fluxes are a result of physical and human processes. This topic will also delve into anthropogenic climate change, and the range of adaptation and mitigation strategies that could be used.

## Paper 2 - Human Geography:

- Globalisation

An exploration of increasing globalisation and interdependence around the world, and the consequential unequal, environmental, and cultural impacts that may arise from this.

## - Regenerating Places

An exploration of places as dynamic entities, understanding how they change over time, and the impact of regeneration schemes on individuals and communities.

## - Superpowers

An exploration of how superpower dominance has changed over time, and the impact these changes have on global economy, global politics and the environment.

- Migration, Identity and Sovereignty

An exploration of how globalisation movements have led to international migration, and the impacts this has on global governance, of both national and global issues.

## Paper 3 - Synoptic Geography:

The synoptic investigation will be based on a geographical issue within a place-based context, rooted in two or more of the compulsory content areas.

## Investigative Geography (NEA)

The non-examined assessment is an independent geographical investigation conducted by each candidate based on primary and secondary data. There will be a residential field course to support this element, to enable primary data collection.

## Why study Geography?

If you pick up a newspaper you will be aware that much of what you read is directly related to the geography you study in school. It is a subject that helps you to understand the issues that directly affect everyone, and it helps you to make informed decisions.
Geography encourages you to develop a wide range of graphic, numeric and written skills. You will learn vital study skills of research, note-taking, presentation, use of ICT and analysis of data. These skills make you highly sought after in the work place.

## What can I do with a qualification in this subject?

Geography is an opening to a wide range of subjects - including law, medicine and accountancy. By studying geography you will be encouraged to think deeply and laterally. You will learn to analyse, discuss, evaluate and justify ideas, problems and issues to become a successful independent learner. You will acquire a large number of skills, such as data handling, essay writing, giving presentations and investigative skills.

## What do I need to study Geography?

A minimum Grade 6 in GCSE Geography is required and a Grade 7 is strongly recommended. In addition, wide background reading, good essay writing technique and an interest in independent research are important.

## HISTORY

## The Course

The AQA A Level specification consists of 3 units
Unit 1-Tudor England 1485-1603
How did Richard III end up buried under a carpark in Leicester? Why did Henry VIII break from Rome and establish the Church of England? Why was Mary I 'bloody'? How did Elizabeth, a 'mere woman', rule England for 45 years?

## Unit 2 - Cold War 1945-91

Why did the wartime allies fall out so quickly? How close to nuclear extinction did we come during the Cuban Missile Crisis? Did America 'win' the Cold War?

## Unit 3 - Coursework

This allows you to investigate a historical issue which interests you and to write an essay about it which will count for $20 \%$ of the A Level.

## Why History?

- Firstly, it is interesting! If you do not have at least some curiosity about the past and why things happened the way they did then you probably won't be reading this.
- The intention of this course is to provide a contrast to the predominantly modern history which makes up most GCSEs. It is a mixture of British and European, traditional and modern history, and should provide a varied and stimulating course enhanced by trips abroad: in recent years the department has visited Moscow, St Petersburg, Washington and New York.
- Lessons involve discussing your research, making presentations to the rest of the class, and arguing your point in debates. Smaller classes mean there is much more opportunity for class discussion at A Level - in fact the subject is largely discussion based.
- Ultimately you will have to demonstrate your understanding by writing essays, answering source base


## What can I do with a qualification in this subject?

The study of History develops - to use a piece of jargon - 'transferable skills'. This means that someone with A Level History can read a piece of information, analyse it, pick out the important points, assess whether it is biased or not, put together a written report and argue their case using the available evidence. These skills are highly prized in any number of professions, most notably law, but also business, journalism, the media, the civil service, advertising and many others. History is considered to be an academically rigorous subject and is respected by university admissions tutors and employers alike.

## What do I need to study History?

A minimum Grade 6 in GCSE History is required and a Grade 7 is strongly recommended.

## LATIN

## The Course

The OCR specification consists of 4 units

## Unit 1 Latin Language (unseen translation)

## Unit 2 Prose Comprehension

## Unit 3 Latin Prose Literature: a selection from Cicero, Tacitus, Livy, Caesar and Pliny

## Unit 4 Latin Verse Literature: a selection from The Elegiac Poets, Virgil, Horace and Catullus

## Why Latin?

Do you want to time travel?

- After the hard work of the GCSE years, which are designed to lead to linguistic competence, Latin at A Level allows you to read and appreciate a diversity of Latin literature.
- The texts will range from history to epic to love poetry and those texts will present a picture of how the Romans saw themselves, their empire, their gods and even their women.
- The exams will demand the capacity to translate and understand unseen texts and to analyse and write essays about two prose set texts and two verse set texts, which will be studied throughout the course.
- The linguistic challenge of Latin is considerable, but that challenge is a substantial help to the learning of other languages. In addition, the study of ancient texts leads you into a world different from our own, but a world which has had massive influence upon our literature, our legal system, our architecture and art, our values and our view of ourselves.


## What can I study with Latin?

Latin may be chosen for A Level in combination with many other subjects as it complements and contributes to our understanding of all subjects, especially Modern Foreign Languages, History, English and Mathematics. If taken further at university, Latin may be studied for a degree in its own right or in combination with, for example, English or French. Many universities, including Oxford and Cambridge, also teach Ancient Greek from scratch so that candidates who have studied Latin can take their Classics courses. The logical and linguistic demands of Latin also prove a very good preparation for those studying Law.

## What do I need to study Latin?

A minimum Grade 6 in GCSE Latin is required and a Grade 7 is strongly recommended.

# MATHEMATICS/ FURTHER MATHEMATICS 

## The Courses

Mathematics leads to a single subject award, whereas Further Mathematics encompasses both Mathematics and Further Mathematics A Level. We also offer Further Mathematics at AS Level in the Upper Sixth. Please note that full Further Mathematics can only be taken as a fourth A Level.

## Mathematics A Level

Students in Mathematics will sit three 2 hour examinations at the end of the Upper Sixth - Paper 1 (Pure), Paper 2 (Pure) and Paper 3 (Applied - Mechanics and Statistics). Our examination board is Edexcel. There is no coursework.

## Further Mathematics A Level

Students in Further Mathematics will sit three 2 hour examinations at the end of the Upper Sixth Paper 1 (Pure), Paper 2 (Pure) and Paper 3 (Applied - Mechanics and Statistics). They will also sit four 1.5 hour examinations at the end of the Upper Sixth - Paper 1 (Further Pure), Paper 2 (Further Pure), Paper 3 (Further Mechanics) and Paper 4 (Further Statistics). Our examination board is Edexcel. There is no coursework.

## Further Mathematics AS Level

Students can select Further Mathematics AS as an option in the Upper Sixth. The course is assessed by two 1 hour 40 minute examinations at the end of the Upper Sixth - Paper 1 (Pure) and Paper 2 (Applied). Our examination board is Edexcel. There is no coursework.
N.B: We strongly recommend that students purchase a Casio fx-991EX ClassWiz calculator for their chosen course. This calculator has the required functionality that is needed for examinations.

## How do I choose which course is right for me?

## Mathematics

- A high grade at GCSE, along with a studious nature and a strong desire to learn, are what you need to do well. The course involves the study of the techniques of Mathematics, including algebra, geometry, trigonometry, statistics, mechanics and calculus, which are in turn applied to different practical situations.


## Further Mathematics

- This is for students who have a real flair for the subject. We recommend the subject to those who are strong in the fields of Mathematics, Engineering or Physics.
- To succeed at this course, you need to be well-organised and hard-working, as well as talented! It is a demanding programme even for the most able student, but it is a rewarding challenge for those who can cope with it.
- There is a strong preference in some of the top universities for science and engineering candidates to have Further Mathematics.


## What do I need to study Mathematics?

- Mathematics: A minimum Grade 7 in Mathematics at GCSE is required.
- Further Mathematics: A minimum Grade 8 in Mathematics at GCSE is required.


## MODERN LANGUAGES

## The Courses

We offer French, Spanish and German at A Level. In addition to the courses being designed to improve and extend knowledge of the target language, students examine the contemporary culture of the country, as well as its literature and compare it to our own here in the UK.

## Grammar at A Level

A Level students will study the grammatical system and structure of the language. The end of course exams will test their use of accurate grammar and structures appropriate to the tasks set, drawing from the lists in the specification.

## Optional Content

Students study two books or one book and one film from the lists in the specification. Individual research topic: Students conduct individual research on a subject of personal interest, relating to the country or countries where the language of study is spoken.

## Assessment

## Paper 1: 2 hours 30 minutes

- Listening and responding
- Reading and responding
- Translation into English
- Translation into the language of study


## Paper 2: Written Exam: 2 hours

Two books from the list of set texts in the specification or one book from the list of set texts and one film from the list in the specification.

Students must answer either two questions from Section A or one question from Section A and one question from section $B$.

## Oral Examination Speaking

- Individual research project (minimal input from teacher)
- Knowledge of one of the sub-themes


## How it's assessed

- Speaking test: 21-23 minutes (including 5 minutes preparation time at the start of the test)
- 60 Marks
- 30\% of the A Level

In addition to the traditional A Level courses we offer in Spanish, French and German, it is also possible as part of the school's ASPire programme for us to offer alternative, hands-on language qualifications to students who have not chosen to study a language at A Level in the form of the Certificate in Languages for Business.

## Content for French:

## Year 1

- Aspects of French-speaking society: current trends
- Artistic culture in the French-speaking world


## Content for Spanish:

## Year 1

- Aspects of Hispanic society
- Artistic culture in the Hispanic world


## Content for German:

## Year 1

- Aspects of German-speaking society
- Artistic culture in the German-speaking world

Year 2

- Aspects of French-speaking society: current issues
- Aspects of political life in the French-speaking world

Year 2

- Multiculturalism in Hispanic society
- Aspects of political life in the Hispanic world


## Year 2

- Multiculturalism in German-speaking society
- Aspects of political life in the German-speaking world


## Why study a modern language?

The benefits of studying a language are wide-ranging: from learning to communicate in fresh ways to having a window into the culture of another country, from learning to express your views and listen to the views of others through the language that you are learning to studying its culture through a variety of modern media.

By learning to manipulate a language to generate your own ideas and responses, you will broaden your own horizons and appreciate the variety that other languages offer. Delivering presentations and being able to summarise your reading skills that go well beyond the classroom.

Demand for linguists from employers and top universities is also growing - for example, in the recent CBI report (Stem Skills) top businesses rated advanced qualifications in MFL as being very desirable in order to improve the UK's engineering outlook.

Within the department there are many opportunities to spend time in the country or countries where our languages are spoken and plenty of contact with native speakers who visit Solihull:

## German

- A biennial study visit to Berlin, strong links with our partner school in Hofheim, the possibility to undertake work experience in Frankfurt.
- Culture and language trip to Berlin
- Responsibility for the German Magazine "Das Alles Ist Deutschland."
- Opportunity to do work experience in Germany


## French

- 5 day immersion trip for Sixth Formers to Normandy


## Spanish

- Pupils have the opportunity to host a student from Argentina every two years in May (from Colegio Yapeyu)
- There is a further opportunity to go to Peru to work with the charities LAFF and Otra Cosa for six week in the summer holiday, after the Lower Sixth.
- We also offer Upper School and Sixth Form trips to Andalucía


## What do I need to study a Modern Foreign Language? <br> A Grade 7 at GCSE in the relevant language is required.

## MUSIC

## The Course

The AQA specification consists of 3 components
Component 1: APPRAISING MUSIC
40\% of A Level (listening, analysis and contectual understanding)

## This consists of ONE written exam ( 2 hrs 30 mins )

Students must study Area of Study 1 (Western Classical Tradition 1650-1910) and two other Areas of Study, from Pop Music, Music for Media, Music for Theatre, Jazz, Contemporary Traditional Music or Art Music since 1910.

Students must be able to use knowledge and understanding of the musical elements within each genre, namely melody, harmony, tonality, structure, timbre, texture and rhythm.

## Component 2: PERFORMANCE

$35 \%$ of A Level (solo and/or ensemble as instrumentalist or singer)
A programme of pieces lasting between 10-12 mins in total performed as a single recital. It is anticipated that pieces of grade 6 level will be marked as 'standard' level of difficulty; pieces above this standard will attract weighting of an extra $2-4 \%$ in marks. Performances are marked with reference to Technical Control (pitch, rhythm, tone, ensemble skills) and Expressive Control (tempo, dynamics, phrasing, articulation).

## Component 3: COMPOSITION

 $25 \%$ of A LevelTwo compositions to be completed, lasting between 4-8 mins in total.

## Composition 1: set to a brief (Bach Chorale) Composition 2: free composition

## Why study Music?

If music is your passion, this A Level course will give you two years of bliss! The AQA course is designed to build on the range of listening, performing and composing activities covered in GCSE music. You will be exposed to a reasonably broad spectrum of music and can perform in a style most appropriate to your experience and skill, but you should be aware that there will be a focus in a number of the units on the detailed study of classical 'art' music repertoire. The course encourages the skills of analysis and criticism and helps you to develop your critical thinking through music composition. Clearly you will also develop your practical skills, as well as enhancing listening and aural abilities. Essay writing is an important facet of the course and there are opportunities for you to develop your powers of musical criticism through the study of set works and topics.

## What can I do with a qualification in this subject?

The course is essential for music degrees and is useful for performing arts/media studies courses. It offers a balanced practical and theoretical course. A number of Music A Level students in the past have gone on to read music at university or to Music College to pursue performance on their principal instrument. However, the A Level music course develops a wide range of skills which are also applicable in situations outside music itself, notably analytical ability, a sense of historical perspective and the self-discipline and confidence that come from performing in public. Music A Level is recognised by all universities, who welcome the subject as a qualification for almost all their degree courses. Many other subjects go well with Music, from Humanities and Languages to Mathematics and Sciences.

What do I need to study Music?
A minimum Grade 6 in GCSE Music is required and a Grade 7 is strongly recommended as is Grade $V$ theory.

## PHOTOGRAPHY

## The Course

The A Level specification consists of two units

## Unit 1 Personal Investigation (60\%)

## Unit 2 Externally Set Assignment (40\%)

In the first two terms of the Lower Sixth students work through a series of practical projects to develop their confidence, creative thinking and technical skills as emerging photographers. In the final term students must set their own theme and begin the research and initial practical work for the Personal Investigation. This major body of work is developed until December of the Upper Sixth. The theme for the Externally Set Assignment is set by the exam board and students develop a body of work over several weeks which culminate in a 15 hour controlled exam in the photography suite where they produce a series of final outcomes for Unit 2.

All students will experience the following range of media techniques to develop their skills:

- Technical instruction on how to use a DSLR camera including guidance on composition, exposure, depth of field etc.
- Studio and location practice.
- An introduction to 35 mm film and wet process dark room techniques where relevant.
- Contextual research and analysis and how to analyse photographs using formal language to express their views and opinions.
- Instruction on the use of Photoshop and digital manipulation.
- Visiting professional photographer workshops.
- Exhibition visits.

The primary aim of this course is to develop mature and creative individuals who have the confidence to express themselves. Part of that confidence comes from being able to use a camera in a skilful and accomplished manner and we put particular emphasis on traditional skills. Time and again our students return from university interviews smiling, having been complimented on the quality of their portfolio and then offered a place on their chosen degree.

## Why choose Photography?

This subject is essential for students wishing to apply for courses in Photography or related courses involving digital media and manipulation at university including Professional Photography, Commercial Photography, Fashion Photography, Video Art, Visual Communication, Film and Television Production, Digital Media, Games Design, Fine Art, Photography Education....and many more. Alternatively you may choose Photography as a complete change to your other science or essay based subjects. It's worth remembering that the study of Photography can complement your other chosen subjects in a positive way and give you a better appreciation of the world around us. The level of creative autonomy within the course will enable you to express your ideas effectively and develop new methods of problem solving. It will also improve your organisation and independent study skills as well as many other transferable skills that are useful in a whole range of careers.

## The Teaching Staff

All staff within the department are Bachelors or Masters of Fine Art with specialisms in photography, figurative painting, drawing, sculpture and installation. Our department technician is also a professional illustrator and can often be found advising students on ideas and photographic processes.

## The Facilities

Students have exclusive use of three dedicated photography studios along with two IT suites that are available to use throughout the normal day and after school. Photoshop software is available in both IT rooms as well as in other selected places around the school. The studios are equipped with various backdrops, light cubes and lighting equipment. Workshops by visiting professionals and location work are integral to the course along with visits to relevant exhibitions. Our photographers enter local and national competitions.

## What do I need to study A Level Photography?

A minimum Grade 6 in a creative subject (Art, Drama, Design and Technology or Photography) and a genuine interest in the subject is required.

## PHYSICAL EDUCATION

## The Course

The OCR specification consists of 4 units
Unit 1 Physiological factors affecting performance: This theoretical unit looks at applied anatomy and physiology, exercise physiology, biomechanics and technology. (30\%)

Unit 2 Psychological factors affecting performance: This theoretical unit involves skill acquisition and sports psychology. (20\%)

Unit 3 Socio-cultural issues in physical activity and sport: A theoretical unit where pupils will develop a knowledge and understanding of sport and society and contemporary issues in sport. (20\%)

Unit 4 Performance in physical education: Perform or coach an activity and complete a verbal evaluation and analysis of a sporting performance. (30\%)

## What is the course about?

- The course is very sport science based. Whilst there are elements of the course which operate through a practical medium, the large majority of lessons are theoretical.
- The anatomy and physiology sections of the course deal with how the human body works during exercise and examines the relationship between training and performance. The psychological aspect deals with how we acquire skills and how we can mentally deal with competition. The socio-cultural area looks at the routes to sporting excellence in the UK and the use of technology in sport. For the practical element you should play at representative level.


## Why study Physical Education?

If you have a passion for sport and want to learn about how performance can be improved through theoretical learning, then this is the right course for you. You may want to move on to a related career or higher education course, or improve your own sporting performance.

## What do I need to study Physical Education?

A minimum Grade 6 in GCSE Physical Education or Biology/Core and Additional Science is required and a Grade 7 is strongly recommended. In addition, a sport must be offered, one of which must be performed to a high (county or 1st team) standard. It is not necessary to have studied Physical Education at GCSE in order to pursue the A Level course.

## PHYSICS

## The Course

## Unit 1 Measurements and their errors

## Unit 2 Particle Physics and quantum mechanics

## Unit 3 Waves

## Unit 4 Mechanics and materials

## Unit 5 Electricity

## Unit 6 Further mechanics and thermal physics

Unit 7 Fields and their consequences

## Unit 8 Nuclear physics

## Unit 9 Optional Topic: Engineering Physics

## Why study Physics?

- Physics is the study of the fundamental laws of nature which underpin the whole universe, from sub-atomic particles through to the motion of galaxies through the cosmos.
- You will study how the world behaves and how the laws of nature operate; develop an understanding of the link between theory and experiment; come to appreciate how Physics has developed and is used in present day society.
- There is a bi-enniel trip to CERN, Geneva, the largest particle accelerator in the world; we normally go over a weekend in March.
- A qualification in Physics is useful preparation for careers in engineering, architecture, medical sciences and dozens of other jobs. Physics develops logical and analytical thinking, both of which are highly valued by employers. Recent reports on university options have confirmed that the physical sciences and engineering provide the some of the best best career prospects in financial terms.


## Practical work

You will do six required practical activities in each year of the course. As the course progresses, you will need to demonstrate your competence in various skill areas to lead to endorsement on your exam certificate. Also, some of your questions on your theory exams will be based on these required practicals. Other practical work will be done, both to train you in practical skills and to illustrate the theory you are learning.

## Engineering

Although Engineering has many branches, Mathematics plus Physics provide a good base for a wide range of courses. Chemical Engineering requires Chemistry. Most Engineering courses require a strong understanding of Mathematics.

## The Exams

Paper 1 covers the material from the first year of the course and Further Mechanics
Paper 2 covers most of the material from the second year of the course
Paper 3 covers practical skills, data analysis and the Engineering Physics Option.
The papers contain a mixture of long and short answer questions and some multiple choice questions.

## What do I need to study Physics?

Students will require a Grade 7 in either Physics GCSE or in both Core and Additional Science GCSE. In addition, a Grade 7 in Mathematics and the selection of Mathematics as an A Level option is strongly recommended.

## POLITICS

## The Course

Edexcel
In the first year you will study how democracy works in the UK - is it really democratic to have a government which won less than $50 \%$ of the votes? How could democracy work better - should the voting age be lowered? Should we be able to vote by text? What do the different political parties stand for? How does Government work? How is our relationship with Europe changing?

In the second year you will study the American political system - what is the Constitution? How is the President elected? What is the role of the Supreme Court? How did Donald Trump get to be president?

## Why study Politics?

- If you want to know why the world is like it is then you should study Politics. Why don't 16 year olds have the vote? Why will you have to pay $£ 9000$ tuition fees at university? Why will you have to work until you are 67 to get your pension?
- Much of the Politics course involves simply knowing a bit about the world - it is the only subject where homework could legitimately consist of 'read a newspaper'!
- In today's competitive market place for university places and jobs the candidate who stands out is one who does not just know about the subjects they have studied but who has a wider knowledge of the world - Politics can help develop this.
- The course is enlivened by talks from local MPs, a visit to watch Prime Minister's Questions in the Houses of Parliament, the opportunity to participate in the European Youth Parliament competition, and last year a trip to Washington during the Easter holiday.

In addition there are a variety of co-curricular opportunities, such as the Book Club, Film Club and the opportunity to contribute to the Politics Department publication, Marginal Gains.

## What can I do with a qualification in this subject?

- The study of Politics combines naturally with subjects like History and Economics, and should appeal to students interested in activities such as debating or European Youth Parliament.
- It develops skills which are useful in the workplace - someone with Politics A Level is literate, informed about the world, able to analyse information and argue a case based upon the evidence.
- It develops knowledge and understanding of how the world works - someone with Politics A Level will have opinions on the important issues of the day - qualities which will impress interviewers.
- These skills and knowledge provide a useful foundation for courses like PPE at university and for careers such as journalism, media, the civil service, government, law and business.


## What do I need to study Politics?

A minimum Grade 6 in GCSE English is required and a Grade 7 is strongly recommended.

## PSYCHOLOGY

Psychology is the scientific study of the human mind and behaviour (British Psychological Society, 2015).

## The Course

The AQA Specification consists of 3 units

## Unit 1 Introductory topics in psychology such as abnormality and memory

## Unit 2 Psychology in context such as biopsychology and research methods

## Unit 3 Topics in psychology such as schizophrenia, aggression and relationships

## Why study Psychology?

- Psychology is a demanding academic subject that will rapidly improve your ability to think critically, analyse and utilise research data, and construct effective arguments.
- It is counted as a science by most universities and an 'academic' A Level by all but one college at Cambridge.
- The content is highly relevant to you and your understanding of society.
- It is fascinating and fun, in between the hard bits.
- Many careers utilise Psychology, from Management Consultancy to Medicine, and it has high employability rates.
- It provides academic input into many other studies, such as History, Biology and English.
- The mapping of the human genome and its interaction with the environment gives extra fuel to many of the debates concerning human behaviour. Psychology is an evolving science and is a particularly vibrant and relevant subject at this time in our history.


## What do I need to study Psychology?

A minimum Grade 6 in GCSE Biology is required and a Grade 7 is strongly recommended.
It is also important to note that Psychology is the scientific study of the brain and behaviour and not primarily focused on counselling or therapy. Students will need to write extended discussion questions, grapple with research methods and analyse unseen material under exams conditions.

# RELIGIOUS STUDIES (PHILOSOPHY AND ETHICS) 

## The Course

The new AQA A Level course is divided into two components:

## 1 Christianity and Philosophy

## 2 Christianity and Ethics

Students will explore philosophical issues such as the nature and existence of God, the problem of evil, life after death, the role of religion in society and the challenges to religion from science and from secularism. We will also explore a range of ethical theories, and apply them to crucial ethical issues such as medical ethics, sexual ethics, abortion, euthanasia, capital punishment and animal rights.

Students will also consider the ideas and impact of key thinkers in the history of philosophy and ethics such as Aristotle, Thomas Aquinas, William James, David Hume, Jeremy Bentham, Immanuel Kant and Richard Dawkins.

The course allows students to explore Christianity in depth, looking at the diversity of views within Christian belief and focusing particularly on areas such as authority, morality and the nature of faith. Can the Bible be trusted? Does God command what is good or is goodness what is commanded by God? Is Christianity irredeemably sexist?

Does Christianity still have a role to play in today's increasingly secular world? Throughout the course the focus is on Christian perspectives, but students are encouraged to think critically about all the issues from all possible points of view and to think about how religion, philosophy and ethics interact with each other and with wider society.

## Why Religious Studies?

Religious Studies (Philosophy and Ethics) is of particular relevance to aspiring students of Philosophy, Theology, Sociology, PPE, Law, International Relations or Anthropology but it can lead to a wide range of degree courses and career paths. Universities and employers all want people who are empathetic, think logically, are able to analyse and critique arguments and who can express their views with clarity. You will develop all these skills in A Level Religious Studies. All Russell Group universities as well as Oxford and Cambridge consider Religious Studies to be a suitable subject for university preparation.

## What do I need to study Religious Studies?

A minimum Grade 6 in GCSE Religious Studies or another analytical essay based subject such as English Literature or History is required and a Grade 7 is strongly recommended.

The course is suitable for students of all faiths and none. All that is required is an open, enquiring mind and a willingness to engage fully with the issues in the course.

It is not necessary to have studied Religious Studies at GCSE in order to study the A Level course.

## THE ASPIRE PROGRAMME

## The ASPire programme - Certified Courses and Enrichment for the Sixth Form

In a world where so much emphasis is put on exam success, we have designed the Advanced Skills Programme (ASPire) to enable the development of the whole student. Our guiding principle is to provide you with opportunities to learn that go beyond the curriculum, to gain experiences outside your day-to-day life in the classroom and to develop skills that will set you up for your future.
With the application process for university and for jobs becoming even more competitive, we also believe that the ASPire programme will help you to stand out from other applicants by being able to demonstrate learning beyond the curriculum and a wide range of critical thinking and problem solving skills.
The programme is here to provide you with something different and to enable you to have fun whilst learning and developing your skills. Through this programme, we want to support you to meet your aspirations.

The ASPire programme is made up of two parts: the Certificated Courses in the Lower Sixth and the Enrichment Programme which runs through both the Lower and Upper Sixth. Details of the options available in these two programmes are given below.


## Certificated Courses

You will be asked to indicate a first, second and third choice from a selection of options. These have been designed to cover a range of interests and result in a certificate which can then be included on UCAS applications and CVs. We encourage students to consider completing the Extended Project Qualification. If academically appropriate, students can choose to study a fourth A Level subject. Alternatively, they may choose from one of our specially selected courses, which include: Gold Arts Award; Certificate in Languages for Business (French, German or Spanish); Computer Programming; Introduction to Financial Services; Introduction to Law; and, Leadership and Management.

Please note that these optional courses are subject to change.

## Fourth A Level

This option is available to those students who seek the challenge of a fourth taught course. It is important to note that Further Mathematics is only offered as a fourth A Level although all other subjects can be added as a fourth option if academically appropriate. The school would expect those doing four A Levels to be predicted at least six Grade 8's at GCSE and an 8 in each of their proposed A Level subjects. Due to the implications of this choice, it is worth students consulting with Mrs Chillcott who oversees the options process.

## Arts Award - Gold

From drama and dance to poetry and photography, take your skills, knowledge and working practices in your chosen art form to the next level. This course provides a framework for you to develop to your own strengths, whilst expressing your creative identity and building the skills you might need for a potential career in the arts. This is achieved through developing a portfolio presentation, taking part in arts events and working with practitioners in your chosen field. Please be aware that a course fee in the region of $£ 30$ applies to this option.

## Certificate in Languages for Business (French, German or Spanish)

Business is becoming ever-more international in its dimensions. This week you could be in Toulouse negotiating a deal, next week it might be Hamburg depending on what line of work you go into. The course provides a rigorous qualification mapped against the National Occupational Language Standards. During the course, you will have the chance to develop your practical foreign language skills suitable for the workplace. The course will help you to become an independent, confident and effective user of language, with the right skills to make a positive and effective contribution to international economic activity. Due to the focus being on applying language to different work-related contexts, a Grade 7 in your chosen language is recommended to take part in this course. Please be aware that a course fee applies to this option.

## Computer Programming

Many aspects of different jobs require the use of computer programming skills - from research, through to product design and even the development of new insurance products. So, whether you want to develop your programming skills in HTML or web design or to design the next million-selling app, then this might be the option for you. Guided by our expert IT department, complete courses on Microsoft's Virtual Academy to develop a broad portfolio of skills or become an expert by following your chosen learning pathway. Certification is provided by Microsoft itself. Further learning opportunities and challenges are provided through taking advantage of Codecademy's online Tutorials and the chance to take part in the HM Cyber Security challenge.

## EPQ

This is a free-standing qualification which can be taken alongside A Levels in the Lower Sixth. We follow the OCR specification. The focus of the EPQ is on the conception, design and completion of a project which reflects a real personal interest on the student's part. During the Taught Skills sessions, attention is paid to skills like using a library effectively and the internet judiciously, dissertation writing and constructing accurate references and bibliographies.

At the heart of the EPQ is the work you do in your own time. You will be allocated a mentor with whom you will meet once a week in order to track your progress throughout the qualification and to help you to develop the skills required to produce an Extended Project.
Part of the EPQ involves presenting your work at an event attended by staff and parents. You will be encouraged to think as imaginatively as possible before finalising the nature of your project. Simply writing an essay is not necessarily a good idea; creating a project which reflects involvement in an activity or process definitely is.

This could be anything: starting a small business enterprise, directing a play, creative writing, a portfolio of artwork or photographs. The EPQ is open-ended and success in it comes to those who approach their task methodically and independently. Your mentor is there to advise and help you think, not chase you for work or do any of the work for you. The EPQ is best thought of as an exercise in project management and it must be remembered that how a project is completed is just as important as its content. By completing an Extended Project you will indicate your ability to work without close supervision, an attribute that is increasingly valued by universities. The skills you develop as well as the final product will be something to be proud of.

## Introduction to Financial Services

This option is for all students who want to gain greater insight into how the financial services sector works. Students will complete the Chartered Institute for Securities and Investments (CISI) Fundamentals of Financial Services - Level 2 award. CISI's courses are highly thought of and are used by organisations operating in the financial services sector to up-skill their trainees. The course covers many aspects including looking at ethics, different types of banks, commonly used financial products, such as shares, bonds and insurance, as well as an introductory understanding of markets and how they work. This broad-ranging course will not only challenge your intellectual skills, but also your abilities to work with financial data. Please be aware that a course fee applies to this option.

## Introduction to Law

It is not just solicitors and barristers who need to know about the law. If you are planning on entering business or any form of management, then an understanding of the law and how it works will open doors for you. This is programme will help you develop your 'soft' skills, such as communication and how you present yourself to clients. The programme includes workshops on the legal profession, commercial awareness and what that means to graduate employers, a criminal case suit, public speaking and current affairs. Other workshops delivered during this course will seek to give to you an understanding of some of the basic legal principles which underpin British society - the rule of law, how laws are made and passed and offers the opportunity to apply the law to everyday factual scenarios. You will also take part in the exciting challenge that is the Mock Bar Trial. During this competition, you work as a team to prepare a case, including the cross-examination of witnesses and the accused, giving you an exceptional insight into the inner workings of the British legal system.

## Leadership and Management

In a world where organisations are facing ever-more challenges, more emphasis is being put on the quality of leadership and management. This course will help you develop your identity as a leader through teaching you about topics such as: different leadership styles; how to motivate and lead a team; and, how to deal with feedback. At the same time, by working through command scenarios, you will also learn to evaluate your own success and failure. This course will help you develop your team work, communication and problem-solving skills, as well as becoming a reflective leader and assessing your performance. As a result, it will help you hone skills that are much in demand by business. This course will provide you with a Level 3 qualification and ties into a range of ILM courses that are increasingly being offered by universities. Please be aware that a course fee applies to this option.

## Enrichment Programme

The Enrichment Programme for the Lower Sixth is designed to take you out of the classroom and to give you the chance to learn, develop and apply skills in new settings. You will take part in this activity for up to three periods a week. This is your opportunity to challenge yourself and try something new.

## Lower Sixth Enrichment

Current activities include:

- Community Service - Help the school to reach out to our local community by choosing to volunteer. Placements in the past have included local schools, nursing homes and charity shops. This programme gives you the benefit of being on a long-term (nearly 9 month) placement.
- Cooking for Univeristy - Learn to plan, prepare and cook a range of quick, easy tasty and nutritious meals on a limited budget; also covers the basics of food hygiene.
- Creative Writing - Hone your skills as a writer! Take part in this option to develop your creative writing across a range of styles, including poetry, drama, film scripts and short stories. Ideal for the potential journalist, novelist or someone who just wants to write for fun!
- Debating - Discuss some of the most challenging and provocative issues of the day. This course allows you to develop the skills of analysis, learn how to structure an argument, spot flaws and speak with confidence.
- The Engineering Education Scheme - Take part in a national scheme which provides an opportunity for 16/17 year old students who are considering a career in engineering. You will work in a team with applied science and technology companies to solve real life problems. There are limited places on this course and students must submit an application.
- Green Power Racing - Practical engineering with the need for speed. One team, a chassis and a standard engine! Students work in a team to create and race a super-charged racing machine. There are limited places on this course and students must submit an application.
- Learning to Sign - Learn the art and subtlety of expressing yourself without speaking! This exciting course provides you with the opportunity to learn British Sign Language. Please be aware that a fee applies to this option.
- Philosophy, Ethics, Culture and Society - Using a wide range of resources, this is your chance to explore big ideas about the world around you, ranging from ethical theory to extremism and post-modernism.
- Photography - Roll up your sleeves and get the developing solution out! Working through a series of miniprojects, learn to use a variety of camera types and skills in processing and developing your own photos.
- Printmaking - Experiment with a variety of images and printing onto plane \& mixed media surfaces, developing skills in mono-printing, dry-point etching and lino-printing.
- Qualification for Community Sports Leadership (QCSL) - A practical course in which you will learn how to deliver safe sporting and recreational activities. The course results in a Level 2 certificate. Please be aware that a fee applies to this option.
- Terriers - Develop your leadership and communication skills and help shape young minds by volunteering to train as an instructor for our bespoke Outdoor Education Programme for the Third Form (year 7). Take responsibility for activities such as cycle maintenance, orienteering, navigation and water safety.
- Theatre Design - For those students who want to get involved in all aspects of performance design, including costume design, managing props and set design. This course provides an opportunity to take design projects from desk to stage and much more beyond.

Please note that the certified courses and enrichment options listed here are subject to change and may not be available in a given year depending on student uptake. Those who opt for the Engineering Scheme and Green Power Racing must give a third choice option.

These sessions will be interspersed with lectures and workshops. Lectures take place approximately once every half term. Previous speakers have included a world poetry slam champion, an Olympic athlete, an explorer who has scaled Everest and a neuroscientist. Students will also take part in three workshops over the year. The purpose of these workshops is to provide a forum to encourage discussion of issues which are critical to your personal development, include that of sexual ethics.

## Upper Sixth Enrichment

In the Upper Sixth, the development of the whole student continues with our Enrichment carousel. You will take part in ten workshops spaced over the course of the year. Our aim is to enable you to take on the challenges that you may face after school by providing you with a skills tool box upon which you can draw. The emphasis in these workshops is on practical advice and skills.

These workshops and talks will be delivered by our dedicated ASPire team, who have many years of Sixth Form teaching experience. A number of the more specialised workshops are delivered through external providers. These sessions cover a wide range of topics, including:

- University finance and student loans
- Student housing issues
- Student banking
- Living healthily on a budget
- Health and wellbeing

Similar to the Lower Sixth Enrichment programme, these sessions will be interspersed with lectures provided by external speakers. These lectures will occur approximately once a term. Some of the speakers will be selected to talk on topics relevant to your life choices over the next few years, while others have been chosen in order to broaden your understanding of the world.

## solsch.org.uk


[^0]:    What do I need to study Chemistry?
    Students will require a Grade 7 in either Chemistry GCSE or in both Core and Additional Science GCSE. In addition, a Grade 7 in Mathematics would be an advantage.

