



**CRANLEIGH**  
SIXTH FORM

# CRANLEIGH SIXTH FORM SUBJECT GUIDE 2022-23

# ADVICE TO CURRENT YEAR 11 ON SIXTH FORM OPTIONS

A Levels in all subjects have now been substantially revised with new specifications. The major change of approach is that A Levels are now undertaken on a linear basis. This means that all external assessment takes place at the end of the two-year course.

The revision of A Level assessment has provided us with the opportunity to reassess what academic courses are offered to Sixth Formers and to adapt our curriculum so as to more precisely offer you the best preparation we can for university and for the world of work. Our provision therefore includes A Level courses, but also a few two-year AS courses and the Extended Project Qualification (EPQ).

Each student will select **one** of the following combinations:

	OPTIONS	CONTACT TIME	PREP
(1)	Three A-Level subjects & the EPQ	24 periods	3 subjects' worth each week + EPQ research
(2)	Four A-Level subjects (all of which continue to the end of the Upper Sixth)	28 periods for four different subjects 25 periods if Further Maths is a choice	4 subjects' worth each week
(3)	Three A-Level subjects + one two-year AS	25 periods	4 subjects' worth each week in both years

Please read the following pages to find out more about the subjects we offer and as always, don't hesitate to speak to myself, one of your teachers, your Tutor and/or your Housemaster/mistress for further information. ***You are making very important choices that will affect your future, so ensure you have consulted widely and thought carefully.***

Mr David Boggitt,  
Deputy Head (Academic)

# ART

The study of art and design will develop your ability to appreciate the visual world and to respond to it in a personal and creative way. The main teaching takes place through practical studio work but your investigation of artists and designers will help you gain an understanding of the ideas and issues that confront artists today and is an essential part of your studies.

We will be working towards the Art and Design: Fine Art A Level course offered by the Welsh Examination board under the brand name of EDUQAS. This two-year course builds on the knowledge gained at GCSE but allows for a period to develop skills and experiment in new areas before committing to developing work for assessment.

A good grade at GCSE Art is going to be the best foundation for success at A Level, although occasionally we have had students who did not take Art at GCSE. If you are creative or 'good at drawing', you may have the basic skills to succeed. However, it is worth visiting a collection of modern and contemporary art and considering whether you are able to appreciate and enjoy the aims of the artists whose works are displayed before committing to the course.

In the first year of the A Level course you will have the chance to explore and develop skills through a series of structured projects working in our four specialist areas: painting, printmaking, three-dimensional studies and photography. You will explore drawing, painting, printmaking, sculpture, ceramics, digital and lens-based media before beginning the production of your final A Level work starting in April of the Lower Sixth year.

The Extended Project Qualification (EPQ) offers assessment through the development and production of an artefact and would be a great option for someone who wishes to continue the subject in the Sixth form but not at A Level. Art AS Level - in one year - would be a taught option to provide breadth and contrast to a humanities or science-based set of subjects. There may be the opportunity - only for those committed to art and design courses after Cranleigh - of adding a second Art A Level in Photography, Textiles or Graphic Communication along with Fine Art. Anyone interested in pursuing AS or a 2nd A Level should first contact the Director of Art.

A Level work is assessed under two components. Component 1, Personal Investigation (worth 60%) has three major elements: supporting studies, practical work, with written critical and contextual analysis assessed through the production of an illustrated essay. These need to be completed by the end of January of the second year. Component 2, Externally Set Assignment (40%) incorporates two major elements: preparatory studies and the 15-hour period of sustained focus. The work is developed from one of twelve starting points given out in an exam paper on the 1st February of the second year of the course.

The structure of the syllabus allows for a wide range of responses, from the traditional to the conceptual. In addition, the course is ideal for preparing a strong and varied portfolio for progressing to a foundation course at art school, or direct to a degree course in art, architecture or design-based courses. The Art Department makes provision for students' independent study with studio spaces

where students can leave work in progress. In addition to independent studio time, students are also required to attend life-drawing classes one evening a week.

During the course, sketchbooks and journals are kept as a resource for exploring and documenting the ideas and processes investigated, as well as gathering information about the artists, designers and craftspeople you will have discovered through department books, trips to London galleries and seminars. We normally run a trip for sixth formers to a European city in the October half term; recent trips have been to Paris, Madrid, Amsterdam and Berlin. We would hope to organise a similar study trip in October 2022, based on travel restrictions at that time, with safety always a priority.

Art A Level forms part of a good general education and is accepted as any other A Level by universities as part of the UCAS application process. Art and design at degree level is normally accessed via a one-year foundation course. Sixth Form artists at Cranleigh have gone on to courses in graphic design, three-dimensional design and fashion, as well as fine art. For those thinking of studying architecture, art is almost essential as a portfolio of visual work is normally required. The experience of art and design can be useful for those thinking of careers in advertising, marketing, publishing, museums or galleries and work in the media. Success in art requires organisation, determination, creativity, dedication and imagination; transferable skills you can take into any career.

# BIOLOGY

The latest AQA A Level specification is more heavily geared towards biotechnology and preparing students for further study in this exciting and fast-paced field. Career opportunities abound in the expanding biotech sector, and AQA have responded by producing a comprehensive and engaging specification that lays the foundations for further study. To satisfy the interests of budding naturalists, the course also retains elements of natural history and ecology, along with more "traditional" anatomy and physiology, which will particularly appeal to (among others) prospective medics, dentists, vets and sports scientists.

The Lower Sixth material is very much about building foundation knowledge in preparation for a more context-led approach in the UVI. Two Lower Sixth units are subdivided into four topics:

- Biological molecules
- Cells
- Organisms exchange substances with their environment
- Genetic information, variation and relationships between organisms.

The latest AQA A Level specification is more heavily geared towards biotechnology and preparing students for further study in this exciting and fast-paced field. Career opportunities abound in the expanding biotech sector, and AQA have responded by producing a comprehensive and engaging specification that lays the foundations for further study. To satisfy the interests of budding naturalists, the course also retains elements of natural history and ecology, along with more "traditional" anatomy and physiology, which will particularly appeal to (among

others) prospective medics, dentists, vets and sports scientists.

The Lower Sixth material is very much about building foundation knowledge in preparation for a more context-led approach in the UVI. Two Lower Sixth units are subdivided into four topics:

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

After a quick recap of the L6th ecology content, inheritance, populations and speciation build on concepts encountered at IGCSE and contextualise principles of natural selection, before the final topic revisits earlier work with DNA by exploring the effects of mutations. Stem cells are considered, as are the processes whereby gene expression is controlled (including an introduction to the new field of epigenetics). This leads into DNA sequencing and recombinant DNA technology, before genetic screening and fingerprinting conclude this fascinating component.

On the other side of the course we begin with a look at the biochemistry of photosynthesis and respiration. Ecological energetics are linked to farming practices and to the roles played by micro-organisms in nutrient cycles, while the next topic looks at the way external stimuli affect the responses of both plants and animals in the control of heart rate and the functioning of reflexes, which will appeal to those with an interest in human

biology. This side of the course finishes with some work on homeostasis, which also has a human focus.

Assessment for the A Level qualification is in the form of three two-hour written exams. The first paper focuses on topics taught in the Lower Sixth, the second tests knowledge of Upper Sixth material and the third paper will test the entire specification, culminating in a synoptic essay which allows candidates to draw on knowledge from across the whole of the course. In addition, 10% of the available marks will assess arithmetic and mathematical skills.

There is no coursework, but there are twelve required practicals; the completion of which will allow an endorsement of 'pass' or 'not classified' on the final certificate (although these do not contribute to the overall grade). To pass, you will need to show mastery of a number of practical skills, which will be assessed by your teachers both during practical work and afterwards in your write-ups.

Additional information may be obtained from the AQA website (course code 7402).

# BUSINESS STUDIES

Branson, Dyson, Gates, Roddick - Virgin, Dyson vacuum cleaners, Microsoft, Body Shop: dynamic and rich people with successful firms. All these entrepreneurs have in their time followed some of the many principles laid down by a typical Business Studies course. You will study these principles and learn from the examples of these entrepreneurs as well as, importantly, from the failed ventures which have littered the business world too.

Business Studies covers the life-cycle of a business - from start-up to multinational company. Case-studies of a wide variety of businesses are used, ranging from the smallest business start-up (as may be seen on BBC2's Dragon's Den) to the largest PLCs, such as Tesco and Microsoft. It involves studying in some detail how today's businesses carry out their various functions, including marketing, finance, operations management (production) and people (human resources).

Ultimately, Business Studies is about decision-making. What price for a can of a new fizzy drink, where to sell it, where to make it, how to raise the money to fund its manufacture, how to motivate the staff, how to deal with customer complaints? The course you might embark on in Business Studies offers the opportunity to ask these and similar questions, sometimes by looking through the eyes of a corporate giant like Coca Cola and sometimes from the point of view of a relative minnow like a local brewery. The course also looks at how outside activities affect businesses and in turn how businesses react to these; for example, the effect of changes in Government policy (e.g., taxes or interest rates), levels of competition, demand, pressure groups and business ethics. In addition the A Level studies the

objectives and strategies that businesses adopt e.g. recent merger activities and the outsourcing of production to Asia.

The specification offered is the Edexcel course, which is based around the following four key themes:

- Marketing and people
- Managing business activities
- Business decisions and strategy
- Global business

At A2 level these themes will be tested across three papers, which will be a combination of calculations, short answers and essays. There is no coursework element in either year. Business Studies is a practical and dynamic subject and the approach is less theoretical than that of Economics. The ability to analyse, evaluate and write English to a good standard is important. It suits students with a more creative mind who are interested in the hands-on practicalities of how businesses operate. Students should be excited by contemporary business affairs.

*Do please note that we do not allow you to take Economics if you are also planning to take Business Studies.*

# CHEMISTRY

Chemistry is the central science of the A Level sciences. An understanding of Chemistry is fundamental in order to explore disciplines as diverse as Astronomy, Medicine, Veterinary Science and Zoology. Studying A Level Chemistry teaches and encourages you to think logically. You will learn both to use the specialist language adopted by chemists and to link experimental work with theoretical concepts – essential skills in the scientific world.

Usually you will study Chemistry in combination with the obviously congruent subjects such as Mathematics, Physics, Biology, Geography and Economics, but is also useful as a stand-alone subject through the emphasis it places on development of logical thought; a much sought-after skill in careers such as management and accountancy. If you choose it as an A Level option you will find it a challenging but ultimately fulfilling subject.

The specification you will study is the AQA 7405 A-Level Chemistry course. The specification covers each of the traditional three branches of Chemistry: physical, inorganic and organic.

The first year of the A Level aims to provide you with an understanding of the main concepts, which can be applied to the rest of A Level Chemistry and, in essence, to chemistry far beyond this level. It covers atomic structure, bonding (in some detail) and all the main mathematical applications of this subject. You will look at the energetics associated with many reactions and look at how enthalpy changes in a chemical reaction can be measured accurately.

Inorganic chemistry covers periodicity, the Group 2 and Group 7 elements. Particular attention is paid to the trends which exist within these Groups in terms of atomic radius, first ionisation energy and melting point. You will also look at redox reactions in detail. There is a large amount of organic chemistry which includes looking in detail at the following homologous series: alkanes; halogenoalkanes; alkenes; and alcohols. You will study reaction mechanisms and the industrial importance of these organic compounds. In addition there is an introduction to organic analysis and structure determination.

In the second year of the A Level, the energetics and kinetics studied in the first year are extended to include Born-Haber cycles and the energetics of solution-based Chemistry. We also look at the entropy changes associated with a wide range of chemical reactions. The other part of the module deals with advanced redox reactions and electrochemical cells. We will look at acids and bases in detail and cover different types of titration and buffer solutions. Inorganic chemistry covers the transition metals and the reactions of ions in aqueous solution. The second year also includes a large amount of advanced organic chemistry to study; in particular nitrogen-based chemistry and aromatic chemistry are studied in great detail. This module also involves advanced calculations based on many of the industrial processes studied throughout the course.

Two papers are used to examine the material detailed above, with a third paper examining all practical skills and this third

paper is synoptic across the whole of the two-year course.

Practical work is extensive and closely integrated with the course material and although laboratory work is not formally examined you are expected to complete twelve compulsory practicals that will equip you with the skills to perform a variety of practical techniques. There will be exam questions based upon these practicals.

The full specification can be found on the AQA website, Chemistry 7404-7405 (A Level).

# CLASSICAL CIVILISATION

An inquiring mind and a willingness to immerse oneself in the civilisations of the past are the qualities necessary for success in Classical Civilisation: in return, this course should be a rewarding one for you as it links well with a variety of academic interests. The specification is split between the study of Greek and Roman literature and culture. This course does not require you to have any previous knowledge of GCSE Classical Civilisation. Classical Civilisation can be combined particularly well with English, History, Religious Studies, Art, and Politics, as it considers all these disciplines and places them within the context of the ancient world.

## COMPONENT 1: HOMER, ILIAD AND VIRGIL, AENEID (SELECTIONS)

The Iliad, which is set before the Odyssey, is the story of the great warrior Achilles and his role in the battle for Troy, as enshrined in the glorious epic poetry of Homer. Virgil's Aeneid was the Roman answer to the Iliad and Odyssey. It tells the tale of Rome's mythical founder Aeneas. Read how he escapes from burning Troy, is seduced by a beautiful eastern queen, is hounded by the goddess Juno and fights for the hand in marriage of the noble Lavinia.

## COMPONENT 2: GREEK THEATRE

The Odyssey, which is set after the Iliad, is the story of the great warrior Odysseus and his return home after the Trojan War as enshrined in the glorious epic poetry of Homer. Virgil's Aeneid was the Roman answer to the Iliad and Odyssey. It tells the tale of Rome's mythical founder Aeneas. Read how he escapes from burning Troy, is seduced by a beautiful eastern queen, is hounded by the goddess Juno and fights for the hand in marriage of the noble Lavinia.

## COMPONENT 3: POLITICS OF THE LATE REPUBLIC

The Late Roman Republic was a period of upheaval and conflicting views on how the Roman state should function. These conflicts eventually led to the downfall of the Republic and the rise of the Roman Emperors. In this component learners will study the political thought of the period from Sulla's retirement in 79 BC to the death of Cicero in 43 BC, through examining Marcus Porcius Cato ('Cato the Younger'), Gaius Julius Caesar, and Marcus Tullius Cicero. The exploration of the very different ideas of three contemporary political figures brings this tumultuous period to life for learners and moves beyond simply studying ideals and abstracts, and into discussion of the practical difficulties familiar to states throughout history. By examining their distinctive attitudes, political beliefs, conduct, and impact, learners will explore the ways in which the later Republican state developed, changed, and ultimately fell.

A typical lesson will involve reading or studying a primary source followed by a discussion. Often we will turn the spotlight back from the ancient world and onto our own world to reassess the nature of our modern societies and values. We make good use of the excellent resources both locally and further afield and trips are regularly organised to visit museums and to attend lectures or theatrical productions. We also have an annual Classics trip for all year groups that visits sites of the ancient world. Recently we have been on a tour around Greece, Pompeii and Rome, and this year we will be returning to Greece.

Classical Civilisation is a popular degree course in many Universities - either standing alone or in combination with

Archaeology and Anthropology. Even a top university such as Oxford offers a degree course in Ancient and Modern History, or Classical Archaeology and Ancient History, for which neither Greek nor Latin is required. Normally five or six Cranleighans go on to study Classics-related courses at university every year.

Study of the Classics is an excellent grounding in the skills required for a wide variety of professions. Well known public figures who have found the study of classics a valuable training before going to high achievement in other fields include: JK Rowling (best-selling author of the Harry Potter series); Boris Johnson (Prime Minister); Sir Anthony Cleaver (ex-Chairman of IBM, Head of UK Atomic Energy Authority); and Chris Martin (lead singer of Coldplay).

# DESIGN ENGINEERING

The content of this title is focused towards engineered and electronic products and systems; the analysis of these in respect of function, operation, components and materials, in order to understand their application and uses in engineered products/systems that have commercial viability. The VEX Robotics competition plays a central role in the application of technical principles that encompasses mechatronics and programming.

Studying Design Engineering at A Level offers you the opportunity to build and develop a set of skills and way of thinking that transcends our subject. The problem-solving and lateral-thinking techniques developed through the subject empower you to make decisions and well-conceived solutions in your wider lives, within both education and your later careers.

The Design Engineering department is a well-resourced facility featuring three design studios equipped with machines running the latest industry standard 3D CAD modelling software. Alongside the design studios, four fully equipped workshops span the length of the department boasting the latest CAM technology including numerous 3D Printers, a large format CNC Router, a CNC Milling Machine and Laser Cutters.

Studying Design Engineering is extremely valuable for a career in any sphere of Engineering, Product or Industrial Design, Architecture or applied sciences. It is recommended that you study Maths and/or Physics alongside Design Engineering due to the applied mathematical content you will encounter throughout the course.

## ASSESSMENT STRUCTURE:

### NEA: ITERATIVE DESIGN PROJECT (50%)

A non-examined 'Iterative Design Project' is a substantial design, make and evaluate project centred on the iterative processes of explore, create and evaluate. It is worth 50% of the A Level qualification. You will be required to identify a design opportunity or problem from a context of your own choice, and create a chronological portfolio supported by real-time evidence of your project development. Innovative approaches will be required resulting in a final prototype that can be tested against the user and the market.

### WRITTEN EXAM: PRINCIPLES OF (26.7%)

This paper assesses your ability to analyse existing products, your technical knowledge and understanding of materials, product functionality, manufacturing processes and techniques. This paper also allows you to demonstrate your understanding of design thinking and wider social, moral and environmental issues that impact on the design and manufacturing industries.

### WRITTEN EXAM 2: PROBLEM SOLVING (23.3%)

This paper focuses on the application of your knowledge, understanding and skills of designing and manufacturing prototypes and products to given situations and problems. You will be required to demonstrate your higher thinking skills to solve problems and evaluate situations and the suitability of design solutions.

# DRAMA & THEATRE

At A Level we continue to use the WJEC Eduqas specification studied at GCSE which is designed to promote a balance between practical theatre making and the theoretical understanding of drama and theatre. This stimulating and engaging course encourages learners to make connections between dramatic theory and their own practice. The Drama and Theatre course is split into three components which equate to 60% practical with supporting evidence and 40% in the final written exam. Again, as with the GCSE course it is possible for students to choose to be assessed on a technical/design skill rather than acting.

## COMPONENT 1: THEATRE WORKSHOP

**20% of A Level internally assessed in YEAR 1, externally moderated**

Students are required to create a piece of theatre based on an extract from a text using the techniques and working methods of either an influential theatre practitioner or a recognised theatre company. They are given the freedom to devise and reinterpret the text. Alongside this they produce a creative process log which details the research and development of the piece and can take the format of prose, sketchbook, PowerPoint, video log, blog etc.

## COMPONENT 2: TEXT IN ACTION

**40% of A Level externally assessed in YEAR 2 by visiting examiner**

Students produce a scripted text performance and a devised performance for examination on the same day. A devised piece using the techniques and working methods of *either* an influential theatre practitioner or a recognised theatre company (a different practitioner or company

to that chosen for Component 1) and an extract from a text in a different style chosen by the student. Students then produce a process and evaluation report within one week of completion of the practical work.

## COMPONENT 3: TEXT IN PERFORMANCE

**40% written exam at the end of YEAR 2**

During the two-year course students will have studied two set texts, one pre-1956 and one post 1956 in preparation for the written exam. As well as this they will also study an extract chosen by the exam board from *The Curious Incident of the Dog in the Night-time*. They have 2 hours 30 minutes in the exam to answer three 40-mark questions which will require them to think as a director, actor and designer.]

The A Level Drama course is a multidisciplinary qualification that helps to prepare students for further study in many different areas in both the performing and entertainment industries, theatre and performance courses, but also in many other academic fields. The creative processes, teamwork, analytical skills, adaptability and flexibility that are developed within the course enhance many of the skills that are desirable across many industries, and particularly for management and leadership roles. Students who study Drama go onto further education in fields as diverse as Medicine, Languages, Literature, Art, Drama, Law, including Oxbridge and Ivy League American Universities.

As part of the course where possible students will attend approximately 8 theatre trips to experience and evaluate contemporary theatre of the highest quality in London and elsewhere.

# ECONOMICS

Economics continues to be a popular subject amongst Cranleighans. Many enjoy the new challenges it offers them, while others seek to take a subject that has real relevance in today's competitive marketplace. Whatever the choice, someone who successfully completes the course will have a thorough grounding in analysing and evaluating the functions of the modern economy.

Since Economics is based around the choices made by individuals, firms, governments and ultimately society, it is an opportunity for debate. It provides the framework for argument, on such diverse subjects as poverty, health-care, footballers' wages and the environment. The goal is to use what resources we have to make ourselves better off, and it is no coincidence that people with Economics degrees are among the best-paid graduates.

Specifically, Economics is split into two areas: microeconomics and macroeconomics. Microeconomics looks at how we should best use our scarce resources, how markets work to determine prices and output, why markets sometimes fail to work efficiently and how the government should intervene to solve this market failure. Some questions we consider are:

- Will house prices keep rising?
- Is Tesco's monopoly power a bad thing?
- Should the congestion charge be extended?
- Should the Government spend more on the NHS?

Macroeconomics involves studying the whole economy and trying to improve overall living standards. It considers how the Government should try to achieve objectives, such as raising economic growth and lowering inflation and unemployment, by altering interest rates, taxation and government spending. Macroeconomics also looks at international factors affecting the UK economy and the importance of imports and exports and the exchange rate. Some questions we consider here are:

- Should the UK join the Euro?
- How is the UK affected if the USA goes into a recession?
- Who benefits from globalisation?

The specification offered is the AQA course, which is split across two key themes:

- Individuals, firms, markets and market failure
- The national and international economy

At A2 Level these themes will be tested across three papers, which will be a combination of multiple choice, short answers and essays. There is no coursework element in either year.

Economics suits pupils who think logically and can use theories to understand how economies, markets and firms operate. It requires a clear mind and an ability to think and analyse logically. Students with a scientific/mathematical mind may benefit, as concepts and theories need to be grasped and applied. It is worth noting that whilst there is very little maths required at A Level, universities require

students applying for Economics at university to have a Maths A Level (typically at A grade or above). Students should have a desire to debate issues and a good awareness of current affairs. As a social science, halfway between arts and the sciences, Economics combines well with many other subjects at A Level.

*Do please note that we do not allow you to take Economics if you are also planning to take Business Studies.*

# ENGLISH LITERATURE

English is a popular choice for Sixth Formers at Cranleigh: currently about 60 pupils study English Literature at Advanced Level in the two years. Our aim is to ensure that, by the end of the course, our students are literate, analytically skilled and enthusiastic about literature. Cranleighans take a two year A Level course, following the OCR syllabus, with students taking their A Level papers at the end of the Upper Sixth.

Students will sit two exam papers ('Drama and Poetry pre-1900' and 'Comparative and Contextual Study', in which they are expected to develop a detailed understanding of a particular literary genre) and will also submit a 3000-word folder of coursework essays, in which they write two essays about three texts, written after 1900.

For the exams, the specific texts that students study will come from a wide and exciting range - possibilities include the following:

**Prose:** *1984* by George Orwell, *The Reluctant Fundamentalist* by Mohsin Hamid, *The Bloody Chamber* by Angela Carter, *Terrorist* by John Updike, *Dracula* by Bram Stoker or *The Great Gatsby* by F. Scott Fitzgerald.

**Poetry:** *Paradise Lost Books 9-10* by John Milton, *The Merchant's Prologue and Tale* by Chaucer or *Maud* by Alfred Lord Tennyson.

**Shakespeare:** *Twelfth Night*, *The Tempest* or *Richard III*.

**Drama pre-1900:** *An Ideal Husband* by Oscar Wilde, *She Stoops to Conquer* by

Oliver Goldsmith or *The Duchess of Malfi* by John Webster.

With regards to coursework, students have explored a really interesting variety of modern writing; the most studied texts have included *The Secret History* by Donna Tartt, *Jerusalem* by Jez Butterworth, *Selected Poems* by Philip Larkin and *Manhattan Transfer* by John dos Passos, but a wide range of other books has also been used by the department.

Lessons are taught in the newly built van Hasselt Centre, in which the English department has eight classrooms and its own library (the Leggitt Library), which is amply stocked with the sort of texts, both primary and secondary, that A Level students need to be able to maximise their potential in this subject. Each A Level class is allocated library lessons, during which they are a) shown how to use critical texts in the most efficient and effective manner and b) given time to do the wider reading that enables them to tackle the Comparative and Contextual Study paper with confidence.

Good English A Level candidates read widely and enjoy going to the theatre and discussing books and plays. They are interested in the power of words, in what motivates human behaviour and in the historical, social and political contexts in which texts were written. Anyone who is considering studying English at A Level is advised to speak to members of the Sixth Form who are currently taking the subject; the vast majority of Cranleigh A Level students thoroughly enjoy their lessons, with large numbers opting to read English at university. Results have been consistently

excellent; since the new syllabus was introduced in 2016, 22% of all grades have been A\*, 53% A\*-A and 87% A\*-B. The overall pass rate has been 100%.

# FRENCH

The Sixth Form French course aims to help you realise your full potential in French and in so doing allows you to achieve the grades you require for university entrance. The course sets out also to imbue you with a love of francophone culture and language as well as with practical skills that will serve you well in later life. A lingua franca of culture, art, cuisine, and an official language of the United Nations, the International Olympic Committee, and International Red Cross, among others, the study of French is as relevant and rewarding today as ever. French is spoken on every continent and remains the second most widely learned foreign language in the world after English. A command of the French language opens up many opportunities with French companies (France is the fifth biggest economy in the world), not to mention opportunities in Canada, Switzerland, Belgium and all of francophone Africa.

We follow the Edexcel A Level French course. The A Level course assesses the four language skills (reading, writing, speaking and listening), but also assumes a degree of awareness of the broader cultural aspects of life in the francophone world. The content of the courses is based on a number of contemporary themes and the study of literature and film is included within these themes. The following contemporary themes are a sample of what is covered throughout the course: the evolution of francophone music, the rise of the far right, freedom of expression, the positive impact of immigration, and the French Resistance. Throughout the course, you will learn to use language effectively to express your ideas, develop an argument and to analyse and evaluate.

You are encouraged to acquire a high level of grammatical competency. The principal aim is to develop confidence and competence in practical communication skills for study, work and leisure. Skills in reading, speaking, writing and listening will develop and pupils will acquire an increased knowledge and understanding of language structures.

The Edexcel A Level course also affords you the opportunity to undertake a research-based project on an area of interest. You also benefit from weekly lessons in small groups of two with the French language assistante to develop oral fluency and gain confidence in producing accurate language on the spot.

This course is suitable for you if you:

- enjoy the nuts and bolts of language learning, namely grammatical structures and syntax;
- enjoy learning about other cultures and issues in contemporary society;
- want to use a language for further study (e.g. at university);
- have a good ability to develop ideas and argue a point in your own language;
- want to work for companies with international links;
- have a good memory and a logical mind.

# GEOGRAPHY

Geography is the study of the earth's landscape, people, places, and the environment. Simply put, it helps us to make sense of the issues affecting people and nature in the world around us. It is often seen as a unique bridging subject between the natural (physical geography) and the social sciences (human geography). The analytical skills it requires are transferable to many different contexts, and geographers have a fine reputation of going on to be successful graduates and business leaders.

Geography at Cranleigh is a thriving subject with approximately 30 A Level students per year group. You will study a diverse range of contemporary issues and the processes that cause them. We also take you out to the real world, with a three-day residential field trip in the Upper Sixth as well as a number of day trips over the two years of study (please note that this residential field trip will incur a cost of approximately £300).

The course will be following the OCR specification which has been designed to give learners the knowledge, understanding and skills necessary to become engaged global citizens. Through the study of dynamic and contemporary content, learners can understand and interact with issues which affect people and places at a range of scales from local to global – and all that is in between. It is made up of the following 4 units:

## **PHYSICAL SYSTEMS (22% OF THE COURSE):**

The study of Physical Geography, which allows the inter-relationships between the land, oceans and atmosphere to be explored, developing an understanding of the processes, characteristics and

impacts on these landscapes and cycles, which shape them over time and create a number of issues when attempting to manage them. We will be studying the Coastal Landscapes option in this unit, as well as focussing on the critical importance of the carbon and water cycles to life on Earth.

## **HUMAN INTERACTIONS (22% OF THE COURSE):**

The study of Human Geography will investigate the actions, interactions and spatial patterns of people in places. It will examine how the world around us is shaped by humans, starting from the local and moving out to regional, national and international scales. Through examples and case studies learners will explore a variety of contrasting places. The concepts of inequality, interdependence, representation, identity and globalisation are particularly relevant to this component. We will be studying the Global Migration and Human Rights options in this unit, as well as, in the Changing Spaces, Making Places unit, exploring the relationships and connections between people and the places in which they live.

## **GEOGRAPHICAL DEBATES (36% OF THE COURSE):**

There will also be an exploration of, and critical reflection upon, some of the most challenging, dynamic and fascinating issues of the 21st century. The chosen topics for this unit will be Disease Dilemmas and Tectonic Hazards. The breadth and relevance of these topics mean that the course should appeal to students with various interests. The concepts of inequality, mitigation and adaptation, sustainability, risk, resilience and threshold will underpin this component.

## **NON-EXAMINED ASSESSMENT (NEA) (20% OF THE COURSE):**

The NEA component allows students to undertake an independent investigation linked to any aspect of the specification to satisfy their intellectual curiosity. This component is designed to encourage learners to deepen their knowledge and understanding of their chosen topic whilst developing a number of geographical and study skills. This project is hugely valuable for preparing you to study in higher education, regardless of the subject.

# HISTORY

History is regarded by all universities as one of the most useful and rigorous A Levels it is possible to take. Our course focuses on how the actions of individuals created the world in which we live today. As a consequence, we think History is also one of the most interesting A Levels it is possible to take.

Our A-Level course aims to build on the skills and knowledge gained at GCSE. We aim to broaden historical knowledge and introduce fresh material to widen historical perspectives. We take the AQA A-Level. There are three main topics we study across both years of the Sixth Form:

- Britain, 1906-57 (40% of the final mark)
- Russia, 1855-1964 (40%)
- The United States, 1763-1861 (20%; this is a coursework essay)

The Britain paper examines how this country underwent radical change and adapted to the unprecedented challenge of fighting two world wars in the first half of the twentieth century. We look at how a series of reforming governments responded to popular pressure to combat the crippling poverty endemic to British cities around 1900, and went on to create the welfare state in a form that is recognisable to us today. We study the sometimes tense relationship between protest groups (such as the suffragists and suffragettes) and political leaders, and look at how British society changed sometimes fundamentally in the light of rapid economic change and the seemingly unstoppable expansion of government power. By the end of the course, students will be able to understand why, as Macmillan famously claimed, Britons by 1957 had "never had it so good."

The Russia paper covers some of the most dramatic and consequential events in world history – the First World War, the Russian Revolutions of 1917, the Second World War, and the opening stages of the Cold War. We look at how Europe's most backward and inefficient economy in the nineteenth century managed to launch the world's first artificial satellite by 1957; we examine how the tsars and then the Communists managed to keep some element of control over one of the biggest and most culturally diverse countries on earth; and we try to understand how the Revolution went so swiftly from a harbinger of the dawn of a new era in world history to the horror of Stalin's gulags. On the way through this, we look closely at a variety of political leaders and insurgents, from Lenin to Nicholas II to Khrushchev, who unwaveringly thought they knew how to save Russia – and whose plans, to some extent or another, all ended in disaster.

Our coursework (non-exam assessment) is centred on the challenges facing the new United States as it, first, established itself as a viable entity, and then managed – at first successfully, and then by turns increasingly badly – the process of territorial expansion and internal consolidation. In this study, which is in large part student-led, students complete a 4,000-word essay looking at what caused the outbreak of the first really 'modern' war – the Civil War of 1861-65.

# LATIN

This challenging but rewarding course offers you the chance to transform the linguistic, historical and literary competences developed at GCSE Latin into something approaching a mastery at AS and A2. This is mainly carried out through the continuous reading of Latin literature and the close analysis of both the text and the society which produced it, from both ancient and modern perspectives.

We follow the OCR course. The course is split between 50% language and 50% literature.

Language consists of prose and verse unseen translation. There is the opportunity to do prose composition for those who are interested. Literature consists of some of the most exciting work ever written: in prose, this might be the imperial intrigues of Tacitus, the courtroom dramas of Cicero; in verse, the adventures of Aeneas in Virgil or the witty and elegant poetry of Ovid.

In general classes tend to be small, informal and provide a lively and mature forum for discussion and debate. A typical week's work will involve unseen translation and more advanced grammar work; reading, annotating and discussing the set text; composing an essay or other piece of criticism; appraising the ancient world and looking at modern parallels and differences. We encourage you to aim for a high standard of written expression and argument, as well as a sensitive and perceptive interpretation of literature, history and culture, and a sophisticated understanding of language and idiom.

All these are skills very highly sought-after, not only by university tutors, but also by employers in a wide range of fields, such

as law, consultancy, industry, the Civil Service and Foreign Office, journalism, teaching, academia, and any profession which requires skilled readers, writers and communicators who can organise their thoughts clearly and express themselves well in writing. Well known public figures who have found the study of classics a valuable training before going to high achievement in other fields include: JK Rowling (best-selling author of the Harry Potter series); Professor Susan Greenfield (who presented the series *Brainstorm* on BBC2); Sir Anthony Cleaver (ex-Chairman of IBM, Head of UK Atomic Energy Authority); and Sir Jeremy Morse (ex-Chairman, Lloyds Bank).

A Level Latin is a natural choice for those with Oxbridge aspirations and during the A Level course there are many opportunities to attend lectures or other events in Oxford and Cambridge. There is an active Sixth Form Classics Society, which is pupil-led, and which organises a wide range of academic and social activities each term.

# MATHEMATICS

Mathematics is wonderfully logical yet full of surprises; functional yet beautiful; deeply complicated, yet also stunningly simple. It is extraordinarily powerful, with new kinds of unexpected connections and hidden depths constantly being found and applied in today's modern world. Studying Maths at Cranleigh provides the opportunity to explore both the pure and applied aspects of this field, with plenty of challenges and surprises along the way.

The potential breadth of the A Level course offers excellent preparation for those wanting to pursue further study of Mathematics and is essential for most Engineering, Science, Computing, and Economics courses. Through the development of logical and analytical thought and, for a whole host of other reasons, Mathematics is highly regarded by universities and employers.

There are two course options for budding Mathematicians in Cranleigh Sixth Form:

## EDEXCEL A LEVEL IN MATHEMATICS

This is a linear course, taught over two years, with three two-hour exams at the end of the Upper Sixth, pupils will study Pure Maths in addition to both Statistics and Mechanics. The course aims to give learners an excellent foundation for using mathematics in higher education courses or other career pathways, leading students to acquire skills they can apply in a wide range of contexts. The Pure side of the course focuses on algebra, graphs and calculus, building on firm foundations built through the GCSE or IGCSE course. The applied side is split between statistics and mechanics. These introduce students to more advanced statistical

analysis, including large data sets, and an introduction to forces and motion.

It should be noted that students who fail to get a high grade at GCSE/IGCSE may struggle with this course. Students not only learn new techniques and concepts, but they are taught mathematical processes and the art of succinct but thorough communication. This course involves plenty of challenging problem solving and suits those with resilience as they will need to persevere through multi-step mathematical problems, being willing to try a variety of approaches until they arrive at the best solution.

## EDEXCEL A LEVEL IN FURTHER MATHEMATICS

Further Maths is the challenge for our most able mathematicians. It provides the opportunity for pupils who enjoy Mathematics, and/or want to pursue a Maths-related degree, to develop their knowledge and understanding significantly beyond that of the single Maths A Level. Universities and employers greatly value this qualification, particularly in highly mathematical disciplines such as Engineering, Science, Economics and Computing. The Further Maths option is a two-year commitment. Single A Level Maths is taught in the Lower Sixth year before moving on to the Further Maths course. All exams are sat at the end of the Upper Sixth year, three two-hour exams comprise an A Level in Maths and four 1.5 hour exams comprise an A Level in Further Maths.

The single A Level Maths course, studied in the Lower Sixth, gives students a strong foundation in Pure Maths with detailed study of calculus, graphs and algebra;

as well as an introduction to forces and motion in Mechanics, and statistical analysis and probability in Statistics. In the Upper Sixth, students will study a wide range of more complex topics from Matrices to Polar Coordinates; and Circular Motion to Probability Generating Functions. This is a subject choice greatly enjoyed by those with a real passion and interest in Mathematics, providing significant challenge and reward for those who undertake it.

# MUSIC

A Level Music attracts those who have taken GCSE Music and who have a strong grounding in practical music as well as a comprehensive awareness of musical styles and forms. If you perform to a high level (Grades 6-8), and have a genuine interest in a wide variety of music and how it works, you are likely to gain a great deal of enjoyment from the course and to score well.

Music has long been recognised by universities as a valuable entrance qualification and is usefully combined with subjects from the arts, languages or science disciplines. The broad range of transferable skills and techniques offered by the course - such as the need to be able to research a topic, to display analytical skills, self-discipline and teamwork - can help you in pursuing a wide range of courses at university.

The AQA A Level course is divided into three strands – performance, composition and a written examination. The performance element is externally assessed through coursework recordings of solo and/or ensemble pieces on an instrument or voice, or through music production (via technology). The composition component requires candidates to produce two pieces, which are also assessed externally; one to a brief set by the board and one free composition.

The written paper carries a slightly more substantial weighting than the two coursework elements (40%). It is designed to assess listening and analysis skills, as well as essay writing. Students study set works from one compulsory area of study (Western classical tradition 1650-1910) and a choice of two further

study areas from the following list: Pop music, Music for Media, Music for Theatre, Jazz, Contemporary Traditional Music, Art Music since 1910.

# MUSIC TECHNOLOGY

A-Level Music Technology is suitable for pupils who have a strong interest in music and wish to learn how technology has, and continues to shape musical styles and performances. The course suits performers and non-performers alike as well as those who enjoy composing or recording. It teaches you to develop analytical, listening and production skills that are directly relevant in a media-rich world along with music technology theory to understand how best to control modern studio equipment. As such the course suits creative, technical individuals looking to enrich their listening and broaden their understanding of music production.

Many pupils progress to undergraduate study in Music Technology, Sound Production/Engineering, Music Business or dual-honours courses requiring musical or technical elements. As well as these, project management and other transferable skills such as appraising, analysis, creativity and imagination are developed on the course and are widely understood and valued by universities and beyond. At School, these skills are similarly sought after and pupils will have the opportunities to mix rock concerts, support music evenings, design soundscapes for drama productions or even score films.

The course content is broadly divided into 3 sections though there is significant overlap in their teaching.

Recording and production techniques for both corrective and creative purposes; Principles of sound and audio technology, including content on theory of sound and; Development of recording and production technology, covering the understanding of how technology has developed over time

and had an impact on music production and styles. Pupils will use the wide range of technology available to them to explore a range of techniques for capturing, editing and manipulating sound including sound theory and the maths and physics of sound waves.

There is a substantial coursework (NEA) element to the course which brings together many of the skills. This involves the recording and mixing of a contemporary song (20%) and a technology-based composition to a set brief (20%) undertaken in the Upper Sixth. There is also a written listening & analysing exam (25%) and a practical production exam (35%) where pupils correct and mix stems along with an extended written assessment. Together these provide a balanced and engaging range of assessments which also enable each pupil to pursue individual interests.

# PHYSICAL EDUCATION (A LEVEL)

The Physical Education Department offers two courses in the Sixth form - the A Level Physical Education course and the BTEC Level 3 Extended Certificate in Sport.

Both courses are well suited to pupils who not only play sport to school level or above, but also have an interest in the wider aspects of sport and physical activity.

At **A Level** we follow the OCR Physical Education course which has a 70/30 split between theory and practical. The theory side of the course is split into three components:

## **COMPONENT 1: PHYSIOLOGICAL FACTORS AFFECTING PERFORMANCE**

This group of topics focuses on key systems of the human body involved in movement and physical activity. You will develop their knowledge and understanding of the changes within these body systems prior to exercise, during exercise of differing intensities, and during recovery. Application of this theoretical knowledge will enable you to understand how changes in physiological states can influence performance in physical activities and sport. You will be expected to be able to interpret data and graphs relating to changes in these body systems during exercise of differing intensities and during recovery. The assessment for this component is in the form of a 2-hour written examination at the end of the Upper Sixth year.

## **COMPONENT 2: PSYCHOLOGICAL FACTORS AFFECTING PERFORMANCE**

This component focuses on the psychological factors affecting physical activities and sports, including: models and theories that affect learning and performance in physical activities; how different methods of training and feedback work and why their effectiveness differs from person to person; group dynamics and the effects of leadership and stress on performers. Through the study of this component you will gain a deeper understanding of the underlying psychological factors that influence our performance in physical activity and sport. You will learn how to apply the theories to practical examples, giving guidance and feedback in constructive ways that are suited to that individual's personality; therefore assisting in developing practical performance in physical activities and sports. The assessment for this component is in the form of a 1-hour written examination at the end of the Upper Sixth year.

## **COMPONENT 3: SOCIO-CULTURAL AND CONTEMPORARY ISSUES**

This component focuses on the sociological and contemporary factors that influence and affect physical activity and sport for both the audience and the performer and how sport affects society. It includes the emergence and evolution of modern sport and how social and cultural factors shaped the characteristics of sports and pastimes in pre-industrial and post-industrial Britain. The impact of the modern Olympic Games will be studied as well as the impact on society of hosting global sporting events. The ever-evolving modern technology and its influence on sport performers and spectators will be

researched and practical examples will be used by candidates to show the effect of modern technology. The assessment for this component is in the form of a 1-hour written examination at the end of the Upper Sixth year.

The practical side of the course (which makes up 30% of the final mark) involves performance or coaching of one sport or activity alongside Evaluation and Analysis of Performance for Improvement (EAPI) of that sport or activity. For the EAPI, candidates give a verbal response to a performance of a peer which should identify and justify the major area of weakness within the performance to prioritise for improvement and propose a long term (2-3 months) development plan to improve the area of performance identified.

# PHYSICAL EDUCATION (BTEC)

The **BTEC** qualification we offer (Level 3 Extended Certificate in Sport) is equivalent to one A Level and is studied alongside other A Level courses. The content and assessment methods differ slightly from the A Level course and there is more of an emphasis on the vocational side of the subject, this course leans more towards preparing students for a career in the sport, leisure and fitness industry. 30% of the course is internal, continuous assessment, including the practical assessment. The theory side of the course has a mixture of assessment methods as you can see below.

The four components of study as follows:

## **COMPONENT 1: ANATOMY AND PHYSIOLOGY**

The content of this component is very similar to the A Level; the students explore how the skeletal, muscular, cardiovascular and respiratory systems function and the fundamentals of the energy systems. This component is assessed at the end of the Upper Sixth year with a 1½ hour externally set examination.

## **COMPONENT 2: FITNESS TRAINING AND PROGRAMMING FOR HEALTH, SPORT AND WELL-BEING**

Students explore fitness training methods, lifestyle assessment (including nutrition), how to conduct a client screening and how to produce a fitness programme based on individual needs. Much of the work is practically orientated and case studies are included in the study of this component. The final assessment will be an externally set case study task which the students have protected time to prepare for and then complete the task in

exam conditions at the end of the Upper Sixth year.

## **COMPONENT 3: PROFESSIONAL DEVELOPMENT IN THE SPORTS INDUSTRY**

In this component students will research the knowledge and skills that are required to access different pathways in the Sports Industry. They will take part in and reflect on a personal skills audit, career action plan and practical interview activities. The assessment for this component is an ongoing assignment which includes a report following an investigation into two contrasting career pathways, a career development action plan and participation in recruitment and selection activities. This assignment is internally set and marked.

## **COMPONENT 4: PRACTICAL SPORTS PERFORMANCE**

This component allows students to demonstrate practical skills in one team and one individual sport alongside gaining a full understanding of the different techniques involved, the tactics and the rules. The assessment is ongoing and will involve video analysis, self-analysis and justification of methods to improve performance. This assignment is internally set and marked.

Grades awarded for the BTEC course are Distinction, Merit and Pass which equate to A Level grades A, C and E. The BTEC Extended Certificate qualification is accepted by all universities as equivalent to one A Level.

As you can see the content of the A2 and the BTEC courses is wide ranging and interesting, and is certainly not an 'easy

option' as we are often led to believe in the press. The time spent in the classroom is the same as for all other subjects as we do all the practical assessment in school games sessions. Some of our students go on to follow courses in Sports Science, Sports Coaching or Sport and Leisure Management at university.

# PHYSICS

Physics is all about trying to answer the bigger questions in our universe (What is gravity? Are there additional dimensions? How did it all begin?) and some of the more familiar (Why does a boomerang come back when you throw it? How does Wi-Fi work? Is all radiation dangerous?). It allows you to gain an understanding of how and why the world around you functions as it does.

Pupils choosing Physics will study the Edexcel A Level course. This is an interesting and varied course that is assessed by 3 exams at the of the U6th. The topics covered in these papers are spread out over the two- year course and this allows for links to be made between the various areas of Physics. There is no course work but sixteen compulsory practicals which are completed throughout the Sixth Form. Whilst this laboratory work is assessed internally and does not contribute to the final grade, you will be examined on skills learnt from them in the final paper.

Papers 1 and 2 each count for 30% of the total qualification. Each exam is 1 hour 45 minutes and consists of 90 marks. Question styles vary between multiple-choice to short open responses as well as calculations and extended writing questions. In paper 1 you will be assessed on Mechanics and Further Mechanics, Electric Circuits, Electric and Magnetic Fields and Nuclear and Particle Physics. Then in paper 2 Materials, Waves and Particle Nature of Light, Thermodynamics, Space, Nuclear Radiation, Gravitational Fields and Oscillations.

Paper 3 is then 40% of the total qualification. This exam is much longer, 2 hours 30 minutes, and consists of 120 marks.

Questions in this paper may draw on any of the topics in the specification and will include linking questions that may draw on two or more of these topics. It will also include questions that assess conceptual and theoretical understanding of experimental methods, this will draw on your experiences of the compulsory practicals.

The course will suit you if you have an inquiring mind and a willingness to analyse and think. The analytical and mathematical skills that Physics students develop suits careers in other industries such as finance, banking and computer programming. Physics is also an important qualification for those wishing to study Engineering or Architecture at University. Even if you do not go on to become a physicist, learning to think like one will help you get to the root of a problem and draw connections that are not obvious to others. Physics will not give you all the answers, but it will teach you how to ask the right questions.

# POLITICS

Politics is arguably more fascinating and exciting than it has ever been. It is, quite literally, a subject that affects everyone, and that everyone is talking about, in particular recent events which have seen Brexit, President Trump, Afghanistan and COVID-19 dominating the news. The study of politics will appeal to you if you are interested in current affairs and in how our daily lives are governed by those with power and authority. It will appeal to you even more if you can see that politics has an impact on us all and that it is really about trying to challenge and change the world around us. Politics is an ever-changing subject, so if you are interested in topics such as voting behaviour and the influence of the media, the differences and similarities between different political ideologies, or the major global political issues of the day, politics may well be the subject for you.

We follow the Edexcel A-Level course, which includes elements of British Government & Politics, Political Ideologies, and Global Politics. In the Lower Sixth, pupils will learn about how the British system works and how it has developed over time. In the Upper Sixth, pupils will focus on political ideas looking at the core ideologies of liberalism, socialism and conservatism, along with the respective political thinkers for each. In addition, they will study Global Politics and International Relations, a fantastic course that looks at key issues in world affairs such as: globalisation, the environment, economic and political global governance, human rights, and systems of power.

## COMPONENT 1 – UK POLITICS AND CORE POLITICAL IDEOLOGIES

The first component of the course

provides an introduction to UK politics, exploring the concepts of democracy and political participation. Pupils will learn about the major UK political parties, how different electoral systems work, and about voter behaviour and the role of the media. This component also includes study of the traditional political ideologies of liberalism, conservatism and socialism. Pupils will learn about the theory of these ideologies, as well as studying the works of key political philosophers.

## COMPONENT 2 – UK GOVERNMENT AND OPTIONAL POLITICAL IDEAS

The second component of the course focuses on how the UK political system works, by looking at the UK constitution, the roles of Parliament and the Prime Minister, and how these different branches of government interact. Pupils will also build on their knowledge of political ideologies by looking at either nationalism or feminism and their associated political philosophers.

## COMPONENT 3 – COMPARATIVE POLITICS – GLOBAL POLITICS

The final component of the course involves the study of global politics. Historically, many Cranleighans have been drawn to the study of International Relations at university, and this module will provide an excellent introduction to this field. Pupils will first study theories of global politics, before applying them to issues such as globalisation and global governance, including economic globalisation and human rights and environmental issues. The course will also include an investigation into the power of nations, and the roles of international organisations, including the EU.

Pupils who enjoy politics tend to like discussing and debating anything and everything. The ability to get involved and offer an opinion is far more important than it being the right one. In order to support this, the department is a very active one. We host a politics blog (<http://blogs.cranleigh.org/politics/>) which both pupils and staff contribute to on a regular basis. This year we also launched the Van Hasselt Award, a bi-termly journalistic writing competition in conjunction with our sister school, Cranleigh Abu Dhabi (<https://blogs.cranleigh.org/politics/category/van-hasselt-award/>). We also have produced a number of political podcasts with pupils on a range of UK political topics (<https://www.cranleigh.org/academic/2019/06/lvi-politics-students-discuss-tory-leadership-candidates-in-new-podcast/>)

In addition, we have run election hustings with the main candidates for the Guildford constituency in the 2015, 2017 and 2019 general elections, with our students taking a major role in the planning and running of these events. We also hosted an EU referendum debate featuring two cabinet ministers (Rt Hon Anne Milton MP and Rt Hon Chris Grayling MP) and students from schools across the region. The department also runs weekly current affairs discussions, visits to Westminster, school elections, regular visiting speakers, and in the past has organised trips to Parliament and Washington DC. A Level Politics can be an excellent springboard to a career in law, diplomacy, journalism, business and government.

# PRODUCT DESIGN

The subject content of this title is focused towards consumer products and applications; their analysis in respect of materials, components, and marketability to understand their selection and uses in industrial and commercial practices of product development.

Studying Product Design A Level offers you the opportunity to build and develop a set of skills and way of thinking that transcends our subject. The problem-solving and lateral-thinking techniques developed through the subject empower you to make decisions and well-conceived solutions in your wider lives, within both education and your later careers. The design process involves channeling creativity, ingenuity and originality into a multi-staged system of development, which culminates in an elegant and sophisticated solution to a problem or need.

The Design Engineering department is a well-resourced facility featuring three design studios equipped with machines running the latest industry standard 3D CAD modelling software. Alongside the design studios, four fully equipped workshops span the length of the department boasting the latest CAM technology including numerous 3D Printers, a large format CNC Router, a CNC Milling Machine and Laser Cutters.

Studying Product Design is extremely valuable for a career in any sphere of Product or Industrial Design, Graphics, Fashion, Media or Marketing. Product Design pairs well with subjects such as Business Studies and the sciences with overlapping content areas.

## ASSESSMENT STRUCTURE:

### NEA: ITERATIVE DESIGN PROJECT (50%)

A non-examined 'Iterative Design Project' is a substantial design, make and evaluate project centred on the iterative processes of explore, create and evaluate. It is worth 50% of the A Level qualification. You will be required to identify a design opportunity or problem from a context of your own choice, and create a chronological portfolio supported by real-time evidence of your project development. Innovative approaches will be required resulting in a final prototype that can be tested against the user and the market.

### WRITTEN EXAM 1: PRINCIPLES OF (26.7%)

This paper assesses your ability to analyse existing products, your technical knowledge and understanding of materials, product functionality, manufacturing processes and techniques. This paper also allows you to demonstrate your understanding of design thinking and wider social, moral and environmental issues that impact on the design and manufacturing industries.

### WRITTEN EXAM 2: PROBLEM SOLVING (23.3%)

This paper focuses on the application of your knowledge, understanding and skills of designing and manufacturing prototypes and products to given situations and problems. You will be required to demonstrate your higher thinking skills to solve problems and evaluate situations and the suitability of design solutions.

# PSYCHOLOGY

Psychology is the scientific study of the human mind and behaviour. The mind is the most complex machine on Earth; it is the source of all our thoughts and behaviours. If you are passionate about understanding how and why people think and behave in a certain way, then this subject will appeal to you.

The AQA A-Level course covers a variety of topics and disciplines and is assessed in three, two-hour examinations.

- In Paper 1 you will study **social influence** (e.g. why did the Germanic people obey the Nazis and why do people conform?), **memory** (e.g. how do we create and store memories and are these memories reliable?), **attachment** (e.g. how do we form attachments and what impact do these attachments have on our later development?) and **psychopathology** (e.g. how do we define abnormality and treat those who suffer from mental illnesses?).
- In Paper 2 you will cover **approaches in psychology** (e.g. how do the different disciplines in psychology explain why humans behave the way they do?), **biopsychology** (e.g. explaining behaviour as a result of brain physiology and brain chemistry) and **scientific processes** (e.g. how to create ethical, reliable and valid experiments).
- In Paper 3 you will cover **issues and debates** in psychology (e.g. the nature-nurture debate - is human behaviour the product of genetic inheritance or the environment?), **schizophrenia** (e.g. what are the symptoms, causes and

treatments of schizophrenia?), **relationships** (how and why are romantic relationships formed, maintained and breakdown?) and **forensics** (e.g. what are the different explanations of offending behaviour?).

Students need to have a flexible approach, as the Linear A Level sees them applying knowledge from across the course to each of the three papers. Questions vary from short answer questions but a significant amount of the marks are attributed to essay writing. Many questions require students to apply their knowledge to scenarios.

Psychology sits well within most combinations of subjects including both sciences and arts as it seeks to use scientific and mathematical methods in order to understand behaviour. Given this, the subject is best suited to those who have good GCSE's in Biology, English and Maths. A third of all A Level marks are awarded for essay writing. A quarter of all A Level marks are awarded for scientific enquiry and 10% of marks will assess mathematical skills.

Career options are varied; there are many specific options for applied professional psychological careers such as Sports Psychology, Clinical, Educational and Forensic etc. In addition, the subject also contains many transferable skills applying to Law, Advertising, Media, Teaching, Public services and Business.

# RELIGION & PHILOSOPHY

# SPANISH

The study of Religion and Philosophy entails the intellectual exploration of the beliefs and theories that have played a vital role in shaping our society and culture over the centuries. Human beings are engaged in a search for meaning and truth; studying this course will give you an opportunity to examine some of the answers to life's fundamental questions and to examine them in a critical and academic manner.

The course gives you the opportunity to explore religion, philosophical theories and ethical practices as you engage with the scholars of the past and the present in a rational and critical environment, whilst giving you the chance to develop your own answers to the questions that our modern multicultural society asks. This subject is not just for those with a personal faith but for anyone who is interested in gaining insight into the reasons why society is as it is and the fundamental questions that lie behind human existence.

Students will ideally have a GCSE in Religious Studies. However, the course is still accessible to those not having studied the subject for GCSE (approximately 40% of our students did not study the subject for GCSE).

We follow the OCR Religious Studies A Level course. There are three areas of study (each taught by a different teacher):

## 1. PHILOSOPHY OF RELIGION

- Key ancient philosophical ideas that have influenced our understanding of the world around us, including Plato and Aristotle.
- Arguments about the nature and existence of God as well as the

- language we use to describe God.
- The nature of soul, body and mind.
- The problem of evil and suffering; if there is a God why is there so much evil and suffering?

## 2. RELIGION AND ETHICS

- Key ethical theories that have influenced our understanding of right and wrong, including Natural Law, Situation Ethics, Kant and Utilitarianism.
- Highly relevant, contemporary ethical issues, including sex and sexuality, euthanasia and business.
- The nature of religious and ethical language: why do we use the language we do? Does it have any meaning?

## 3. RELIGIOUS THOUGHT

- Key Christian beliefs, values and teachings and how these vary historically and in the contemporary world.
- Arguments about the nature and existence of life after death.
- Practices that shape and express religious identity and how these vary in different traditions.
- The relationship between religion and society, including issues such as feminism, liberation theology and extremism.

Each area will be assessed by a 2-hour exam (with the student writing three essays per paper) at the end of the two-year course.

Many people ask what Religion and Philosophy can lead to. Well, the reality is, just about anything. All the major universities consider the subject as a rigorous

academic A Level that requires excellent analytical skills, ability to communicate ideas and an openness and willingness to discuss important issues.

A degree in Philosophy, Theology or Religious Studies will equip students for fast-track management training programmes with major companies as well as any number of employment opportunities including business, law, politics, accounting and finance, teaching and lecturing, social work, the armed forces, the police and medicine. The course suits anyone with an enquiring mind and openness about the world around them. There will be lots of opportunities to discuss and debate challenging issues.

In this increasingly globalised society and economy, being able to speak two of the three most widely spoken languages on the planet (English and Spanish) is well-recognised as advantageous in the business world. Language study at A Level also develops a range of transferable skills, and is a robust but varied course. The Spanish course offers students the opportunity to build considerably on the linguistic foundation forged at GCSE, developing them into ambitious and flexible linguists who can communicate freely in both oral and written Spanish. Students selecting this course must have studied GCSE Spanish and should have achieved at least a grade 7.

The course comprises topic, language and culture sections to provide a broad and stimulating range of aspects of study. Topics range from the social to the political, and include issues affecting Latin America as well as peninsular Spain, both past and present. Linguistically, Sixth Form Hispanists should be ready to tackle some complex grammatical issues in order to really make progress in the language. The cultural section of the course involves the study of literature and film and these are carefully selected to ensure that they are manageable and engaging for students; most of our A-Level students really enjoy this part of the course. All A-Level students of Spanish also benefit from weekly sessions with our language assistant, which is an opportunity to develop a real degree of fluency and confidence in spoken Spanish.

The final examinations test candidates in the skills of speaking, listening, writing, translating and reading. Candidates have to demonstrate a strong knowledge

of the topics and literary / film works they have studied both orally and in written form. Both receptive skills of reading and listening and productive skills of grammatical problems, speaking, and extended writing are also assessed in the final examinations. The A-Level course suits anyone with a genuine interest in studying the Spanish language and all its associated cultures at a higher level.

# THE EXTENDED PROJECT QUALIFICATION (EPQ)

# TWO-YEAR AS SUBJECTS

## WHAT IS THE EPQ?

- The EPQ is equivalent to half an A Level.
- It is graded A\* to E and carries 28 UCAS points
- There are four different types of project. Students can choose to write a dissertation, carry out an investigation, give a performance or create an artefact
- The Extended Project has been widely welcomed by universities since it helps students develop skills in thinking and independent learning.
- It is fast growing in schools, with over 40,000 entries annually. More Cranleighans are now receiving HE offers based on their EPQ, often with a grade discount.
- Dr John Taylor, Cranleigh's Director of Learning, Teaching and Innovation is one of the pioneers responsible for the national development of the EPQ.

## WHY DO AN EPQ?

The EPQ is fun, challenging and exciting and it is excellent as a preparation for university and working life. It promotes the development of capacities for independent learning, research and critical thinking. It also gives students an exciting and enjoyable opportunity to work on topics which are related to their personal interests and plans for the future. Students have a free choice of title for their project and are encouraged to pick topics which they find interesting and helpful as a pathway to their future.

## WHAT DO UNIVERSITIES THINK?

EPQ gives students a taste of what university life is like whilst they are still in the Sixth Form. They learn to take charge of the direction of their studies and are taught how to carry out a large-scale project with support from a supervisor. It is highly valued by many universities as it provides an excellent preparation for life beyond the Sixth Form.

**Birmingham:** "An EPQ can benefit your application as applicants who take the EPQ and meet our offer criteria will be made the standard offer for their course, plus an alternative offer which will be one grade lower plus a grade A in the EPQ (though please note that this excludes our Medicine (A100) and Dentistry (A200) courses)."

**Cambridge:** "We welcome the Extended Project and would encourage applicants to undertake one as it will help to develop independent study and research skills valuable for higher education."

## WHAT WILL IT INVOLVE?

All students will have access to a workstream on Google Classroom with a comprehensive suite of videos, webinar links, guidance documents and exemplar projects designed to help them develop their skills in independent learning, thinking, research and debate. Project work will be completed during the Lower Sixth. Students will work with a project supervisor who will oversee all aspects of the project process, meeting weekly to discuss progress. Having completed their projects, students give a short (10 minute) oral presentation in which they review their project and discuss its main points.

## SAMPLE TITLES

- Should religion and politics be separate?
- What is the best alternative to the use of fossil fuels?
- Does personality type make a difference to sporting performance?
- Do dogs dream?
- Is there such a thing as a real hero?
- What sort of training regime is best for improving my sprint times?
- Is the pen mightier than the sword? An exploration of 3 influential novelists.
- Should liberty be sacrificed to security?
- Creating a business case for a start-up technology company.
- How does perception of flood risk affect households in Cranleigh?
- Is idealism in international relations feasible in the modern world?
- Are serial killers born or made?
- Create an amplifier for an electric guitar.
- Repertoire for a concert at Cranleigh Arts Centre.
- Does tragedy still have a meaning in the modern world?
- Is it possible to synthesize aspirin in the laboratory?
- An exploration of the power of music to affect mood.
- A podcast to highlight sporting achievement at Cranleigh School.
- Who am I? A film exploring personal identity.
- A performance of scenes from Hamlet for the Fourth Form.
- Creating an online advertising campaign for a drinks company.

## COMPUTER SCIENCE AS

Every time we see the news we hear of a new innovation in health, science, engineering, entertainment and so on that has been enabled by new technological advances. Artificial intelligence, big data and cybersecurity are now all fields that are increasingly impacting on society.

Studying for an AS in Computer Science will help develop a range of skills that will help you to participate in and drive forward an increasingly computer-driven world. Skills that involve being an effective end user of computer software are important but clearly no longer sufficient. This course explores the world of algorithms, data and computational thinking to enable you to understand not only current technology, but an unknown technological future around the corner.

The course follows a similar structure to the A Level and is taught over two years following the OCR Specification. Pupils will study for two papers:

### C01: Computing principles, introduces pupils to the fundamental technical principles of computing.

You will study:

- The characteristics of contemporary processors, input, output and storage devices
- Types of software and the different methodologies used to develop software
- Data exchange between different systems
- Data types, data structures and algorithms
- Legal, moral, cultural and ethical issues.

### C02: Algorithms and programming, builds on C01 to include computational thinking and problem-solving. It covers:

- What is meant by computational thinking (thinking abstractly, thinking ahead, thinking procedurally, etc.)
- Problem solving and programming – how computers and programs can be used to solve problems
- Algorithms and how they can be used to describe and solve problems.

The main difference between A-Level and AS is the requirement for a major programming project. However, computational thinking is often best expressed and explored through programming and so there will still be opportunities to develop Python skills through the course.

## FRENCH AS

The **two-year AS** in French offers those students who do not wish to opt for a full A Level the opportunity to continue with French in the Sixth Form. In doing so, pupils will gain practical language skills over and above those acquired at GCSE and a widely respected qualification held in high esteem by both universities and employers. French is spoken on every continent and remains the second most widely learned foreign language in the world after English. A command of the French language opens up many opportunities with French companies (France is the fifth biggest economy in the world), not to mention opportunities in Canada, Switzerland, Belgium and all of francophone Africa.

For the two-year AS course we follow the

AQA AS Specification. The AS course includes the study of one set text in addition to a number of themes such as the changing nature of family, contemporary French music, and French cinema.

The course is particularly suitable for those students with a clear specialism in other subject areas but who would nevertheless like to add a language to support their university application and future job prospects. The course is both rigorous and rewarding and, in addition to the obvious linguistic benefits, it seeks to develop pupils' communication and independent research skills.

## GEOLOGY AS

Geology is the scientific study of the Earth, its history, structure and origin. During the course candidates learn about the composition and formation of the many different rock types which make up the Earth; the explanation for and significance of their distribution and the consequent economic and political implications.

Geology AS usually takes the place of the EPQ.

Geology is an excellent subject to choose to study in the Sixth Form. It supports and draws from all the core sciences and explains much of the scientific rationale behind physical geography. It also makes an excellent 'stand-alone' science subject for any pupils wishing to keep their options - and minds - open. It offers a valuable extra qualification which often commends itself to university admissions tutors; but perhaps the most compelling argument for choosing Geology lies in its intrinsic fascination. If you take this course, you will find that Geology is fun:

# TWO-YEAR AS SUBJECTS

# UNIVERSITY APPLICATIONS

it is all around us and, once started, it is very difficult to cease analysing the planet upon which we live.

The course is always taught over two years (usually four lessons a week) and also includes a compulsory field trip, usually to Arran in May of the Lower Sixth.

In some circumstances we will also consider, by arrangement, Geology as a full A Level.

## GREEK AS

The study of Classical Greek opens up the literature, philosophy, history and politics that underpin the Western world: indeed, all of these disciplines find their Western origin here. For this reason, Classical Greek is one of the most enriching subjects to take at A Level. It is an ideal preparation for candidates with aspirations towards the top universities in any discipline as it provides a benchmark of academic achievement and aspiration.

Literature comprises 50% of the course, involving the study of two texts in Classical Greek, split between prose and verse literature. The verse texts vary from year to year, but will typically consist of a selection from one of the two texts that form the basis of the entirety of Western literature, Homer's Iliad and Odyssey, or from Greek tragedy. In prose, the texts will be selected from history or philosophy; being a small subject, we are able to respond nimbly to the interests of the pupils who take the course.

Language classes consist of prose and verse unseen translation, and the option to develop skills in prose composition, that is, writing in Greek. This is a rare and wonderful skill.

In general classes tend to be small, informal and provide a lively and mature forum for discussion and debate. A typical week's work will involve unseen translation and more advanced grammar work; reading, annotating and discussing the set text; composing an essay or other piece of criticism; appraising the ancient world and looking at modern parallels and differences. We encourage you to aim for a high standard of written expression and argument, as well as a sensitive and perceptive interpretation of literature, history and culture, and a sophisticated understanding of language and idiom.

All these are skills very highly sought-after, not only by university tutors, but also by employers in a wide range of fields, such as law, consultancy, industry, the Civil Service and Foreign Office, journalism, teaching, academia, and any profession which requires skilled readers, writers and communicators who can organise their thoughts clearly and express themselves well in writing. Well known public figures who have found the study of classics a valuable training before going to high achievement in other fields include: JK Rowling (best-selling author of the Harry Potter series); Professor Susan Greenfield (who presented the series Brainstory on BBC2); Sir Anthony Cleaver (ex-Chairman of IBM, Head of UK Atomic Energy Authority); and Sir Jeremy Morse (ex-Chairman, Lloyds Bank).

In some circumstances we will also consider, by arrangement, Greek as a full A2.

## SPANISH AS

The 2 year AS Spanish course provides an opportunity to continue with a language without taking it as one of their three A-Level options. The advantages of being able to converse in two of the three most widely spoken languages on the planet (Spanish and English) are well-documented, and this course may therefore be of particular interest to students who wish to go on to work in the increasingly globalised business world, where a good level of Spanish would be a real benefit. Of particular note are the growing economies of Latin America, but also the importance of Spanish for work in business within the USA, where Spanish is very widely spoken.

The two-year Spanish AS course is linguistically challenging, but also varied and interesting. The AS Spanish course also involves the study of literature OR film, as well as a weekly session with the language assistant, which builds fluency and confidence. We recommend that students wishing to take this AS course achieve at least a grade 7 at GCSE.

The final AQA Spanish AS examinations test candidates in the skills of speaking, listening, writing, and translation. Candidates have to be able to speak in a reasonably natural and fluid manner, and answer spontaneous questions about aspects of Hispanic culture, politics and society.

The majority of Cranleighans do go onto university after leaving school and in many cases may have chosen A Levels specifically to suit the specifications of a higher education course. Equally many will have kept their options open until experiencing subjects at A Level. But by your second year at Sixth Form you will begin to consider your future and are likely to need support with the potentially difficult process of choosing and applying for a place on a course.

## SUPPORT WITH APPLICATIONS

Cranleigh has a dedicated team of staff, who are here to help you work out which course and place might be right for you and help you in making your application. Mr Gordon Neill is the Director of University of Applications and is responsible for relations with UCAS (University and Colleges Admissions Service): Mr Nick Miller is the Assistant Director of University Applications, dealing specifically with post-A-Level applications, and Mrs Amanda Reader is Head of Careers and can provide advice on many different aspects of careers. Miss Trish Henderson has also joined the UCAS team and is assisting Mr Neill with UCAS provision for the Upper Sixth. Mr Adam Rothwell provides support with Oxbridge applications and Mr Freddie Laughton oversees all applications for Medicine.

During the Lower Sixth we run a Cranleigh Futures week, which introduces pupils and parents to the process of university applications and employment aspects. Mr Neill has individual meetings with each member of the Lower Sixth during the Lent term, delivers talks to the Upper Sixth in September and January and holds regular clinics in the Michaelmas

term for the Upper Sixth. All the team are happy to support and advise all pupils throughout their time at Cranleigh and beyond. House staff are also available along with the Heads of Departments as a valuable source of information.

We are committed to offering all reasonable help with applications to Old Cranleighans, no matter when they left. We also advertise university taster courses and information resources on Twitter, Facebook, email and the School's website. However, you are also expected to research and understand your own choices and it is recommended that you spend time on this during the Summer term before your Upper Sixth. January of the Lower Sixth onwards is a good time to start thinking about university courses. Students are allowed to visit two university open days during school time, either in their Lower Sixth or their Upper Sixth year. We also take the whole Lower Sixth on a university visit today towards the end of June - they choose one of three universities to visit.

## DEADLINES FOR APPLICATIONS

The application process for UK universities will formally start in late June when UCAS activates Apply 2020. You can register on the UCAS website from that time and the earliest submissions can be made in September of that year.

The deadline for both Oxbridge and medical school applications is October and the internal school deadline is 25th September, to allow time to process the application and check for errors. All other course applications (with the exception of a few Art and Design courses) have an external deadline of January and should

therefore be submitted by the end of the Michaelmas term.

# CAREERS & THE GAP YEAR

# NOTES

## CAREERS

In the Lower School at Cranleigh, careers work has been fully integrated into the tutorial programme. There is a number of events from a variety of people from different industries. The Fifth Formers sit the Morrisby Aptitude Tests and this online tool enables them to access a plethora of information about careers and university applications.

Throughout the School, efforts are made to support you in narrowing down your career search and help you gain more of a feel for your chosen career and how to get there, whilst supporting you in developing employability skills for all areas of working life. Links with industry have developed strongly, and there is a work-experience week at the end of the Upper Fifth. During the first few weeks of the Lower Sixth, a tutorial time is spent reflecting on your work experience and employability skills. Any work experience that you can gain during the holidays will enhance your CV and UCAS application and help you to firm up your career aspirations. You are also encouraged to attend careers courses and university open days during the holidays and long exeat weekends.

The Careers Fair takes place during the Lent term, where you will have the opportunity to choose short career talks to listen to, followed by an opportunity to network further with career experts and potential employers. Towards the end of the Lower Sixth, we hold a Cranleigh Futures Week. During this week we will support you in your initial UCAS or Apprenticeship research, help you to build a CV, advice on writing a personal statement and help you to develop your interview skills. Our Facebook page is updated regularly with relevant careers advice and support. Throughout the year, Professional Suppers take place that will enable sixth formers to chat in small groups with experts for a variety of industries.

The Cranleigh Network is a 'careers for life' programme that is a joint initiative between the School and the Old Cranleigh Society. The Network is intended as a genuine support organisation for all school leavers, from help with work placements to CV design, postgraduate employment to potential career change initiatives later in life. All Cranleighans will have the opportunity to be part of the Cranleigh Network.

## THE GAP YEAR

Gap Years are becoming increasingly popular with pupils after their A Levels, and can provide an amazing opportunity to see the world, develop some new skills and consider your future. There are many exciting and worthwhile short- and long-term projects available at a wide variety of destinations, from working in medical centres in Tanzania to teaching sport in South Africa. A Gap Year can provide a valuable experience that can make a significant difference to the prospects of success on your chosen course and can enhance your CV. The Futures room has a wide selection of publications with advice for the Gap Year. We host a Gap Fair during the Lent term where you will be able to hear first-hand from a variety of different Gap opportunities.

Besides paid employment or voluntary work at home or abroad, it is worth you being aware of a number of other opportunities. Cranleighans have participated in projects run by The Gap Organisation, Project Trust, Schools Partnership Worldwide and Raleigh International. The 'Year in Industry' scheme enables bright school leavers to gain valuable experience in a STEM-related industry.

The Cranleigh Network Facebook page and Firefly provide many useful links to gap year opportunities and advice.

# NOTES

# NOTES

