



CATERHAM
SCHOOL

A Level Options 2021

For External Candidates



Inspiring Education for Life

We aim to provide an inspirational all-round education which combines academic excellence with a wealth of co-curricular opportunities. Our academic track record places us among the top schools in the country. All our students go on to Higher Education and in 2019 over 90% went to a 'top tier' university of choice.

However, we do not believe that raw results alone show the true measure of a school. It is far more important that each individual achieves his or her very best. A truly excellent education is about much more than academic achievement alone: it is also about developing a passion for learning, capacity for independent thinking, moral values, self-confidence without arrogance, and a broad range of interests that extend beyond the confines of the classroom. In short, it is developing the whole person, to ensure that each pupil leaves here ready for the challenges that lie ahead.

The Sixth Form at Caterham

Introduction

As a student in the Sixth Form you will play a central part in the life of Caterham School as a senior member of the School community and as a role model for the next generation.

The Sixth Form also represents the culmination of your school career as well as preparation for University. These two years are likely to be the most challenging and exciting that you have experienced. During this time we hope you will develop the maturity and focused ambition to succeed and perhaps even go beyond your own expectations. Our Sixth Form students involve themselves fully in a wide and stimulating range of activities, and we set high standards to enable you to develop the academic, creative, sporting and personal strengths needed for a rapidly changing world. We are continually developing the programme for our students, creating opportunities for challenge, growth, inclusion and fun.

Sixth Form Entry Criteria

The qualification for Sixth Form entry is 44 points or equivalent (an 8 is 8 points; an A* is also 8 points) from the best six GCSE/IGCSE subjects. Additionally, there are specific entry requirements for each A Level subject. These have been set because our experience is that those who do not achieve these grades in GCSE will not succeed at A Level. All pupils must qualify to study four subjects.

The Sixth Form Curriculum

Students following a subject to A Level will have a two year course and will not sit AS exams at the end of the Lower Sixth. For those starting the Sixth Form in 2020 there will be a few exceptions where students will sit AS exams as it will be in their best interests to do so:

- Geography is following the International A Level course which is still modular.
- Fine Art, Fashion Textiles, Photography and Product Design – all students can submit their work for the AS exam if they do not wish to continue into the Upper Sixth.

How many?

All students will start with four subjects. Students opting for Further Maths will start with five. Whilst the majority of students will end up completing three A Levels, it is our experience that students frequently change their minds about their relative enthusiasm for the subjects they are studying. It is important to start with four as this may well be the appropriate number of A Levels for a particular student or they may decide that their least favoured option in September becomes the subject they are most keen to study further.

By the end of the Autumn Term of the Lower Sixth, following assessments as well as discussions with subject teachers and a member of the Sixth Form pastoral team, some students may be advised not to continue with one of their four subjects. This will usually be because they are struggling to cope with four subjects or because one of their subjects does not suit them.

Edge and IRP

Edge is a bespoke course created for Caterham's Sixth Form pupils. It asks pupils to spend time outside of their curriculum subjects to explore in detail 3 main areas: 'Learning to Learn', 'Big Ideas' and 'Practical Problem-Solving'. An online platform full of resources and information is supported by sessions which run throughout the year and will be a mixture of visiting speakers, debate, discussion and practical activities. The course has been designed to develop the crucial skills our pupils will need both during and beyond their time at school. Topics include ethics, logic, critical thinking, presentation skills and design thinking amongst many more. By the end of the year, pupils will have been allocated a team with whom they will work towards developing a solution to a real-life problem. They will then present their idea to a panel of judges, with the aim of reaching the final of the OCA Innovation and Collaboration Award which offers the winners on-going mentoring and support to develop their idea further.

The online part of the Edge course begins with a module on Research and Thinking Skills which gives our pupils a fantastic grounding to begin developing their innovation projects and an opportunity to develop an Independent Research Project (IRP), which will allow them to conduct a piece of academic research.

The IRP will typically complement one or more of the pupils' chosen subjects. The final deadline for this will be the end of September of the Upper Sixth at which point the best six will be shortlisted for the IRP presentation evening, one of the standout events of the Sixth Form calendar and an opportunity to win a significant prize. As well as developing a range of skills, the IRP will benefit students by enabling them to impress universities on their UCAS personal statements and in university interviews.

Subject Choice

Whilst we will endeavour to accommodate your combination of subjects, some combinations cannot be met due to timetabling constraints. ***Subjects where demand is very small may be withdrawn.*** In these cases the students affected will be advised and asked to re-opt.

Initially you have a free choice of any four subjects. If Further Mathematics is one of the subjects chosen, it is generally expected that you will choose five subjects. Once initial choices for subjects have been made after GCSE Mocks in January, subjects are placed into option blocks. You may continue to amend your choices until the start of the academic year in September, however from March there is no longer a free choice; changes will be possible as long as there is space in the requested subject and the new combination fits into the option blocks. Requests for subject changes should go through Mr Mansell (john.mansell@caterhamschool.co.uk)

Progression to the Upper Sixth

Candidates who perform poorly in the Lower Sixth exams may need to repeat the Lower Sixth year.

Study in the Sixth Form

As a major part of a responsible attitude towards your work, you will be making a deliberate commitment to two further years of academic study with the objective of maximizing opportunities for your next steps. This commitment brings greater freedom but also greater responsibilities. We will help you to organise your work and your free time to achieve a sound balance between the demands of A Levels, co-curricular activities and your social life.

To complete your A Levels successfully with good grades, you will need to invest a significant amount of time studying independently to increase your depth of understanding. All A Level courses include some untaught time, which is spent in private study and in library sessions. In the Lower Sixth this should average sixteen hours per week. In the Upper Sixth this should be nearer eighteen hours per week. This time may be spent on specific tasks that have been set for particular deadlines and on additional reading, note taking or problem solving, using class notes, texts or reference books. You may also need to complete holiday work or review significant topics from the previous term.

You will have the opportunity to meet staff outside timetabled lessons to take learning beyond the confines of the curriculum. This occurs in a variety of formats, for example the long established Moncrieff Jones Society that involves a fortnightly, student-led session on a topical scientific issue. Most academic departments have similar groups that meet regularly. The Library organises subject-specific book groups and has an extensive range of online and physical resources which are available to you. You will have timetabled periods in the library for subject enrichment.

The open nature of the student/teacher relationships are a feature of Sixth Form life, allowing you to take responsibility for your own learning and performance, within a supportive structure of academic and pastoral staff. The transition to this type of more independent learning is so important for success at A Level and beyond, and with different students developing at different rates, we feel it is essential that we are able to support you in making this transition. Effort and Attainment grades given every half term are analysed to determine whether you have 'license' to organise yourself during study periods, making use of the facilities within the Pye Centre. During the Lower Sixth Year we expect 90% of our students to have gained their license by demonstrating an effective approach to independent study.

Making the Transition

Your satisfaction with your choice of A Levels and your motivation towards the target of University are key elements in ensuring success in examinations. You will be allocated to a Tutor who will monitor your academic work and involvement in co-curricular activities, in consultation with the Sixth Form team.

Your Form Tutor will see you daily to provide guidance in the day-to-day triumphs and setbacks throughout the two years. The tutor group will provide you with support, separated from the busy nature of the working day. Your Tutor will encourage you to take part in activities during form time, with the vast majority of students participating in the Study Buddy programme, supporting younger students with their studies. The tutor will also help you reflect on your progress and help you in setting objectives for the next half term.

Sixth Form Forum

As part of the 'all round' experience and education, forum sessions are organised throughout the year outside the academic curriculum. The themes are varied, including health and social issues amongst others. The programme is reviewed regularly taking into account discussion and feedback from students.

Sport and Games

Wednesday afternoon is Senior games afternoon for all Sixth Formers and a full programme of physical activity options are available for all pupils to enjoy. For those that enjoy competitive team sport, there are a range of options that involve a high degree of commitment to both training and matches. Team sports available are rugby, hockey (girls and boys), cricket, lacrosse, netball, football and basketball. Within each team sport, there is also the option to enjoy it more socially on a Wednesday afternoon, for its own sake, not to prepare for matches against other schools.

There are also a range of new activities for pupils to try such as girls' football, girls' rugby, croquet and pilates. For those that like the outdoors, cross country running in the woods is popular, while racquet sport enthusiasts are catered for with tennis and badminton. Dance is also a popular option.

Pupils that are selected to play in a School team will be expected to participate in both practice sessions during the week and in weekend matches, unless prevented by injury or illness.

A wide programme of sporting activities is available throughout the week and is listed in the co-curricular calendar, which is updated at the beginning of each term.

Exam access arrangements for A-Levels

Access arrangements are 'reasonable adjustments' for pupils who have a disability or special educational need that significantly affects them in exams. Access arrangements have to be applied for and approved in advance of the exams by the JCQ (Joint Council for Qualifications). For an application to be made, the school is required to have evidence of the pupil's needs over time, ongoing support and evidence that they have used the access arrangements both in the classroom, and in tests and exams. Ultimately, the school decides whether an application for access arrangements should be made considering the evidence. An up-to-date assessment is required either with an independent specialist assessor known to the school, or with the SEND Coordinator. Assessments with an independent specialist assessor must be discussed with Mrs Charlesworth, the SEND Coordinator. Assessments that have been carried out without prior contact with the school cannot be used as evidence for access arrangements.

Word processing in examinations and in class is an arrangement which needs approval by the SEND Coordinator, based on the criteria set out by the JCQ

SUBJECT REQUIREMENTS

Individual subject qualifications are as follows:

Subject	Minimum Requirement for A Level
Art: Fashion Textiles	6 in an Art, Design (e.g., 3D or DT) or Media GCSE
Art: Fine Art	6 in Art
Art: Photography	6 in an Art, Design (e.g., 3D or DT) or Media GCSE
Biological Sciences	7 in Biology Paper and 7 in Mathematics
Business	6 in Mathematics & 6 in English Language or Literature as well as 6 in Business Studies GCSE if taken
Chemistry	7 in Chemistry Paper and 7 in Mathematics
Computer Science	7 in Computer Science and must study Maths A Level
Drama and Theatre	6 in Drama & 6 in English Language or Literature
Economics	6 in Mathematics & 6 in English Language or Literature
English Literature	6 in English Literature and in English Language
French	7 in French
Geography	6 in Geography & 6 in English Language or Literature
German	7 in German
History	6 in History & 6 in English Language or Literature
Latin & Greek	7 in relevant Language
Mathematics	7 in Mathematics*
Further Mathematics	8 in Mathematics*
Music	7 in Music & Grade 5 on an instrument/voice
Philosophy, Ethics & Theology	6 in Religious Studies (if taken) & 6 in English Language or Literature
Physical Education	6 in PE*
Physics	7 in Physics Paper and 7 in Mathematics
Politics	6 in English Language or Literature & 6 in a Humanity
Design & Technology: Product Design	6 in 3D or DT
Psychology	Minimum of 6 in Biology, Mathematics & English Language or Literature, with 7 in either Biology or Mathematics
Spanish	7 in Spanish

*Please see subject section for further explanation.

Art: Fashion Textiles

A Level

AS Level

Exam Board: Eduqas

Exam Board: Eduqas

Creativity is cited as one of the top three skills promoted by the World Economic Forum as essential for a young person entering the careers market in the next decade. The foundation of all creativity is enabling a student to realise their own ideas stemming from a divergent range of possible solutions. At the core of an Art A Level is the development of a student's creative excellence to prepare them for 21st century opportunities.

Entrance requirements:

Students should have completed an Art, Design (3D or Graphics) or Media GCSE and have achieved at least a grade 6.

Art (Fashion Textiles) is an academic option which can complement a range of other A Levels adding breadth as well as the important opportunity to self-direct their own creative process with teacher mentoring and to develop independent critical thinking skills which are increasingly sought after in industry.

Career opportunities:

It is an essential qualification for University courses in Fashion, Textiles and Design courses in all their variety (399 art and design related options are available through UCAS). There is a wealth of possible careers available proven by the three quarters of a million people employed in Fashion and Textiles related fields in the UK presently.

Structure of course:

Art: Fashion Textiles is a two-year linear course but there is the added flexibility that students can submit their Lower Sixth coursework to the exam board and complete an AS Level if they are considering not continuing to the full A Level. AS does not involve a practical timed or written exam.

The AS and A Level courses involve both practical work and critical studies. Students develop their own direction through a variety of textiles processes. Students look at the work of other designers to inform their ideas and approaches to making their own outcomes which can be fashion outcomes, interiors or Fine Art textiles pieces. Additional life drawing classes develop the students' skills and confidence in drawing the human form. Other opportunities such as trips to galleries and artist-led workshops can occur during the course.

Students are introduced to a broad range of processes and are encouraged to explore these fully. The Art/Textiles studios offer opportunities for students to work with the sewing machines, sublimation printing, screen printing, dyeing, felting and more. We also have a set of PCs so the students can develop their confidence using the Adobe Suite including Photoshop and Illustrator. Pursuing digital textile outcomes is firmly part of this course.

The opportunities within Art: Fashion Textiles at Caterham are broad and students are provided with the skills through one-to-one tutorials and workshops to really develop their individual interests through processes of their choice beyond the initial diagnostic phase.

In the Lower Sixth students will complete an induction period in which they will be taught a number of core skills as part of a self-directed project in response to a theme. They will also study the History of Costume and Textiles Design for two terms in one of their double periods each week to lay the foundations for their Personal Investigation which they embark on after Easter of the Lower Sixth. Part of the Personal Investigation requires a 3000 word visual essay in response to a self-directed theme. The Personal Investigation is worth 60% of the A Level and continues to be developed until the end of January in the Upper Sixth through practical work and outcomes. This is followed by an externally-set assignment worth 40% of the A Level which begins in February of the Upper Sixth and ends with a timed examination in the Summer Term. The year is rounded off with an exhibition celebrating their work.

Whilst all materials will be provided, there may be charges for some unusual or specialist materials that a student wishes to use for an expensive bespoke outcome.

Art: Fine Art

A Level

AS Level

Exam Board: Eduqas

Exam Board: Eduqas

Creativity is cited as one of the top three skills promoted by the World Economic Forum as essential for a young person entering the careers market in the next decade. The foundation of all creativity is enabling a student to realise their own ideas stemming from a divergent range of possible solutions. At the core of an Art A Level is the development of a student's creative excellence to prepare them for 21st century opportunities.

Entrance requirements:

Students should have completed an Art, Design (3D or Graphics) or Media GCSE and have achieved at least a grade 6.

Art: Fine Art is an academic option which can complement a range of other A Levels adding breadth as well as the important opportunity to self-direct their own creative process with teacher mentoring and to develop independent critical thinking skills which are increasingly sought after in industry.

Career opportunities:

It is an essential qualification for University courses in Architecture, Art and Design courses in all their variety (399 art and design related options are available through UCAS). There is a wealth of possible careers available proven by the fact that 1 in 11 adults in the UK (1 in 8 in London) are employed within the creative industries.

Structure of course:

Art: Fine Art is a two-year linear course but there is the added flexibility that students can submit their Lower Sixth coursework to the exam board and complete an AS Level if they are considering not continuing to the full A Level. AS does not involve a practical timed or written exam.

The AS and A Level courses involve both practical work and critical studies. Students of Fine Art develop their ideas through a variety of media and processes. Students look at related works of artists, designers and architects to inform their ideas and approaches to making their own responses. Additional life drawing classes develop the students' skills and confidence in drawing. Other opportunities such as trips to galleries and artist-led workshops can occur during the course.

Students are introduced to a broad range of processes and are encouraged to explore these fully. The Art studios offer opportunities for students to work in drawing and painting, sculpture, ceramics, print making (screen, etching and sublimation). We also have a set of PCs for developing in our students the skills of Adobe Suite (Photoshop and Illustrator). Pursuing Digital Art is now firmly part of this course.

The opportunities within Art at Caterham are broad and students are provided with the skills through one-to-one tutorials and workshops to really develop their individual interests through processes of their choice beyond the initial diagnostic phase.

In the Lower Sixth students will complete an induction period in which they will be taught a number of core skills as part of a self-directed project in response to a theme. They will also study the History of Art for two terms in one of their double periods each week to lay the foundations for their Personal Investigation which they embark on after Easter of the Lower Sixth. Part of the Personal Investigation requires a 3000 word visual essay in response to a self-directed theme. The Personal Investigation is worth 60% of the A Level and continues to be developed until the end of January in the Upper Sixth through practical work and outcomes. This is followed by an externally set assignment worth 40% of the A Level which begins in February of the Upper Sixth and ends with a timed examination in the Summer Term. The year is rounded off with an exhibition celebrating their work.

Whilst all materials will be provided, there may be charges for some unusual or specialist materials that a student wishes to use for an expensive bespoke outcome.

Art: Photography

A Level

AS Level

Exam Board: Eduqas

Exam Board: Eduqas

Creativity is cited as one of the top three skills promoted by the World Economic Forum as essential for a young person entering the careers market in the next decade. The foundation of all creativity is enabling a student to realise their own ideas stemming from a divergent range of possible solutions. At the core of an Art A Level is the development of a student's creative excellence to prepare them for 21st century opportunities.

Entrance requirements:

Students should have completed an Art, Design (3D or Graphics) or Media GCSE and have achieved at least a grade 6.

Art: Photography is an academic option which can complement a range of other A Levels adding breadth as well as the important opportunity to self-direct their own creative process with teacher mentoring and to develop independent critical thinking skills which are increasingly sought after in industry.

Career opportunities:

It is an essential qualification for Art and Photography courses in all their variety (399 art and design related options are available through UCAS). There is a wealth of possible careers available proven by the fact that 1 in 11 adults in the UK (1 in 8 in London) are employed within the creative industries. This subject is a highly useful qualification for our age of visual communication and social media. It has also proved invaluable for students planning to study such courses as Business Management, Forensics, Psychology and Marketing, as well as those who choose careers in the Arts.

Structure of course:

Photography is a two-year linear course but there is the added flexibility that students can submit their Lower Sixth coursework to the exam board and complete an AS Level if they are considering not continuing to the full A Level.

The AS and A Level courses involves both practical work and contextual studies. Students of Photography are expected to be taking photos regularly, working in their sketchbooks, developing their personal work and involving related works of other photographers, artists, designers and filmmakers, both contemporary and historical, as well as from any culture. In the Lower Sixth students will complete an induction period in which they will be taught a number of core skills as part of a self-directed project in response to a theme. They will also study the History of Photography for two terms in one of their double periods each week to lay the foundations for their Personal Investigation which they embark on after Easter of the Lower Sixth. Part of the Personal Investigation requires a 3000 word visual essay in response to a self-directed theme. The Personal Investigation is worth 60% of the A Level and continues to be developed until the end of January in the Upper Sixth through practical work and outcomes. This is followed by an externally set assignment worth 40% of the A Level, which begins in February of the Upper Sixth with a timed examination in the Summer Term. The year is rounded off with an exhibition celebrating their work.

Facilities:

The Photography provision within the studios offers opportunities for students to work with both wet and dry photographic processes. These studios are fully equipped with:

- Photographic darkroom (equipped for black and white chemical photography);
- Digital photography (including digital camera, colour scanners, large format colour printers, a sublimation printer and Adobe Suite).
- Backdrops, lighting and other photographic studio equipment and PCs with Adobe Suite.

Whilst all materials will be provided, there may be charges for some unusual or specialist materials that a student wishes to use for an expensive bespoke outcome.

Biology

A Level

Exam Board: AQA

No subject is moving faster than Biology. With recent advances in our knowledge of genetics, the sequencing of the human genome, and a fierce worldwide debate raging over evolution, stem cell research, cloning, GM crops and many other topics, there is no greater time to be studying Biology.

Entrance requirements:

A GCSE grade of at least 7 in Biology is required. In addition Mathematics should have been passed with ideally an 8 or 7, and a sound knowledge of Chemistry is important.

While taking Biology on its own with no other Sciences is perfectly fine, the ideal mix of subjects for Lower Sixth Biology is Biology, Chemistry and Mathematics.

Career opportunities:

For Degree courses in Biology, Biochemistry, Biotechnology, Forensic, Microbiology, Marine Biology and others, a combination with Chemistry and often Mathematics is usually taken. For Medicine, Dentistry and Veterinary Science taking A Level Chemistry is essential.

An A Level in Biology can lead to a variety of careers as well as providing a means of entry to almost any Higher Education course. Its use for entry to some specific courses has already been mentioned but there are also many paramedical careers such as Nursing, Physiotherapy, Speech Therapy, Occupational Therapy, Chiropractic, Osteopathy, Radiography and Pharmacy for which an A Level in Biology is needed.

Field course:

Biology is a very hands-on, practical subject. Several field trips are planned as part of the course.

The week long course at the end of August is compulsory for all those taking Biology in the Upper Sixth (in view of COVID 19 whether or not this trip will take place is under constant review) and will cost in the region of £450.

Structure of course:

The Lower Sixth syllabus content involves a study of cells at the molecular level and many aspects of physiology and disease. The Upper Sixth syllabus content involves further study of physiology and the key life processes and allows some specialisation in some of the modern aspects of the subject.

Biology is concerned with the origins, structure, physiology and behaviour of the living world, both plants and animals, including man. Many important aspects of modern life such as disease, pollution, conservation, world food supplies and public health are considered to relate the subject to the needs of mankind.

Although the study of Biology A Level can lead to Higher Education and a career in related sciences, it is also a means of gaining an understanding and appreciation of living organisms and their environments.

Business

A Level

Exam Board: AQA

Entrance requirements

In order to study Business at A Level, candidates should have reasonable levels of numeracy and literacy and so grade 6s are necessary in Mathematics and English Language or Literature at GCSE.

Career Opportunities

Business has immediate relevance to everyday life. It is a practical study of the institutions and patterns of behaviour that are so important to the society in which we live. Despite its practical nature, Business requires candidates to develop the academic skill of analysis and evaluation. Our Business students have gained entry to a very wide range of University courses. In the right combination of subjects, Business is well respected as a qualification for entry into Higher Education.

For those who already have careers in mind, Business with Mathematics is a useful combination for Banking, Insurance, Accountancy, etc. while Business with languages is a good start for those considering Sales and Marketing. Combined with sciences it provides a useful background for a scientific career in industry.

Structure of the course

Lower Sixth content	Upper Sixth content
<ul style="list-style-type: none">• What is business?• Managers, leadership and decision making• Decision making to improve:<ul style="list-style-type: none">○ marketing performance○ operational performance○ financial performance○ human resource performance	<ul style="list-style-type: none">• Analysing the strategic position of a business• Choosing strategic direction• Strategic methods: how to pursue strategies• Managing strategic change

The Business syllabus encourages candidates to acquire a range of important and transferable skills including:

- Data and numerical skills – candidates will be expected to manipulate data in a variety of forms and to interpret their results
- Presenting arguments and making judgments and justified recommendations on the basis of the available evidence
- Recognising the nature of problems, solving problems and making decisions using appropriate business tools and methods
- Planning work, taking into account the demands of the task and the time available to complete it
- Conducting research into a specific theme in preparation for one or more tasks
- Challenging their own assumptions using evidence that has become available.

Assessment

Three papers of 2 hours each, all covering the whole of the course content and counting for 33.3% of the A Level each:

P1 (100 marks)

- 15 marks of multiple choice
- 35 marks of short answer questions
- 50 marks comprised of 2 essay questions

P2 (100 marks)

- Three data response questions

P3 (100 marks)

One case study of approx. 6 questions

Chemistry

A Level

Exam Board: OCR

Why study chemistry?

We all do chemistry every day.

As soon as you wake up in the morning, you start doing chemistry. Chemistry explains why an egg changes when you fry it and why your non-stick pan is non-sticky, how soap and shampoo make you clean, why you feel tired before coffee and alert after it, and how the petrol in your car gets you to school or work.

In fact, your body is doing chemistry all of the time; your sense of vision works because a small organic molecule changes shape in the back of your eye when light hits it.

Chemistry is truly the 'central science'. New breakthroughs in fields such as genetics, biochemistry, medicine, materials science, forensics, nanotechnology, drug discovery, the environment and next-generation computer hardware are all driven by chemistry. Chemistry is about the molecules all around us. It is about matter: specifically, how matter changes.

Studying Chemistry will allow you to learn about why the things around us behave the way they do. A sound knowledge of chemistry is also required to fully understand most other areas of science, and this is why the study of chemistry to A Level is either compulsory or recommended by many other disciplines at universities. However, most importantly, it is just so fascinating and so much fun. If you want to understand the workings of the world around you - then Chemistry is for you.

Entrance requirements:

A GCSE grade of at least a grade 7 in both Chemistry and Mathematics is required. It is also recommended, although not essential, that you study A Level Mathematics as well as one of the other core sciences, Biology or Physics.

Career opportunities:

Chemistry opens up career options. There are many careers in chemistry but even if you're looking for a job in another field, the analytical skills gained in chemistry are helpful. Chemistry applies to the food industry, retail sales, transportation, art, homemaking... really any type of work you can name.

Chemistry is a very versatile subject and is respected by universities no matter what course you wish to pursue next, whether you want to go into law or business or even science. It is essential for degree courses that are based on the physical sciences, such as Natural Sciences, Engineering and, of course, Chemistry. A Level Chemistry is also essential to study Medicine or Veterinary Science as well as most other Biological or Biomedical Science courses.

Structure of course:

A Level Chemistry is a two-year course and covers the traditional areas of Organic, Inorganic and Physical Chemistry. The exams assess both a breadth as well as a depth of chemistry knowledge and understanding, along with problem solving questions, pushing students beyond the confines of the specification.

Even if you do not go on to use Chemistry directly in your further studies you will find that the broad skill set acquired is invaluable in whatever field you choose. Having an understanding of what all 'stuff' is made of and how it all works cannot fail to be of interest to someone with an enquiring mind.

Computer Science

A Level

Exam Board: OCR

Entrance Requirements

In order to study Computer Science at A Level you need to have studied the subject for GCSE and achieved at least a grade 7. You should also have a minimum of a 7 in GCSE Maths and be studying Maths at A Level.

Why Study Computer Science?

Computer Science is all about problem solving. This is probably the most important skill for life.

Computer Science is a practical subject where students can apply the academic principles learned in the classroom to real-world systems. It is an intensely creative subject that combines invention and excitement, and can look at the natural world through a digital prism. Computational thinking helps students to develop the skill to solve problems, design systems and understand the power and limits of human and machine intelligence.

Career Opportunities

We live in a digital world. Every aspect of life and work involves computers. Because every industry uses computers, computer scientists can work anywhere, on any project. You want to work in design, architecture, engineering, publishing, health, artificial intelligence, robotics, music or film production (the list is endless)? Then Computer Science is one of the best points to start from. Don't know what you want to do with your life? Perfect! Most jobs available when you leave university have not even been thought of yet.

According to the Complete University Guide, computer scientists are in high demand. 93.6% of graduates from the top 10 universities are professionally employed or in further studies 6 months after graduating.

Course Content

- Computational Thinking and Problem Solving
- Programming techniques
- Computer Systems
- Structure and function of the processor
- Type of processor
- Systems software
- Applications generation
- Software development
- Types of programming language
- Compression, Encryption and Hashing
- Databases
- Networks
- Web technologies
- Automated decision making
- Artificial intelligence
- Programming Project

You will also complete a practical programming project. This can be in Python, Swift or a C based language and you are free to negotiate a problem to solve under the guidance of your teacher. This could be a mobile app, data management information systems or game project, among others. You can even use Unity if you wish.

Assessment

There are two written exams:

Computer Systems
2½ hours written paper
140 marks
40% of total A Level

Algorithms and Programming
2½ hours written paper
140 marks
40% of total A Level

The third component is the individual non-exam assessment:

Programming Project
70 marks
20% of total A Level

Design & Technology: Product Design

A Level

Exam Board: OCR

AS Level

Exam Board: OCR

Entrance requirements:

We would expect all students to have achieved at least a grade 6 in GCSE 3D or DT. It may be possible for some Art and Design GCSE students to take up Product Design; in these instances, students will need to present a portfolio of work (further information on this is available from Mr Taylor, Head of 3D Design) as well as achieving a 6 in their Art and Design GCSE.

Career opportunities:

Product Design is a fantastic subject if you are interested in university courses, such as Architecture, Automobile Design, 3D Design, Engineering, Furniture Design, Jewellery, Industrial design, Product Design and other related areas, as well as for entry to a Foundation Course in Art & Design (a diagnostic course and a prerequisite of most BA degree courses in Art & Design subjects).

The emphasis of the course will be on developing skills, experience and technical knowledge, while exploring design projects, the end results being full-size products or scale models with working prototypes produced wherever possible. The Product Design course will open up the world of design to its students in a way that is rarely seen in a school environment. The experience of exploring ideas, working creatively, thinking laterally and producing successful outcomes will stand you in good stead within many walks of life.

Structure of course:

The A Level course involves both practical and design work supported by material, manufacture, critical and historical theory. Product Design is primarily concerned with solving problems and designing to meet a need in a functional and aesthetic manner. Students of Product Design work regularly in the studios and workshops, developing their personal ideas through a variety of media and processes. Students also look at related work by artists, designers, and architects as well as associated subject theory and wider influences upon design.

Opportunities to visit galleries, museums, factories, design shows and workshops occur during the course and feed directly back into students' work.

The 3D department offers creative spaces to design, make and test their ideas in a range of equipment including:

- Technical and artistic-based drawing (a wide range of media and equipment)
- CAD/CAM (including 3D printing, routing, laser cutting and vinyl cutting)
- Specialist workshops for wood, metals, ceramics, polymers and digital technology
- Equipment includes lathes, band saws, pillar drills, sanders, bag press, planers, TIG and MIG welders, gas cutting and brazing, forging and forming.
- High quality model making and presentation skills
- Computer modelling with Autodesk 'Inventor and Fusion'

Assessment:

At A Level, students will complete two forms of assessment, a written exam (worth 50% of the total) and a substantial 'Design and Make' project known as the NEA, Non Examined Assessment, also worth 50%.

Component 1 & 2 (written exam)

Paper 1 (1½ hours) covers the technical principles of the subject, such as materials and manufacturing and understanding of wider social, moral and environmental issues which impact upon design.

Paper 2 (1¾ hours) is comprised of a series of longer answer questions that require students to demonstrate their problem solving and critical evaluation skills.

Component 3 – NEA – completed within 65 hours of lesson time. Students will undertake the 'Iterative Design Project' which requires students to design, make and evaluate a project centred on a context of their own choice. Using the skills developed over GCSE and the A Level course, students will create a portfolio of evidence and final product in real time to demonstrate their competence. The portfolio of design work is based on an idea, issue, concept or theme leading to a finished outcome or a series of related finished outcomes.

AS Level:

All Lower Sixth students will work on the same course structure in the first term. Assessment is comprised of a written exam (1¾ hours; 50% of the total) including technical principles and problem solving and the NEA, a substantial 'Design and Make' project (45 hours; 50% of the total).

Drama and Theatre

A Level

Exam Board: AQA

Entrance requirements:

This course requires previous experience of Drama GCSE or comparable experience of work in the theatre. All students must have an understanding of how to analyse text in performance, as well as be capable of applying methodologies of different practitioners to practical work. Technical candidates should possess secure performance skills, as set texts are explored practically. Given the theoretical and analytical demands of the A Level in Drama and Theatre, all candidates should have attained grade 6 or above in English Language or Literature at GCSE.

Career opportunities:

Drama and Theatre is widely accepted as a valuable subject for degree courses such as English Literature, Film Studies, Law and Psychology, alongside Drama courses and specialist Drama Schools. Students develop core skills such as creative thinking, analysis, problem-solving and communication, leading to employment opportunities across creative industries, the legal sector, technological innovation and public-facing roles.

Structure of course:

Drama and Theatre is a demanding but exhilarating course, offering students the opportunity to engage with a range of cultural discourses that challenge our perceptions of what constitutes dramatic art, and what it is for. A heavy emphasis is placed on applying theoretical ideas to performance, justifying practical decisions in relation to a practitioner or director's intentions and creating innovative new theatre.

Component 1: Drama & Theatre: Written examination: 3 hours (40%)

Section A: one question (from a choice) on Hedda Gabler by Henrik Ibsen (25 marks)

Section B: one three part question on a given extract from The Glass Menagerie by Tennessee Williams (30 marks)

Section C: one question (from a choice) on the work of theatre makers in a single live theatre production (25 marks)

Component 2: Creating Original Drama: Internally assessed, externally moderated (30%)

Pupils participate in the creation, research, development and performance of an original piece of devised drama, in the style of a selected Theatre Practitioner. Pupils complete a working notebook throughout the devising process (40 marks) before giving their final performance (20 marks.)

Component 3: Making Theatre: Externally assessed by a visiting examiner (30%)

Pupils study and practically explore three extracts from three contrasting play texts. The third extract is rehearsed in the style of a selected Theatre Practitioner, and performed to a visiting examiner (40 marks). A reflective report is completed, documenting the opportunities & challenges of each extract, alongside the pupils' theatrical interpretations of each.

** Components 2 and 3 can be studied from the perspective of actor, director or designer. Component 1 requires a firm understanding of all three.*

“The mission of the theatre, after all, is to change, to raise the consciousness of people to their human possibilities.” – Arthur Miller

Economics

A Level

Exam Board: AQA

Entrance requirements:

We would expect all students to have achieved GCSE English Language or Literature and Mathematics at a minimum of grade 6.

Career opportunities:

Economics is highly regarded by both universities and employers. They like to recruit people who can think for themselves, be critical and develop logical arguments. Studying Economics will help you develop these skills and is valuable to anyone thinking of any sort of career in the business world, dealing with finance or tackling major issues such as global warming and world poverty. The subject neatly partners Arts, Humanities, Science and Mathematics subjects.

One of the best things about Economics is that it will help you have a better understanding of the things that shape your life. You will be able to make better sense of the news, current affairs and politics.

Structure of the course

Lower Sixth content	Upper Sixth content
Microeconomics <ul style="list-style-type: none">• The economic problem and economic methodology• Price determination in a competitive market• Production, costs and revenue• Competitive and concentrated markets• The market mechanism, market failure and government intervention Macroeconomics <ul style="list-style-type: none">• The measurement of macroeconomic performance• How the macroeconomy works• Economic performance• Macroeconomic policy	Microeconomics <ul style="list-style-type: none">• Further development of some Lower Sixth topics• Individual economic decision making• Perfect competition, imperfectly competitive markets and monopoly• The labour market• Distribution of income and wealth: poverty and inequality Macroeconomics <ul style="list-style-type: none">• Further development of some topics• Financial markets and monetary policy• Fiscal policy and supply-side policies• The international economy

The course aims to encourage students to:

- Develop an understanding of economic concepts and theories through a critical consideration of current economic issues, problems and institutions that affect everyday life;
- Apply economic concepts and theories in a range of contexts and appreciate their value and limitations in explaining real-world phenomena;
- Analyse, explain and evaluate the strengths and weaknesses of the market economy and the role of the government within it;
- Participate effectively in society as citizens, producers and consumers.

Assessment

Three two-hour papers – one micro (P1), one macro (P2) and one covering all the content (P3).

- Each paper 33.3% of A Level.
- P1 and P2 made up of data response and essay questions.
- P3 made up of 30 marks multiple choice and 50 marks case study questions.

Outside the classroom

- Economics Club runs weekly to push beyond the syllabus and pupils are strongly encouraged to attend.
- Other activities such as debates against other schools also help to enrich the course.

English Literature

A Level

Exam Board: OCR

If you want to spend two years exploring some of the greatest stories, poems and plays written over the last 500 years, then this is the course for you. No subject is wider reaching and few are as well regarded by universities and employers. In English Literature, we will not guarantee you an A* - because it is academically rigorous - but we will guarantee you two years of challenge, exceptional teaching and mind-broadening discussion.

Entrance requirements:

You need to have a 6 in both English Language and English Literature at GCSE Level.

Career opportunities:

English Literature complements almost every other subject: Modern Languages, Biology, History, Classics, Geography, Drama, Philosophy, Economics – and even to combine it with Maths makes a fierce combination. A Level English Literature is a Facilitating Subject, highly regarded by all universities, and paves the way for a range of degree courses: History, Politics, Languages, Law, Anthropology, Theology, Business, Marketing, Economics, Media Studies, Linguistics, Drama, Philosophy and Sociology.

An English degree may lead to a wide variety of careers, notably law, politics, advertising, the media, management and the Civil Service, and students enjoy the privilege of not being limited by virtue of their subject in their final career decision.

Structure of course:

N.B. Text choices for the coursework element will vary from teacher to teacher.

Lower Sixth Content	Upper Sixth Content
<ul style="list-style-type: none">○ Drama Coursework: <i>A Streetcar Named Desire</i>○ Comparison Coursework: <i>Feminine Gospels</i> and <i>Wide Sargasso Sea</i>○ Shakespeare: <i>Hamlet</i> or <i>The Tempest</i>○ Prose (Dystopian Literature): <i>1984</i> and <i>The Handmaid's Tale</i>*	<ul style="list-style-type: none">● Comparison: <i>A Doll's House</i> and <i>Paradise Lost IX</i> and <i>X</i>● Unseen Material – Dystopian Extracts● Revision of Lower Sixth material

Assessment:

Coursework: 20% (internally assessed)

- Students write two pieces (3000 words in total) on a selection of texts.

Component 1: Drama: 40% (external exam, 2½ hours)

- Essay question on a studied Shakespeare play in context, taking wider critical reading into account.
- Close analysis of a Shakespearian passage.
- Comparison between *A Doll's House* and *Paradise Lost*.

Component 2: Prose: 40% (external exam, 2½ hours)

- Comparative essay on two studied prose texts, *1984* and *The Handmaid's Tale**, under the theme of Science and Society.
- Unseen extract from a Dystopian novel.

All externally assessed components are 'closed book'.

There will be many opportunities in the Sixth Form for you to enjoy English-related activities outside the limitations of the syllabus. There is a very successful Literary Society and the department offers English Enrichment sessions for those considering English at University and plenty of opportunity for creative writing and essay competitions.

Wherever possible, we take advantage of opportunities to enhance the teaching of our chosen text, for example: a literary trail around London, visits to museums, seminars at Cambridge university, and residential excursions to Yorkshire and Stratford.

We have also hosted a number of immersive enrichment evenings, such as 'An Evening with Tennessee' and 'An Evening with Fitzgerald' as a way of fully exploring these texts in their contexts.

*Prose texts may change from year to year.

French

A Level

Exam Board: Edexcel

Entrance requirements:

Candidates for A Level French should have taken Higher papers at GCSE and achieved a 7 or above.

Career opportunities:

Where Higher Education is concerned, as well as the more traditional University language courses, there is a wide selection where languages are linked, such as Law, Drama, or Business Studies. For those not intending to study languages at University, a modern language is still of immense practical use for future life. Modern European languages at A Level are also a sound base for anyone contemplating a non-European language at University; they are also a useful asset in a vast range of careers including Accountancy, Banking, Telecommunications, Insurance, Publishing, Management, Law, and the Civil Service.

More and more professional people nowadays find it vital to be able to deal with their European counterparts in a foreign language. France is a near neighbour of ours in Europe and is a successful and prosperous EU country and trading partner.

Structure of course:

The content builds on the understanding developed and achieved during the GCSE. The qualification features inspiring and engaging themes providing clear links to the most fundamental and interesting aspects of French culture.

The A Level course aims to:

- enhance linguistic skills and promote and develop capacity for critical thinking on the basis of knowledge and understanding of the language, culture and society of the country or countries where the language is spoken
- develop control of the language system to convey meaning, using spoken and written skills, including an extended range of vocabulary, for both practical and intellectual purposes as increasingly confident, accurate and independent users of the language develop ability to interact effectively with users of the language in speech and in writing, including through online media
- develop language learning skills and strategies, including communication
- engage critically with intellectually stimulating texts, films and other materials in the original language, developing an appreciation of sophisticated and creative uses of the language and understanding them within their cultural and social context
- develop knowledge about matters central to the society and culture, past and present, of the country or countries where the language is spoken
- mediate between cultures and between speakers of the language and speakers of English
- foster their ability to learn other languages
- equip themselves with transferable skills such as autonomy, resourcefulness, creativity, critical thinking, and linguistic, cultural and cognitive flexibility that will enable them to proceed to further study or to employment
- develop as independent researchers through the language of study.

Therefore, you need to enjoy the subject already and have a genuine desire to study it to a higher level.

What will the lessons be like?

Pupils start the course on topics which are familiar to them from the GCSE course and quickly develop their ability to speak, understand and write the foreign language using material from modern textbooks and authentic sources such as the internet, newspapers, magazines and films. The course deals with subjects of genuine interest and importance to young people. Over the two year period, the syllabus will cover popular literary texts and films with a rich choice that includes contemporary and more classical titles, together with authentic source materials.

The structure includes four engaging themes studied alongside two works, one literary text and one film.

Les changements dans la société française

La culture politique et artistique dans les pays francophones

L'immigration et la société multiculturelle française

L'Occupation et la Résistance

Lessons will be conducted predominantly in French and students will have the opportunity for a weekly lesson with our native French assistant.

Am I expected to go to France as part of the course?

Yes. It is assumed that those taking A Level French will be willing to spend a useful period of time (at least a week) in France in order to put classroom knowledge into practice. The students are encouraged to take part in work experience placements in France during their holidays. In addition, there is an annual Exchange during the Easter holidays which represents an invaluable opportunity to be immersed in the language shortly before taking oral exams at the end of April/beginning of May.

Geography

International A Level

Exam Board: CIE

Entrance requirements:

A GCSE grade of at least a 6 in Geography is required as it signifies a broadly acceptable foundation from which to embark on A Level Geography. A need for effective communication requires a grade 6 or better in English Language or Literature.

The CIE Course

The Cambridge International Exam (CIE) International A Level differs from the domestic A Level in that the AS and A2 pattern of assessment is still used. This means that exams are taken at the end of the Lower Sixth and an AS mark and grade is awarded. This mark is then combined with the A2 mark in the Upper Sixth to give an overall A Level grade. The advantages of this are that pupils can take the course for only one year if they wish, have fewer exams in the Upper Sixth and are able to space out their assessment over the two years. Students can also resit AS exams in the Upper Sixth if needed to boost performance.

Results

100% A*-B and 78% A*-A at full A Level in 2019.

Paper 1 (AS – L6) Physical Core

- Hydrology and fluvial geomorphology
- Atmosphere and weather
- Rocks and weathering

Paper 2 (AS – L6) Human Core

- Population
- Migration
- Settlement dynamics

Paper 3 (A2 – U6) Advanced Physical Options – study 2 from:

- Tropical environments
- Coastal environments
- Hazardous environments
- Arid and semi-arid environments

Paper 4 (A2 – U6) Advanced Human Options – study 2 from:

- Production, location and change
- Environmental management
- Global interdependence
- Economic transition

Within the course there is a compulsory residential field trip to South Wales at the start of the Easter holiday in the Lower Sixth costing in the region of £175, and a day trip which varies from year to year. However, there are also other trips available to geographers, most notably a trip to Iceland in alternate summers (2013, 2015, 2017, 2019 etc.).

Career opportunities:

Geography is concerned with the interaction between humans and their environment. It seeks to draw together aspects of the humanities and sciences, within a spatial context, in order to address both current and long-term issues which influence the human environment. Geographers are therefore synthesisers, people who draw together relevant concepts and disciplines and seek to provide an overview. These qualities, together with IT-based research skills, mean that Geographers are often involved in decision-making processes. In addition to the academic environment, they are to be found working as planners, environmentalists, and in many areas of the business world.

Degree Studies in Geography require a good grade at A Level. Courses such as Economics, History, Politics, Town Planning, Surveying, Geology and Environmental Sciences may also require or recommend Geography at A Level. Many Russell Group Universities also consider Geography to be a science and, as such, it can be seen as an alternative to other science subjects.

Well-qualified geographers have little difficulty finding employment but many utilise the wide range of appropriate skills developed in a variety of consultancy roles.

Geography is an academic subject with strong application skills. It combines well with a number of other A Level subjects and can be viewed as a link between the observational sciences and the critical humanities. It aims to prepare students for the global future.

German

A Level

Exam Board: Edexcel

Entrance requirements:

Candidates for A Level German need at least a grade 7 at GCSE.

Higher Education and Career:

There are a large number of degree courses which involve the study of German. The subject can be studied on its own or in conjunction with another language and it is often linked to courses in Law, European Studies or Business Affairs. Since language learning is a skill in itself, the study of German at A Level is also a good springboard to studying more exotic languages at University such as Mandarin, Russian or Arabic.

Even if your chosen degree course is not languages based, having a language at A Level can open up opportunities for spending some of your studies abroad. Similarly, languages are, of course, also a useful asset in a vast range of careers and professions. There are many interesting and well paid careers available to fluent Germanists, including Banking, Accountancy, Law, Insurance, Publishing, Translation and the Civil Service.

There are a number of career opportunities in Europe for German students, notably in the finance centre of Frankfurt, the German Parliament in Berlin and the European Commission in Strasbourg and Brussels. Having a foreign language at your disposal can bring you into the frame for jobs abroad, thus considerably widening your eligibility for employment.

As with all Modern European Languages, the advanced study of German is evidence to future employers that you are an individual that is willing to look beyond cultural boundaries and interact with different kinds of people.

What will the lessons be like?

Pupils quickly start to move away from familiar GCSE territory and into topic areas which are of genuine interest and importance to them. There is an emphasis on using the target language so that pupils gain in confidence in their spoken German. Pupils will need to strive for grammatical accuracy as well as get to grips with a range of new syntax and idiom. They will also have the opportunity to have weekly lessons with a German assistant.

The course is covered through the use of a modern textbook which includes inspiring digital resources in conjunction with authentic materials from radio, television, the internet, newspapers and magazines.

The course structure includes four engaging themes studied alongside two works, one literary text and one film.

1. *Gesellschaftliche Entwicklung in Deutschland*
2. *Politische und kuenstlerische Kultur im deutschen Sprachraum*
3. *Immigration und die deutsche multikulturelle Gesellschaft*
4. *Die Wiedervereinigung Deutschlands*

Am I expected to go to Germany as part of the course?

Yes. It is assumed that those taking A Level German will be willing to spend a useful period of time in a country where the language is spoken. Typically this takes place during the Lower Sixth and all pupils will be strongly encouraged to participate in the exciting new exchange programme involving a week in Bavaria in July and a return visit from the German pupils in March.

History

A Level

Exam Board: Edexcel

Entrance requirements:

A minimum of a grade 6 at History GCSE is required and we would expect a similar result in English Language or Literature.

Career opportunities:

History is for you if you are interested in people, what they did and, more importantly, why. It is for you if you have an enquiring and analytical mind. History teaches you not only to solve problems, but to work out what the problems might be. Finally, History is for you if you want to equip yourself with skills that are highly valued at university and in the workplace. History is highly respected and useful for a wide number of degrees, from History and English to Accountancy and Law. As such, it is an excellent stepping stone for those interested in becoming bankers, journalists, teachers, lawyers, civil servants and politicians.

Structure of course:

The History Department at Caterham offers a mixture of topics across time and continents.

Lower Sixth

Unit 1: Britain, 1625–1701: conflict, revolution and settlement

This includes the Personal Rule of Charles I, the Civil War, Charles I's execution, Cromwell, Charles II and the Restoration, James II and the Glorious Revolution, the early days of Empire etc.

Unit 2: Russia in revolution, 1894–1924

This includes the collapse of Tsarism, the experience of WW1, the 1917 Revolutions and the Russian Civil War.

Upper Sixth

Unit 3: Civil rights and race relations in the USA, 1850–2009

This includes analysis of the changing portrayal of Civil Rights in fiction and film over time; the impact of the US Civil War and Reconstruction, Jim Crow Laws, the New Deal, Martin Luther King and the 1950s and 60s, and the reasons for Obama's electoral victory in 2008.

Unit 4 (coursework): The European Witch Craze: An essay analysing historians' differing interpretations.

Units 1 and 3 are each worth 30% of the A Level and units 2 and 4 are each worth 20%. The methods of assessment mean that students taking History in the Sixth Form will experience a wide range of teaching approaches. The department makes use of iPads and ensures that key skills are developed explicitly so that students are well prepared for university study.

We endeavour to take students out of the classroom, with trips to the theatre and cinema, to exhibitions and to other places of interest. There is a thriving enrichment programme with an active History Society (CLIO) and there is also a superbly resourced library.

Latin & Greek

A Level

Exam Board: OCR

Entrance requirements:

To ensure success, candidates for Classics A Levels should have a 7 in GCSE Latin or Greek but do not need to have previously done any English to Latin or Greek translation.

Combinations with other A Level subjects:

Because the study of Classical languages develops skills in the close analysis of data and the systematic application of grammatical rules, and the study of literature promotes artistic sensitivity, Latin or Greek are often combined with languages such as English, French, German or Spanish, with humanities such as History, and with sciences such as Mathematics or Economics.

Career Opportunities:

Greek and Latin go naturally together, but each of them also combines well with other subjects. They should not be seen as possible choices only for brilliant linguists. High grades are attainable by any candidate who has done well at GCSE, is interested and is prepared to work. Our approach to Classics is exacting and scholarly and we aim to be the intellectual hub of the school; the outcome is consistently outstanding exam results and a high ratio of Oxbridge success.

Both Greek and Latin are highly respected subjects in the eyes of universities and employers. There is wide scope for pursuing them in higher education, either on their own or with other subjects. They are of particular benefit for linguists and students of English Literature, but also provide a good background for more vocational degree courses such as Law. Both Latin and Greek have always been prized as offering the chance to acquire a range of transferable skills, and Classics graduates are valued for their flexibility as well as for their intellectual rigour. Students who study Classical subjects at A Level enjoy success in a huge variety of careers from Journalism to Politics, from Publishing to Business.

The study of the history, languages and culture of the ancient world makes a superb foundation for the world of work, and pupils whose interests lie in the ancient world will find A Level Latin or Greek an academically stimulating and rewarding experience. Caterham Classicists who go on to take a Classics-related course at university (and a good number invariably do) can do this in the knowledge that graduates of this discipline are, according to a recent survey, regarded as the most employable, because they will have demonstrated adaptability and flexibility, qualities that are increasingly coveted by employers.

Structure of course:

The programme over the Sixth Form and the format of the A Level examination are similar in both languages. In the Lower Sixth we read widely in Greek and Latin literature. This concentration enables students to attain a fluency and speed in reading original texts which is hard to imagine at the start of the course, and these texts represent some of the greatest literature ever produced; it is an incomparable experience to read them in the language in which they were written. In the process, pupils acquire much historical knowledge of periods both interesting in themselves and hugely influential in forming our own world and outlook. Students also reinforce their understanding of grammar by seeing how its rules are applied (and broken) by ancient authors.

Our reading in the Lower Sixth is focused around two set texts, one verse and one prose, ranging from forensic oratory to epic poetry. In the Upper Sixth, we study two more set texts, in slightly fuller detail, including a more in-depth analysis of classical history. The A Level examination, taken at the end of the Upper Sixth, therefore tests knowledge of four different texts, together with additional literature in translation, read and discussed in class to provide context in each area. In addition to this, two papers in Unseen Translation and Prose Composition or Translation test a student's knowledge of vocabulary and linguistic structure through questions based around previously unseen passages of Latin or Greek. During the whole course, pupils will thus have tackled four contrasting set texts in prose and verse, drawn from epic, history, drama, philosophy and lyric poetry, which taken together provide a wide and representative experience of ancient literature. In terms of enrichment, the department also provides a year-round Oxbridge programme and offers regular Oxbridge Open Days, theatre trips and study tours abroad for dedicated Caterham Classicists.

Mathematics

A Level

Exam Board: AQA

Entrance requirements:

The Maths GCSE grade required to study Maths at A Level is 7. However, those who have achieved 8 or 9 are more likely to access a C grade or above at A Level. The Maths GCSE grade required to study Further Maths at A Level is 8. However, those who have achieved 9 are more likely to access a C grade or above at Further Maths A Level. For Further Mathematics A Level, study beyond GCSE (e.g. the AQA GCSE Further Mathematics course) is highly beneficial; if you have not had this opportunity, you should contact the Registrar for a study pack over the summer and ideally arrange a discussion with the Head of Mathematics to determine your suitability for this course. Pupils wishing to study Further Maths who studied their IGCSE at Caterham MUST discuss this with either their teacher or with the Head of Mathematics before choosing this option.

Career opportunities:

An A Level in Mathematics is essential if you are going to read degree courses in Mathematics, Physics, Engineering and for almost all Computer Science and Operational Research courses. An A Level is useful for Higher Education courses in Accountancy, Architecture, Statistics, Meteorology, Optics and for some courses in Management Science and Economics.

Structure of course:

There are two ways of taking Mathematics at Advanced Level:

- 1) A single subject, Mathematics. This includes Pure Mathematics and some Applied Mathematics (Statistics and Mechanics).
- 2) A double subject, Mathematics and Further Mathematics, which count as two A Levels. This develops the material studied in Single Mathematics, as well as introducing many new and challenging concepts.

What is A Level Mathematics about?

There are three main areas:

- 1) Pure Mathematics, where the study of Algebra, Geometry, Trigonometry and Calculus is continued.
- 2) Applied Mathematics (Mechanics), which involves the study of forces and the way in which forces combine to make things move (Dynamics) or stay still (Statics). This is especially useful to those studying Physics.
- 3) Applied Mathematics (Statistics) which involves the study of probability and how to handle and analyse quantities of data.

Music

A Level

Exam Board: Edexcel

Entrance requirements:

Candidates will normally have achieved a 7 or above in GCSE Music. They must be having tuition on their principle study instrument/voice and they will normally have attained Grade 6 standard (though may only have taken the Grade 5 exam) on this before entry in the Lower Sixth form. A good level of knowledge of music theory will be of great benefit.

Career opportunities:

Some who take A Level Music do so with the intention of going on to Higher Education in Music, either at University or one of the specialised music colleges. The A Level is, however, an acceptable subject choice for almost all humanities-based courses such as English, Law, History and Modern Languages, and in combination with Mathematics and Physics provides entry into Engineering Studio Music, Recording or Acoustics. It forms an ideal combination with other Arts based subjects, e.g., English and History. Previous candidates who have studied A Level Music have also gone on to read medicine at Russell Group universities. Due to the breadth of the A Level course and both creative and academic aspects, Music A Level is a well-regarded subject by top universities.

Structure of course:

Through a study of a wide and diverse range of musical genres, the A Level course provides candidates with a breadth of musical knowledge in preparation for higher education. The linear course allows pupils time to develop and extend their performance and composition skills, with all coursework being submitted for external assessment before the final exam in the summer of 2020.

Component 1: Performing

30% of the qualification

Assessment overview

- A public performance of one or more pieces, performed as a recital.
- Performance can be playing or singing solo, in an ensemble, improvising, or realising music through the use of music technology.
- The total performance time across all pieces must be a minimum of 8 minutes.

Component 2: Composing

30% of the qualification

Assessment overview

- Total of two compositions, one to a brief and one either free composition or also to a brief.
- One composition must be from either a list of briefs related to the areas of study, or a free composition, carrying 40 marks for this component. This composition must be a minimum of 4 minutes in duration.
- One composition must be from a list of briefs assessing compositional technique, carrying 20 marks for this component. This composition must be at least 1 minute in duration.
- Total time across both submissions must be a minimum of 6 minutes in duration.

Component 3: Appraising – Written examination: 2 hours

40% of the qualification

- Knowledge and understanding of musical elements, contexts and language.
- Application of knowledge through the context of six areas of study, (vocal music, instrumental music, music for film, pop music and jazz, fusions, new directions) each with three set works.
- The written exam consists of two sections: Section A (Areas of study and dictation) and Section B (Extended response).

It is expected that A Level students participate in more than one musical ensemble offered by the School. Students will also participate in one of the choirs in order to assist with the learning of more complex areas of the programme of study such as harmony and notation.

It is also expected that pupils purchase their own copies of the Edexcel A Level Anthology of Music as well as a Study Guide so that they can make annotations to aid their studies. This can be ordered by the pupil or by the school and put on their bill.

Philosophy, Ethics & Theology

A Level

Exam Board: OCR

Examination requirements:

A 6 or better in Religious Studies GCSE (if taken) and English Language or Literature.

Career Opportunities:

In a world where technological development is at the forefront of our lives, it may at first seem surprising that Philosophy, Ethics and Theology is one of the fastest growing subjects in the UK. However, if we step back and look at the bigger picture behind the many ground-breaking changes around the globe, we will often find a student of Philosophy, Ethics and Theology is never too far away from the action. For example, as Google make the finishing touches to their autonomous cars, it is philosophers and ethicists who are debating over the code of conduct that will drive the computers' decisions when difficult, potentially life-changing choices need to be made.

The skills nurtured when studying Philosophy, Ethics and Theology such as critical thinking, problem solving and the communication of ideas are a crucial part of many degree and career opportunities ranging from Law, Politics, Economics and Sociology, to Psychology, Medicine and Robotics.

As the world moves forwards, employers will need people with the sensitivity and thoughtfulness to look at the choices we are making and to evaluate them in a critical way which keeps in mind the thousands of years of thought and debate that has taken us to where we are, whilst having the flexibility and moral insight to understand where new choices and ways of thinking may be necessary.

Structure of course:

In the **Philosophy of Religion** students will study the following topics, among others:

- ancient philosophical influences
- the nature of the soul, mind and body
- arguments about the existence or non-existence of God
- the challenge for religious belief of the problem of evil

In **Religion and Ethics** students will study the following topics, among others:

- utilitarianism, situation ethics, Kantian ethics & natural moral law
- euthanasia
- business ethics
- debates surrounding the significant idea of conscience
- sexual ethics

In **Developments in Religious Thoughts** students will study the following topics, among others:

- gender and society/theology
- religious pluralism
- the challenge of secularism
- liberation theology and Marx

How the A Level is assessed

- Three written exams of 2 hours

A Level Philosophy, Ethics & Theology is an academically demanding and thought-provoking subject that is appropriate for those of any faith or of none. The best students may be committed atheists who find the philosophical and ethical questions that the subject raises fascinating and intellectually stimulating, or those of a strong faith who are excited to explore the foundations of some of the key thinking behind both religious and secular debate throughout mankind's relationship with God.

Over the course of the two years the Philosophy & Theology and Psychology departments run a joint trip to Krakow, Poland, incorporating a visit to Auschwitz concentration camp. This study trip is designed to support a number of the topics studied at Religious Studies A Level, including 'The Problem of Evil', 'Conscience' and 'Christian Moral Action'. It is a two night visit costing approximately £400, dependent on the number of students participating.

Physical Education

Entrance requirements:

A grade 6 in GCSE Physical Education is required for A Level, as long as a 6 has been achieved on the theory paper. It may be possible to accept pupils who have not studied the subject for GCSE, particularly if they have a strong Science background.

Career Opportunities:

A Level PE is a subject widely respected by universities and many of our pupils have been accepted into the very best universities, whether to study Sports Science, Mechanical Engineering, or anything in-between! It is obviously an excellent stepping stone towards any sport-related degree course, such as Sports Science and Sports Management. There is an ever-increasing demand for sports scientists, as in recent years athletes and coaches have realised the serious impact science has on sports performance. Careers in sport can therefore range from Physiotherapy, to strength and conditioning Coaching, to Performance Analysis, to the technological development of sports equipment. London 2012 has also led to an increase in the demand for event management and sports marketing graduates with a specialism in sport.

The varied content of the subject makes it an interesting and challenging option at A Level. Sports-minded students find it an enjoyable option, which may well offer them a good contrast within their combination of subjects. Its cross-curricular content can also complement subjects like Biology and Psychology.

Structure of course:

The course is **70% theory** and **30% coursework**. The coursework is classroom-based and assumes the pupils will continue in their chosen sport outside of lessons in order to attain the necessary levels of performance, as well as enabling them to fulfil the coursework tasks related to their chosen sport.

Theory

A Level Physical Education is a continuation and extension of work introduced at GCSE. The topics studied in Lower and Upper Sixth include:

- Applied anatomy and physiology
- Biomechanical movement
- Skill acquisition
- Sport psychology
- Sport and society
- Role of technology

Each of the different topics studied are inter-related and require the students to develop an awareness of the importance that they all have collectively on performance, both the performance of an elite athlete and the student's own performance in their chosen sport.

The theory work will be examined by two papers:

- Component One: Scientific Principles of Physical Education
(*Applied A&P; Biomechanics; Exercise Physiology*)
- Component Two: Psychological and Principles of Physical Education
(*Skill Acquisition; Sports Psychology; Sport and Society*)

Coursework

- Practical performance in one chosen sport (performer or coach): 15%
- Performance analysis: 15%

Lower Sixth: Analysis and evaluation of a performance

Upper Sixth: Personal Development Plan

The coursework is assessed via external moderation.

Physics

A Level

Exam Board: OCR

Physics is the subject that, more than any other, explains the universe around us at its most fundamental level. Understanding Physics is key to some of the biggest questions that humanity has ever asked, and is at the heart of our greatest technological achievements. There is no greater excitement than the thrill of seeking Physics' cutting edge.

Entrance requirements:

For a pupil wishing to study Physics it is essential that at least a grade 7 has been achieved at GCSE Physics (or a grade 7 in the Physics paper of Double Award Science). A Level Mathematics is strongly recommended as the two subjects are extremely complementary. Although it is possible to achieve highly without studying Mathematics in the Sixth Form, students should be aware of the extra work that will be necessary to develop their mathematical fluency in algebra and trigonometry in particular.

Career opportunities:

A good grade in A Level Physics is a gateway to an enormous range of University courses, all of which prize the high levels of numeracy and abstract logical thinking that Physics requires. It is universally seen as a highly academic subject. Almost all jobs requiring a level of technological ability will inherently rely upon a basic knowledge of Physics. For example, modern medicine makes extensive use of Physics in the prevention, diagnosis and treatment of disease. University courses in all types of Engineering (Electrical/Electronic, Civil, Mechanical and Aeronautical) require Physics and Mathematics at A Level. Physics and Engineering graduates are some of the most sought after in high earning or fast-tracked career paths in Banking, Finance, Marketing, Accountancy and Law. Some use their technical skills directly in Research and Development, Design or Manufacturing, others are involved in Marketing or General Management in technological industries, with Physics-related career opportunities growing to service our increasingly technologically advanced societies.

Structure of course:

Students are expected to take a curious attitude towards the world around them and seek a clear, concise understanding of the underlying causes and reasons for workings of the universe, from the sub-atomic to the cosmological scales. Students typically enjoy the simplicity of underlying Physical laws or love to understand the way things work and make their own creations, or appreciate the fundamental nature of the subject. In spanning almost 14 billion years of history, the course aims to develop a full understanding of concepts rather than just the ability to learn facts. Successful students learn to think abstractly, logically and creatively to apply their understanding to a diverse range of situations. Building upon GCSE, the course goes into far greater depth, and gives far more rigorous justification, both experimental and theoretical of familiar and unfamiliar material. Furthermore, students are expected to be able to apply their understanding within practical experiments to affirm or deny proposed theories.

The Lower Sixth course covers work on motion, energy, waves, electricity, the nature of light and quantum Physics. The Upper Sixth course covers orbital, circular and harmonic motion, field theories, both electromagnetic and gravitational, particle and nuclear physics, medical imaging, introductory thermodynamics, and astrophysics. Practical work plays a key role throughout both years of the course.

Assessment

The A Level is awarded based on the results of a 2¼ hour Mechanics paper, another 2¼ hour paper covering Waves, Electromagnetism, Quantum, Medical and Particle Physics, and a third 1½ hour paper covering the whole syllabus. The A Level may also earn a practical endorsement which is awarded by OCR based on a sufficient standard of practical work over the two years. All students who successfully complete the two year course are expected to achieve the practical endorsement.

Politics

A Level

Exam Board: Edexcel

Examination requirements:

A grade 6 in English Language or English Literature and a grade 6 in one of the humanities.

Career opportunities:

A Level Politics is a highly regarded qualification. It is particularly relevant for those wishing to study Politics or International Relations at university, two of the fastest growing degree subjects in the country. A Level Politics is also one of the best options for those considering a Law degree. As well as learning the process of government and studying political issues and debates in the UK and USA, you will develop transferable skills of analysis, evaluation and research methodology. A Level Politics will also help you to become a more empathetic and compassionate young person.

These skills will be directly relevant to those seeking to pursue careers in law, business, the civil service, the public sector, the media, publishing and academic research, amongst many others.

Structure of course:

In the Lower Sixth students study two units, British government and British politics. The politics unit covers the ideas of democracy and participation, the party structure, the role of elections, voting behaviour and the role of the media in elections. The government side covers the UK constitution, Parliament, the executive, the judiciary and the inter-relationship of these branches. There are also sections on the key political ideas of conservatism, socialism, liberalism and feminism.

In the Upper Sixth, the course considers the comparative nature of British and American politics. In addition to learning about the workings of the American political system, including the Constitution, political representation, elections, the Supreme Court, the presidency and Congress, students will learn to make comparisons between the British and American systems.

Assessment is based on three exams, each two hours in length, sat at the end of the Upper Sixth. The course provides a fascinating insight into the political systems and cultures operating on both sides of the Atlantic.

Unit 1

British Politics:

- UK Elections
- The role of the media in elections
- Political participation and democracy
- Political parties
- Political ideas: conservatism, socialism, liberalism

Unit 2

British Government:

- The nature of the UK constitution and reforms
- The UK Parliament: Commons & Lords
- The UK Executive: the roles of the Prime Minister and Cabinet
- The inter-relationship of the branches and the role of rights and the judiciary
- Feminism

Unit 3

Comparative Politics (USA)

- The American political system, covering
 - The Constitution
 - Supreme Court
 - Congress
 - Presidency
 - Elections
 - Representation
 - Race Relations
- Skills of comparison and analysis between the British and American political systems

Why study Politics?

There is an ancient apocryphal Chinese curse: 'May you live in interesting times'. With the aftermath of Brexit, the ramifications of coronavirus and the chaos of the American political system, there has never been a more interesting or important time to study politics. Not only will you gain a high quality academic qualification, but you will be fully immersed and engaged in the study of the ever changing world.

Psychology

A Level

Exam Board: AQA

Entrance requirements:

Minimum of 6 in Biology, Mathematics & English Language or Literature, with 7 in either Biology or Mathematics.

Career opportunities:

Psychology is a multifaceted subject. Not only does it lead to a variety of Psychology-specific degree options (e.g., Forensic Psychology, Clinical Psychology) it also serves as a valuable basis for other academic study options (e.g., Neuroscience, Law, Business Studies & Management). To achieve Chartered status as a Psychologist, a highly standardised and regulated route of study and practice is required (<http://beta.bps.org.uk/>), but studying Psychology at A Level can open doors to many different careers in the health sector, education and research. A Level Psychology is not necessarily required to study Psychology at degree level but it is certainly advisable. Studying Psychology strongly develops theory-to-practice thinking, and the ability to diagnose real-world issues and design evidence-based interventions. Pupils studying A Level Psychology will be equipped with a stronger awareness of how to describe, predict and evaluate human behaviour, and apply such psychological knowledge in ways that enhance human life.

Structure of course:

The two-year **A Level course** is made up of the following topics, assessed by three written examinations:

Paper 1:

- Social Influence (e.g., Explanations for conformity and obedience)
- Memory (e.g., Theories of forgetting; Eyewitness testimony accuracy)
- Attachment (e.g., Types of infant attachment; Research into Romanian orphans)
- Psychopathology (e.g., Biological approach to explaining and treating Obsessive Compulsive Disorder)

Paper 2:

- Approaches in Psychology (e.g., Behaviourism; Cognitive Neuroscience)
- Biopsychology (e.g., Localisation of brain function; Split brain research)
- Research Methods (e.g., Experimental and non-experiment methods; Inferential Testing)

Paper 3:

- Issues and Debates in Psychology (e.g., Nature-Nurture debate)
- Schizophrenia (e.g., Dopamine hypothesis; Typical & atypical antipsychotics)
- Cognition and Development (e.g., Intellectual development; Explanations for autism)
- Forensic Psychology (e.g., Offender profiling; Cognitive distortions)

We provide a vibrant and stimulating environment for pupils to develop interest in the relationship between brain and behaviour, and explore the various methodologies for studying this relationship. Critically, research methods and data handling techniques used by psychologists are a core focus. Pupils have the opportunity to attend a support clinic and the Psychology Society, where topics like personality, perception and motivation are discussed and the latest research in these areas reviewed in seminar-style sessions.

Development of diagnosis and critical analysis skills are key and we ensure this subject is taught in a way that fosters such insight via consultation simulations, applied case studies (e.g., amnesia case studies) and formal debates. Furthermore, pupils have access to key resources such as the *British Psychological Society* monthly magazine, *The Psychologist*, and *Psychology Review*. Some topics are excitingly accompanied by research seminars where students are required to put their knowledge into practice and get hands-on experience conducting controlled observations and experiments of behaviour. This fascinating subject requires an inquisitive mind, as well as a diligent approach to one's studies in order to cope with the significant breadth and depth of content.

Spanish

A Level

Exam Board: AQA

Entrance requirements:

Candidates for A Level Spanish need at least a 7 at GCSE.

Career opportunities:

Spanish is a global language and it is growing fast. Of course we know that it is spoken by the 40 million people who live in Spain. You were probably aware that most Central and South American countries are also Spanish speaking. You may not have been aware that there are around 38 million Spanish speakers in the United States – a figure that is growing – and that many parts of America have Spanish as a first language. Being able to speak Spanish opens up a wealth of opportunities in this globalised economy in which we now live. Employers in sectors such as Banking, Accountancy, the Armed Forces, Law, Insurance, Publishing and the Civil Service are always looking for people with language skills. Indeed, it is becoming increasingly common to find that a second language is a pre-requisite for a job.

Structure of course:

Starting with principles familiar to a good GCSE candidate, the A Level course in Spanish aims to:

- Develop knowledge of the language to the point where the pupil can understand and communicate in the written and spoken language for a variety of purposes in the worlds of work and leisure;
- Foster an awareness and understanding of the background (cultural, social, commercial, historical, geographical and political) of countries in which Spanish is spoken;
- Offer the enjoyment, intellectual stimulation and challenge appropriate to an advanced course at this level;
- Enable students to pursue further learning of the language and/or to undertake the acquisition of other foreign languages;
- Complement their other studies through the pursuit of selected areas of interest in greater depth and the development of a personal and independent response to them.

You therefore need to enjoy the subject already and have a real desire to study it to a higher level.

What will the lessons be like?

Students start the course on topics which are familiar to them from the GCSE course and develop quickly their ability to speak, understand and write the foreign language using material from modern textbooks and authentic sources such as newspapers, websites, magazines, radio and television programmes, films and plays.

Most students say that they cannot believe how quickly their Spanish progresses from the GCSE level language they were using. This is partly because the scope of the course is so much wider.

The syllabus over the two year course is as follows:

- a. Aspects of Hispanic Society. This involves the study of modern and traditional values, cyberspace and equal rights.
- b. Multiculturalism in Hispanic society. Here students will study the issues of immigration, racism and integration.
- c. Artistic culture in the Hispanic world. This is a very wide ranging topic which includes: modern day idols, Spanish regional identity, cultural heritage or cultural landscape.
- d. Aspects of political life: today's youth, tomorrow's citizens, political systems throughout the Spanish speaking world and popular political movements.

We also study a Spanish film and a Spanish piece of literature – both of which have proved very popular with students in the past.

A significant part of the exam (30%) is the oral. Here students discuss themes covering the above topic areas as well as the book and film that they have studied. To help with this, students will spend 25 minutes a week speaking with our language assistant on topics linked to the exam. Our philosophy is that we aim to teach the language in such a way as to enable students to speak as fluently as their ambition allows.

IELTS / EAL

International Students Only

All international students study for and sit the IELTS exam, aiming to leave Caterham School with a certificate showing a minimum of 7.0 in each part. On arrival, all Lower Sixth international students sit a mock IELTS paper to assess their current English level and determine which group they will join in order to achieve the above grade as quickly and efficiently as possible. With a focus on academic English, this course also supports the main A Level subjects.

In addition, students have the opportunity to follow individual courses (so-called 121s), the content of which is driven by personal needs. There is no extra cost or specific timeframe involved. A student may self-refer if they would like help for any reason in any of the four skill areas (reading, writing, listening and speaking); they may also be referred by a teacher.

Please do not try to circumvent this by sitting an IELTS exam before arriving at Caterham School. The qualification is required for university entrance and a valid certificate is needed on the commencement date of the university course. As the certificate only has two years' validity, the earliest useful date for sitting the exam is mid-October of the Lower Sixth.



CATERHAM SCHOOL

Harestone Valley Road
Caterham Surrey CR3 6YA

Telephone: +44 (0)1883 343028
Email: admissions@caterhamschool.co.uk
caterhamschool.co.uk