



Sixth Form Curriculum

A Guide to A Level Study



RGS GUILDFORD

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Foreword



The Sixth Form at the RGS exists to support, inspire and prepare students as they progress from school to university and the wider world. The RGS provides a positive and aspirational environment which promotes compassion, diversity and diligence. The Sixth Form is the epitome of the RGS experience where students have opportunities to flourish both academically and in a wide variety of co-curricular fields.

The highest expectations and personal responsibility are embedded in every area of school life, creating a high-performance setting that strives for excellence. The RGS Sixth Form fosters and encourages leadership, independence and a sense of community. Respect for others underpins all actions, as students are challenged to better themselves and the world around them.

When joining the RGS Sixth Form you will take more responsibility for your learning within a challenging and supportive academic setting. Learning within the RGS Sixth Form will feel different to your experience studying towards your GCSEs as classes sizes will be smaller and you will be taught by teachers who will inspire within you a love of learning for the subjects you have chosen to study.

All students in the Lower Sixth begin by studying four A Levels. This will provide you with the opportunity to maintain a degree of breadth to your academic studies and to perhaps try a subject at A Level that you have previously not experienced, without committing to having to study it for two years. Students will then typically drop to three A Levels later in the academic year, either during the Lent Term or (following Lower Sixth examinations) in the Trinity Term.

Whilst academic excellence is at the heart of our educational philosophy, there is so much more to life in the RGS Sixth Form than studying towards A Levels and indeed your time with us might be considered as a means to prepare for the exam of life, rather than for a life of exams. You should expect to make lifelong friends in your time here whether in the classroom, the Sixth Form Centre, the sports field, the orchestra, the trips or the host of other activities that will be available to you.

We hope that this community and its support structures will help guide you towards a healthy, happy and fulfilled two years of Sixth Form study. When the time does come for you to leave us you will likely be sad to leave, and (hopefully) ready to go and in doing so join the thousands-strong Old Guildfordian community and all the benefits that it affords.

We look forward to welcoming you to the RGS Sixth Form.

*Mike Royds
Head of Upper School*

Sixth Form Entry and Grade Requirements for A Level



Candidates looking to join the RGS Sixth Form are expected to gain a strong list of GCSE grades, including English Language and Mathematics, with at least six passes at Grades 7 to 9. All students are expected to contribute fully to the School's co-curricular programme.

We would expect a Grade 7 in the relevant subject at GCSE as a minimum. Anything below this will prompt a significant conversation with the relevant Head of Department and the Assistant Head (Curriculum), in which students should demonstrate they have the appropriate determination and interest to study the subject at an advanced level. For students looking to study an A Level based on achieving less than a Grade 6 in the relevant subject at GCSE (which is most uncommon) this is only by approval of the Headmaster.

The sciences rely heavily on strong foundational knowledge. It is our experience that students who achieve anything less than Grade 8 or 9 at GCSE in Biology, Chemistry, Mathematics or Physics will

achieve at best a Grade B in the associated A Level. Students at the RGS aspire to the strongest universities, which will typically make offers of A*AA/AAA for entry. On this basis, we would caution students looking to study a science at A Level, who aspire to study such courses at university, and who obtain less than a Grade 8 or 9 at GCSE.

The GCSE performance of all candidates looking to join the RGS, and of existing RGS students, are carefully reviewed at GCSE Results Day and checked against A Level choices. Where further conversations need to take place, the school will contact the student. These usually take place at a specific *A Level Consultation Evening* meeting held at the beginning of the school year, when students are able to meet Heads of Department to discuss their subject choices in light of their results. The process is further supported by our Director of Higher Education, who is well placed to discuss subject choices, subject combinations and the path to university.

A Week at the RGS



The school week comprises 40 periods of 35 to 40 minutes, split equally over Monday to Friday.

In the Lower Sixth you will begin by studying four A Levels, with eight periods allocated to each subject. In addition to these academic periods you will be timetabled for:

- Games.
- General Studies.
- Monday *Period 8*.

This leaves you with two unallocated periods for personal study.

Games

Rugby and hockey are the major sports of the Michaelmas and Lent Terms while cricket is played in the Trinity Term. Sixth Form students who are not required for these major sports can opt for a number of different minor sports. Successful teams run in athletics, golf, football, cross-country, tennis, badminton, basketball, sailing and squash.

There are four Senior Rugby and Hockey teams per age group and three in the cricket season.

Representative sides in the major games play on Saturdays and minor games tend to be played after

school, during the week. Students with exceptional sporting talent are encouraged to gain representative honours at county, regional and national level.

In order for the RGS to maintain its strong sporting reputation, we expect boys to represent the School when invited to do so.

General Studies

The *General Studies* programme gives students the chance to try new things outside the curriculum, learn new skills and pursue their interests. The program runs in collaboration with Guildford High School, providing a mixed environment and a wider range of views and experiences.

Students are able to choose courses that appeal to them, and options include learning new languages, volunteering in the local community, ballroom dancing and learning to cook as well as courses that may complement their academic subjects. Courses run each half term, so students get to try many different activities and in the summer term there are social events for the Lower Sixth students to celebrate the end of the school year.

Monday Period 8



On Monday afternoons on the last lesson of the day, until up to 1700, academic lessons for the Fourth Form and above are replaced by our co-curricular Monday *Period 8* programme. We also have five *field days* each year, when normal lessons are suspended and the whole school takes part in alternative activities onsite, locally and further afield. These field days are linked to the specific Monday *Period 8* activity groups.

In the Fourth Form, students join either the RN, Army or RAF sections of our CCF or our non-uniformed group *Outdoor Pursuits*. In the Fifth and Sixth Forms the programme is defined by its diversity. For some this will be taking on leadership roles within the CCF, for others it could be volunteering in the local community including general after-school clubs in local primary schools, visiting and entertaining the elderly in residential homes and in local charity shops. We also have groups assisting with running after-school maths and sports clubs in local schools. Outdoor activities include hiking, climbing, lifesaving/surfing and mountain biking. Drama, technical theatre, set construction, editing the student newspaper *The 1509* and both classical and rock music groups are also on offer. In the Upper Sixth Form, students are also able to opt to take the period for private study. On field days, this group follows a life-skills extension programme.

Independent Learning Assignment

Most students drop to three A Levels during the course of the Lent Term. This provides additional time for self-guided study, but also coincides with the launch of the RGS Independent Learning Assignment (ILA) programme.

The ILA is a research project that all students in the Lower Sixth are encouraged to undertake. It is a bespoke part of our 'Scholarship for All' programme and represents the highest point of the RGS learning journey. Students are able to explore their own topic of interest and carry out their research independently, with support and guidance from subject-specialist supervisors. These independent research skills are essential preparation for undergraduate learning and the ILA can become a valuable point of discussion in university applications.

At the end of the process, those students who produce the highest quality submissions are invited to present to a panel of judges to compete for the ILA award across the Sciences and Arts/Humanities.

Recent entries include:

- Metal-Organic Frameworks: a potential solution to world hunger.
- The justification for economic sanctions on Russia.
- How inter-generational communications are impacted by different interpretations of emojis.
- The hunt for supermassive black holes.
- Analysing Catalan independence through culture.
- The use of gene therapy in the treatment of Huntington's disease.

In the Upper Sixth, students studying three A Levels have more personal time for independent study, to help with their preparation for their examinations.

In addition to your academic periods you will be timetabled for:

- Games
- General Studies
- Monday 'Period 8'
- General RE.

General RE

In the Upper Sixth Form, for those students not studying four subjects, there is one period per week where students have the opportunity to consider a range of personal, social and moral issues designed to be relevant to their preparation for life beyond the RGS.

Each student is encouraged to look critically at contemporary standards and values as well as to consider their own presuppositions, so that they are able to construct their own world view and personal moral code.

This is a flexible programme, that responds to contemporary issues as they arise. In recent years these include: discussing private versus public provision of health and education, consent and moral issues in sex education, trans rights, the response to 'everyone's invited', rape, and young people's political engagement.



Careers and Higher Education



Whether plans after A Levels are focused on an application to a UK university or further afield (notably to the USA), a degree apprenticeship or straight into employment, the School prides itself on providing bespoke, structured support to guide each student to achieve their ambitions.

The majority of our students focus on applying to universities in the UK with, on average, 95% of them receiving and accepting offers from those ranked in The Times Top 20 or members of the Russell Group. The most popular destinations include Bath, Bristol, Cambridge, Durham, Exeter, Imperial, Oxford, Nottingham, UCL and Warwick. Over the last decade an average of 17% of students have achieved an Oxbridge offer. Recent offers to the USA have included Chicago, Harvard, Tufts, UCLA, and Yale, whilst degree apprenticeships have been achieved with Dyson, KPMG and PWC.

We begin the process of advising on university and other post A Level plans during the first term in the Lower Sixth. Mr Dunscombe, Director of Higher Education, is always available to meet with students and parents to discuss any aspect of the Higher Education application process. Updates on all issues relating to Careers and Higher Education are provided via a detailed fortnightly briefing sheet.

Table of Subjects



All A Level subjects taught at the RGS should be considered traditional, robust and a sound preparation for a strong university application.

Ancient Greek	Ancient History	Art	Biology
Business	Chemistry	Computer Science	Design & Technology
Drama & Theatre Studies	Economics	Electronics	English Literature
French	Geography	German	History
Latin	Mathematics	(Further) Mathematics	Music
Physical Education	Physics	Politics	
Religion & Philosophy	Spanish		

In addition to the above, some students study modern languages outside of timetabled lessons and may choose to take further qualifications (GCSE, A Level). These would usually be taken during the Fourth Form and/or Lower Sixth Form, so as not to disrupt their main GCSE and A Level preparations.

Currently the extra-curricular languages we provide are:

- Arabic
- Japanese
- Mandarin
- Russian

A LEVEL ANCIENT HISTORY AT THE RGS



Course Outline

A Level Ancient History introduces you to the most interesting and enlightening periods and figures of Ancient Greece and Rome that shaped the development of the world as we know it today.

On the Greek side of the course, students study the seismic events of the 5th century BC, starting with the Persian Wars, in which against all the odds the Greeks defeated one of the largest armies ever assembled. Students then investigate the meteoric rise and fall of Athens, a city that has had an enormous impact on almost every aspect of western civilisation.

On the Roman side of the course, students learn about the Julio-Claudian and Flavian emperors, investigating how two families revolutionised the Roman Empire and established themselves as the leading powers of the western world. Students will encounter the political machinations of Augustus and Tiberius who were attempting to reinvent politics in Rome, and the mad, bad and dangerous trio of Gaius, Nero and Domitian whose actions have shocked and fascinated historians both ancient and modern.

Course Content

OCR A Level Ancient History specification

Greek History

Lower Sixth

- Students study the relations between Greek states, such as Athens and Sparta, and their relations with the surrounding world including Persia. This fascinating period of study runs from the Persian Wars up to the end of the Peloponnesian War.

Upper Sixth

- Students study the culture and politics of 5th Century Athens, which includes their philosophy, drama, art and architecture and the development of democracy, all of which made them the leading power of their time.

“A Level Ancient History introduces you to the most interesting and enlightening periods and figures of Ancient Greece and Rome.”

“Ancient History trains you to communicate in a lucid, coherent, concise manner and construct logical and sound arguments.”

Roman History

Lower Sixth

- Students study the Julio-Claudians beginning with the first emperor Augustus, who took brutal revenge against the murderers of his father Julius Caesar. They then investigate the successes and failures of his diverse array of descendants, culminating in the explosive reign of Nero.

Upper Sixth

- Students study the rise of the Flavian emperors, examining how Rome moved from the turmoil of civil war, culminating in the tumultuous Year of the Four Emperors, to one of the most successful and memorable dynasties of the Roman world.

Basis of Assessment

A Level Ancient History (OCR specification) consists of a Roman and a Greek History paper which develop and assess the same valuable skills.

Students will:

Assess the value and reliability of ancient source material for learning about the Greek and Roman worlds.

Look at how other historians have interpreted the events and personalities of those time periods.

Evaluate the sources and events of the periods they have studied and express their own interpretation of this material in essay questions.

Entry Requirements

No prior knowledge is required, but the course will prove stimulating to any student who has an interest in the ancient world or History in general, whether or not they have taken a Classical subject to GCSE. Ancient History can prove a useful addition to the study of Latin at A Level, but equally is a valuable A Level in its own right.

Skills

The study of Ancient History develops the ability to:

- Evaluate the significance of events, individuals, issues, and societies in the history of the ancient world.
- Understand the nature of historical evidence from the ancient world and to evaluate the usefulness of primary sources.
- Communicate in a lucid, coherent, concise manner.
- Construct logical and sound arguments, using primary sources from the ancient world.
- Understand Greek and Roman history in the context of their neighbouring civilisations.

Beyond the Curriculum

The Classics Department runs a thriving Senior Classics Society and there are regular lectures, both from the students and outside speakers, which inspire students to look beyond the syllabus. We run trips to various parts of the Ancient World, including Greece, Sicily and Italy so that students can see at first-hand what they have studied in the classroom. Students are encouraged to take part in university essay competitions and to investigate Classics at university and beyond, including the many careers that Classicists embark on, such as banking, coding, and law.

A LEVEL ART AT THE RGS



Course Outline

Fine Art is the expression of creative skill and imagination. It uses visual forms such as painting, drawing, photography, sculpture and printmaking, that are appreciated for their imaginative, aesthetic, or intellectual content. As part of the course, you will be exploring a variety of artistic styles and traditions from Europe and around the world, set in history and the present day.

You will develop holistic skills such as creative problem-solving; the ability to learn from criticism and be objective about your work; an openness to new influences and concepts, all of which support a wide range of university courses and careers. Fine Art plays a fundamental role in the world of Architecture, Illustration, Graphic Design, Fashion, the Gaming and Film Industries.

Course Content

OCR A Level in Art and Design (H600-H606) Specification

Personal Investigation: 60%

Practical coursework and a 2,500 word illustrated essay.

Externally Set Assignment: 40%

Practical coursework involving a 15-hour exam, set over 3 days.

OCR A Level in Art and Design (H600-H606)
Specification:

- **Terms 1 and 2:** Observation through various media with a focus on technical skills; one-on-one and group tutorials.
- **Term 3:** Begin final outcome; Related Study introduced.
- **Term 4:** Final outcomes are resolved for the Personal Investigation.

“Fine Art plays a fundamental role in the world of Architecture, Illustration, Graphic Design, Fashion, the Gaming and Film Industries.”

“You will be challenged to think critically about your work and about the contexts you use as your influences.”

- **Term 5:** Personal Investigation and Externally Set Assignment paper - preparation for the timed practical exam.
- **Term 6:** Early in Summer Term the course concludes with a 15-hour exam, three-day exam, under controlled conditions. The course is completed as Study Leave begins.

Basis of Assessment

OCR A Level Fine Art course is assessed against four Assessment Objectives. Teachers internally assess all work, and an OCR representative visits the school to moderate these marks.

AO1: Develop ideas through sustained and focused investigations informed by contextual and other sources, demonstrating analytical and critical understanding.

AO2: Explore and select appropriate resources, media, materials, techniques and processes, reviewing and refining ideas as work develops.

AO3: Record ideas, observations and insights relevant to intentions, reflecting critically on work and progress.

AO4: Present a personal and meaningful response that realises intentions and, where appropriate, makes connections between visual and other elements.

Entry Requirements

You should be able to show a passion for this subject before embarking upon the A Level course. You will be expected to have attained a Grade 7 or above in Art and Design at GCSE and have strong technical skills. It is unusual for students who did not take GCSE to embark upon the course and any student that wishes to do so will need to discuss this with the Head of Department and provide a portfolio of work to support their request.

Skills

You must already have an established technical ability in any of the art fields. These will be promoted and encouraged during the course, allowing you to prove a sense of growing confidence and independence of ideas. You will be challenged to think critically about your work and about the contexts you use as your influences, discussing and proving how you have resolved the complex issues that connect to your art practice. Art students are self-directed, independent learners and therefore suit individuals who are mature, organised and self-motivated.

Beyond the Curriculum

Students studying Fine Art A Level go on to do degrees in many fields, including Architecture, Fine Art, Design or Gaming Art. Art A Level offers diversity alongside more STEM-based subjects and can give students an edge in interview when applying for non-art related degree subjects. Students are encouraged to enter internal RGS art competitions, as well as the Young Artists Royal Academy Summer Exhibition. Our artists often visit London galleries on Field Days for Art Appreciation.

A LEVEL BIOLOGY AT THE RGS



Course Outline

A Level Biology aims to inspire and nurture students' passion and curiosity for the living world. It will involve studying some of the most recent and exciting advances in the subject, such as the regulation of gene expression, genetic engineering, immunology, stem cell research and medicine, as well as a more detailed study of the core biological principles and processes introduced at GCSE. It is an ever-changing field of study with recent discoveries often discussed and debated in lessons.

Biology is an obvious choice for students interested in Medicine, Veterinary Science or Dentistry, but there are also a multitude of Biological Science courses beyond the A Level to suit every interest. For those scientists and engineers planning to take Physics, Mathematics and Further Mathematics A Levels, Biology makes an excellent fourth subject choice, particularly given the opportunities in the growing fields of medical physics, biochemical engineering, biotechnology and genetic engineering.

Course Content

[AQA | AS and A-level | Biology | Specification at a glance](#)

There are eight broad topics taught over the two years of the course.

- In the Lower Sixth, we study the foundational biological principles, and include the molecules required for life, cells, transport and gas exchange systems in different organisms, and the diversity of life. Fieldwork is carried out during a residential four-day course at the Dale Fort Field Centre in Pembrokeshire, Wales. Here the diverse marine and terrestrial ecosystems offer the perfect opportunity to explore how populations are affected by the environment and each other.
- In the Upper Sixth, we continue building on the foundational principles, but in much more detail. We will study energy and energy transfer between organisms, responses to our internal and external environments, genetics and evolution, and DNA technologies.

“Studying some of the most recent and exciting advances in the subject.”

“The skills that are developed in Biology will prepare pupils for studying at university and addressing some of the major global problems that we face.”

- Practical work is a strong feature of the course. A diverse range of investigations are carried out including: genetically engineering fluorescent bacteria, DNA fingerprinting, extracting giant chromosomes from maggots and dissecting locusts, fish and frogs.

Basis of Assessment

Exam board: AQA

Written examination: There are three exam papers:

Paper 1: 35% weighting
includes topics 1 - 4.

Paper 2: 35% weighting
includes topics 5 - 8.

Paper 3: 30% weighting
A synoptic paper covering topics 1 - 8.

NEA:

There are 12 required practicals that are completed over the course of the A Level. This is 'pass/fail' and is based on the accumulation of a variety of different practical and analytical skills (such as devising a practical method and drawing graphs).

Entry Requirements

Biologists should have an interest in the living world, including plants and animals. An ability to learn a considerable amount of content accurately is necessary for success. Your Biology grades throughout the GCSE course need to have been consistently strong in order to be successful at A Level, and it is necessary to achieve a minimum of Grade 7 in GCSE Biology to take it at A Level.

Skills

The skills that are developed in Biology will prepare students for studying at university and addressing some of the major global problems that we face. Students will further develop their analysis and maths skills, and statistics are introduced and applied to a variety of scenarios.

Students will improve in their ability to design and conduct experiments using specialist equipment, as well as contextualise topics. Investigations will also allow students to improve their competence in analysing, interpreting, and evaluating. There are a number of opportunities to research and report on an interesting area of Biology and learn how to reference sources correctly.

Beyond the Curriculum

The course is enriched by activities run by the Department such as Dissection Club, the Biology Extension club, and trips. There are leadership opportunities in arranging dissection club and Biology week. Furthermore, we keep all Sixth Form students informed of interesting lectures (both online and in-person) and enter students into the British Biology Olympiad. Support and extension are given to students interested in studying a Biological Science or Medicine at university or completing the RGS Independent Learning Assignment.

A LEVEL BUSINESS AT THE RGS



Course Outline

A Level Business is a social science that studies the behaviour of firms, the roles of the different departments within them, and the strategic decisions they take to achieve their differing aims.

The course is designed to develop students' knowledge and understanding of business management theories, and then apply them critically to evaluate business activities at local, national and international level. This could include for example, compare the strategies used by Google and McDonald's to motivate its staff, or evaluate the growth strategies of Domino's and Gymshark.

The course covers organisations from all industries, as well as the profit and not-for-profit sector. As students will be required to respond to case studies in the final exam, it is important for students to take an active interest in reading the latest business and economics news throughout the course and are aware of current trends.

Course Content

Edexcel A Level Business Specification

There are three areas of study:

Lower Sixth

We study the first two of the four themes of the courses:

- **Theme 1:** Marketing and people.
- **Theme 2:** Managing business activity.

In these themes we learn about each of the four main business functions: Marketing, Finance, Operations and Human Resources. It outlines the way businesses have to co-ordinate, measure and adjust these four to remain competitive but profitable.

Upper Sixth

We study:

- **Theme 3:** Business decisions and strategy.
- **Theme 4:** Global Business.

Here we learn how to measure corporate performance, analyse changing external influences on business including technology, competition, the economy and globalisation and finally to compare how different businesses manage change. Drawing on our knowledge from Lower Sixth, students could be expected to consider the impact of a business decision on the different departments and how they might respond.

“Students in the Sixth Form have the opportunity to put theory into practice by creating their own company and bringing a product to market in time for the Christmas Fairs at the RGS, GHS and local area.”

Basis of Assessment

The course is assessed via three exam papers which are each 2 hours in length.

Paper 1: 35%

Focuses on Units 1 and 3; Marketing, People and Global Business.

Paper 2: 35%

Focuses on Units 2 and 4; Business Activities, Decision and Strategy.

Papers 1 and 2 require students to respond to two different case studies provided in the exam, with students writing a series of short and longer written responses that require between 5 and 25 minutes to write. Although academic writing is the primary form of assessment, students can also expect to complete some numerical calculations as part of their assessment.

Paper 3: 30%

Synoptic exam, Investigating business in a competitive environment.

Paper 3 assesses the same skills as the other two papers, however, focuses on a single case study that is pre-released to students in the November before the summer exam. Students are expected to complete additional research to help inform their answers; however, this cannot be taken into the exam.

Entry Requirements

Students will require both strong numerical and literacy skills to access this course. Unlike Economics, there is no requirement for students to study A Level Mathematics to access either the A Level Business course or the majority of university courses. The financial module does though require students to be able to complete some financial statements and calculate financial ratios.

Skills

Students will need to be able to read, interpret and analyse financial and other quantitative information, so students with a strong GCSE grasp of statistics will be able to build on this throughout the course.

Reading and writing well are essential. Students who are comfortable writing excellent English, History or other Humanities essays will be able to transfer these skills to Business.

Students will need to be creative; you will be required to come up with appropriate recommendations for a business in a specific context and evaluate them effectively.

Beyond the Curriculum

Students in the Sixth Form have the opportunity to put theory into practice by creating their own company and bringing a product to market in time for the Christmas Fairs at the RGS, GHS and local area. Successful companies then have the option of entering their team into a national competition.

Business students would also be eligible to join the current Economic residential trips that we have recently run to Amsterdam and Brussels, and we hope to offer a specialist Business trip in the near future.

A LEVEL CHEMISTRY AT THE RGS



Course Outline

Chemistry is known as the central science due to its importance in linking physical and biological sciences. It rationalises important biological processes on a molecular level and allows the synthesis of key medicines. The lithium-ion battery and the making of plastics are just two examples of Chemistry inventions that are indispensable in our everyday lives.

A Level Chemistry can be taken with a wide range of subjects with Mathematics, Physics or Biology being the most common.

The A Level course is far more exciting than GCSE! There is more time for in-depth discussions and practical work. You should always challenge yourself (or your teachers) with the question “why?” and accepting something without justification should be very rare indeed.

Course Content

Edexcel A level specification

The course is broadly divided into Physical, Organic and Inorganic Chemistry.

- Physical Chemistry involves studying the fascinating nature of atoms and how they bond together to form molecules. It looks at the fundamental reasons behind chemical reactions and explains how disorder (entropy) is the driving force of the universe. Physical Chemistry uses mathematical logic and you will learn how to calculate the amounts of products at equilibrium, the pH of solutions and the activation energy of reactions.
- Organic Chemistry is more exciting than ever before! You will no longer be learning reactants and products by rote, but will be using mechanisms (aka curly arrows) to work out what will happen in totally unfamiliar reactions. Modern spectroscopy is part of the course and NMR (MRI) is particularly important in Medicine today.

“Chemistry is known as the central science due to its importance in linking physical and biological sciences.”

“In one year alone,
we took all top eight
places in the world for
the Cambridge Chemistry
Challenge.”

- Inorganic Chemistry involves precision and quantitative analysis. You will, for example, be carrying out experiments to find the percentage of aspirin in a tablet or the amount of nitrogen in a fertiliser. Crystal field theory is used to explain the different colours of transition metal ions.

Basis of Assessment

You will sit three exam papers at the end of the course:

Paper 1: Advanced Inorganic and Physical Chemistry.

Paper 2: Advanced Organic and Physical Chemistry.

Paper 3: General and Practical Principles in Chemistry.

The third paper contains synoptic questions covering all the topics in the course and a significant number of marks are awarded to questions on experimental methods.

Entry Requirements

You will need to have developed a solid foundation in GCSE to pursue A Level Chemistry, achieving a minimum of Grade 7. It is necessary to be proficient in several key topics such as moles calculations, formulae, balancing equations, and structure & bonding. A good standard of mathematics at GCSE is also required as a minimum of 20% of the marks are awarded for calculations.

Skills

To achieve a high grade in A Level, you need to be able to apply your knowledge and understanding to unfamiliar situations. Some problems will involve calculations and others will require logical reasoning such as working out organic chemistry mechanisms. The course will allow you to use ICT to collect and analyse data. A key part of the course is the development of practical skills and requires a high degree of confidence and dexterity.

Beyond the Curriculum

RGS pupils have achieved high distinction in a number of Chemistry competitions including the Chemistry Olympiad and C3L6. In one year alone, we took all top eight places in the world for the Cambridge Chemistry Challenge!

A number of students take part in ORIS and carry out original scientific research in various universities around the country during the summer vacation of the Lower Sixth year.

A LEVEL COMPUTER SCIENCE AT THE RGS



Course Outline

A Level Computer Science aims to develop your understanding of the theory of computers, as well as your ability to program in Python, well beyond GCSE level.

On the programming side, object-orientated programming (classes) will be explored as well as the use of SQL with databases.

The theory will probe deeper into computers, from the understanding of computer components and systems to a more detailed analysis of computer networks and cybersecurity.

There is a strong mathematical focus, for example, learning how binary is used to perform calculations and how to store floating point numbers efficiently for these calculations.

Course Content

www.aqa.org.uk/subjects/computer-science-and-it/as-and-a-level/computer-science-7516-7517/specification-at-a-glance

- Students wanting to take A Level Computer Science should have a good understanding of both the theory and the programming side of the GCSE Computer Science course. The A Level course will develop and extend components of the GCSE curriculum alongside adding new content.
- You will learn about number systems including floating point in binary. The concepts of logic will be extended from GCSE to include Boolean algebra. Machine code and assembly language will be discussed in greater detail, with an expectation of being able to understand simple programs in assembly. The internal architecture of a computer and the understanding of computer networks will be covered at a deeper level.

“At A Level the
interplay between
mathematics and
computing plays out at
a deeper level.”

“The skills you develop in Computer Science will reflect those required in both the present and future economy.”

- On the programming side, the fundamentals of computational thinking learned at GCSE will still be applicable alongside the Python language. At A Level, different data structures will be encountered, such as stacks, queues and trees. Algorithms involving these data structures will be studied and implemented in code, such as binary tree search. You will learn object-orientated programming, widely used in industry, as well as SQL to query databases.

Basis of Assessment

The exam board is AQA Computer Science (7517).
The structure of assessment is:

Paper 1: 40%

This paper tests a student's ability to program, as well as their theoretical knowledge of computer science, via on-screen assessment 2 hours 30 mins.

Paper 2: 40%

This paper tests a student's theoretical knowledge and understanding of computer science, via written assessment 2 hours 30 mins.

Paper 3: 20%

A non-examined assessment where students will solve or investigate a practical problem.

Entry Requirements

Whilst no formal entry requirements exist, a good understanding of the GCSE course would be recommended for success at A Level, including the ability to program in Python. A strong grade (minimum 7) in GCSE Mathematics would also be advisable, as at A Level the interplay between mathematics and computing plays out at a deeper level.

Skills

The skills you develop in Computer Science will reflect those required in both the present and future economy. As part of doing A Level computer science, you will develop your computational thinking and problem-solving skills together with your ability to program in Python, which will stand you in good stead for future employment. As part of completing the coursework you will understand how to plan a large-scale project and organise your time.

Beyond the Curriculum

While studying A Level Computer Science, students are encouraged to take part in the annual competitions for coding and computational thinking. Every year we enter students into the Bebras Computational Thinking competition which acts as a qualifying round for entry to the Oxford Computational Challenge. The department also enters its most able students into the annual British Informatics Olympiad, which is designed to find the very best computer programmers in this age group, and the British Algorithmic Olympiad, designed for those with a real interest in both mathematics and programming.

A LEVEL DRAMA AT THE RGS



Course Outline

AQA Drama and Theatre is an academic course that is assessed through practical and coursework elements as well as a final written paper at the end of the two-year programme of study. Students learn about the work of key practitioners and playwrights and develop their understanding of styles of performance as well as appreciating the cultural, political and historical context of their chosen texts. They will develop their abilities as effective and sophisticated communicators through the practical side of the qualification and learn essential academic skills of research, analysis, evaluation and critical appreciation of theatre work through the theoretical part of the course. Theatre trips are included as part of the curriculum.

Course Content

[AQA | A-level | Drama and Theatre | Specification at a glance](#)

- **Component 1:** Students study two set texts. They will investigate ways of performing and staging the texts through practical methods and theoretical ideas. They will learn about directing, stage design, lighting, sound design and costume as these elements are also tested at the end of the two-year course. They will also write critically about a live production seen.
- **Component 2:** Students devise, develop, rehearse and perform an original piece of drama from a stimulus. They will study an influential theatre practitioner and use their methods and theories to inform their work. Alongside this performance is a coursework assignment detailing the process and outcomes of their work.
- **Component 3:** Students rehearse and perform three extracts from three different plays (these contrast in form, genre and period to their set texts). They select a second influential practitioner to guide their performance work. The third extract is performed to an external examiner in the spring term of their final year and will be accompanied by a second piece of coursework.

“Theatre is the art of
looking at ourselves.”

Augusto Boal

“*Art is not a mirror
held up to reality, but a
hammer with which to
shape it.*”

Bertolt Brecht

Basis of Assessment

Component 1: 40%

This is assessed in a terminal written paper covering both set texts and a live production seen during the course. Candidates will demonstrate knowledge and understanding of how drama and theatre is developed and performed and analyse and evaluate their own work and the work of others.

Component 2: 30%

Candidates will create and develop ideas to communicate meaning as part of the theatre making process, making connections between dramatic theory and practice and apply theatrical skills to realise artistic intentions in live performance. A *Working Notebook* of 2,500 words is submitted. This work is internally marked and externally moderated by AQA.

Component 3: 30%

Candidates perform their third extract for an external examiner to demonstrate they can apply theatrical skills to realise artistic intentions in live performance. The *Reflective Report* document of 2,500 words is submitted to demonstrate the ability to analyse and evaluate their own work and the work of others.

Entry Requirements

There is no requirement to have taken GCSE Drama; however, a student wishing to take A Level without the GCSE would be expected to have a keen interest in the subject, good general knowledge and experience of drama and theatre, and some performance experience.

Skills

Drama and Theatre A Level is not designed to train students to be actors. It teaches understanding and appreciation of drama both from the perspective of a theatre maker, and as a critical and informed consumer. You will learn how to deploy independent research and analytical approaches to the subject. The method of learning embeds essential transferable skills for successful life post education and in the work place. Students who study drama develop their ability to be self-starters, independent and confident. Creativity, empathy, leadership, people management and advanced communication skills are at the heart of the programme of study, along with developing flexible thinking to find practical solutions to problems. The World Economic Forum identified these “soft skills” as being fundamental to society as well as highly sought after by employers. Drama is particularly valuable for those who may wish to pursue a career in medicine, law, marketing, media and communications as well as any area that deals with the public.

Beyond the Curriculum

Co-curricular productions offer students the opportunities to deepen their knowledge and understanding of the subject. Regular theatre trips ensure boys can access a wide range of theatrical styles and genres of further enhance their studies.

A LEVEL DESIGN AND TECHNOLOGY AT THE RGS



Course Outline

Students study historical, social, cultural, environmental and economic influences on design and technology, whilst enjoying opportunities to put their learning into practice by producing products.

Product Design encourages students to design and make original products using a variety of techniques and materials such as paper/card, plastics, electronics, timber-based materials, and ferrous and non-ferrous metals. The subject prepares students for individualised learning and the kind of problem solving essential in business and industry. Time management is a key factor to candidates' success within the coursework elements of the qualification.

Course Content

[AOA | A-level | Design and Technology: Product Design | Specification at a glance](#)

Students undertake activities amongst others such as: designing a multimeter and making a model of it, pewter casting, undertaking a materials testing experiment, learning how to produce realistic images of designs, building a side table in hardwood. These practical tasks are interspersed throughout the year alongside taught theory lessons.

Lower Sixth

- The theory sessions focus on developing technical knowledge of the different materials such as wood, metal and plastic and the processes in manufacturing such as injection moulding, welding and metal bending.

Upper Sixth

- The topics move on to design history: learning about famous designers and design movements and to more conceptual issues such as designing for others and some of the more specialised systems used in mass production in factories.

“Knowledge and confidence to succeed in a number of careers, especially those in the creative industries.”

“The school provides opportunities for attending interesting engineering and design based lectures, talks and visits.”

NEA

Part of the assessment in DT is through a piece of assessed coursework (known as the NEA). The NEA is a long term design project spread over 40 hours that ranges across the whole design process involving: researching a problem, interviewing clients, visiting their specific environments, developing design ideas through drawing, modelling and the use of CAD and finally leading to a fully resolved and manufactured final concept.

Basis of Assessment

The course is examined through:

Paper 1: 30%

Technical Principles, 2 hours 30mins,
120 marks.

Paper 2: 20%

Designing and making principles, 1 hour 30mins,
80 marks.

NEA: (non-examined assessment) 50%

Practical application of technical principles,
designing and making principles: a substantial design
and make project, 100 marks.

Entry Requirements

There are no formal entry requirements and students have successfully undertaken the course without having studying it first at GCSE. You would need to be someone who is good at iteration: generating lots of alternative ideas. If you are easily fixated on the first concept that you think of, you will find the course difficult. A good level of motivation and time management skills are desirable. There are also a number of questions on both papers that test mathematical knowledge (not really higher than GCSE standard though) so being happy to engage with the mathematical aspects of DT would be beneficial.

Skills

You will need the ability to think laterally, to demonstrate flexibility of thought and be able to come up with creative ideas. Empathy is important because you will be designing for others and you will put yourselves in other people's shoes. You will also need to be a self-starter, organised and determined in order to successfully tackle the NEA project.

This qualification gives students the practical skills, theoretical knowledge and confidence to succeed in a number of careers, especially those in the creative industries.

Beyond the Curriculum

Students who study DT are able to access the workshops across a whole series of after school, lunchtime and additional sessions where they can develop their own interests in things. The school provides opportunities for attending interesting engineering and design-based lectures, talks and visits. Competitions can be entered and students in the past have been very successful at these.

A LEVEL ECONOMICS AT THE RGS



Course Outline

Economics is a social science which studies the behaviour of societies as they attempt to solve the fundamental economic problem of scarcity, how do they best allocate their limited resources to an apparently endless list of competing wants and needs.

The A Level Economics course provides students with a toolkit to analyse this problem and help them view the world with a critical eye. They will be then asked to apply this toolkit to a range of economic policy decisions and evaluate competing solutions. Students will get the opportunity to challenge one another's policies via healthy classroom discussion.

It is important to realise that the subject is taught in the context of current events taking place at the time, and therefore economists at the RGS are expected to be curious, keeping up-to-date with these events and reading around economic issues in more detail throughout the course.

Course Content

Edexcel A Level Economics Specification

Lower Sixth

- **Microeconomics:** Introduces the fundamental models to understand how markets work and then evaluates a range of market failures and their solutions.
- **Macroeconomics:** Explores the key objectives that all governments look to achieve; sustainable economic growth, low unemployment and inflation, a healthy balance of trade and acceptable levels of income inequality. Students will learn how governments manipulate fiscal, monetary and supply side policies to best achieve these objectives.

Upper Sixth

- **Business economics:** Considers the Theory of the Firm – why some businesses stay small, others seek to grow, and the impact of competition. Government intervention is analysed, through the lenses of efficiency and stakeholder outcomes.

“Economists at the RGS are expected to be curious, keeping up-to-date with current events.”

“Being able to think Economically and approach problems with an Economics mindset is a skill you that will stay with you for life.”

- **International Economics:** Starting with the benefits and critiques of international trade theory, students then study foreign exchange markets, trading blocs and Economic integration before finishing with an in-depth analysis of Development Economics and the impact of globalisation.

Basis of Assessment

The course is assessed via three exam papers which are each two hours in length. All papers require students to respond to data given in the exam (written and numerical), with students writing a series of short and long-written responses that require between 5 and 30 minutes to write. Although academic writing is the primary form of assessment, students can also expect to complete some numerical calculations and draw a range of economic diagrams to complement their answers.

Paper 1: Focuses on Themes 1 and 3; Microeconomics and Business Economics.

Paper 2: Focuses on Themes 2 and 4; Macroeconomics and International Economics.

Paper 3: Synoptic exam, draws on contents from all 4 Themes across the course.

Entry Requirements

Students will require both strong numerical and literacy skills to access this course. Although there is no requirement to study A Level Mathematics to access A Level Economics, it is often a requirement for students looking to study Economics at university. Strong mathematicians and scientists therefore often thrive in Economics. Data handling and statistics are the most frequently used areas of mathematics at A Level.

Reading and writing well are equally essential. Students who are comfortable writing excellent English, History or other Humanities essays will be able to transfer these skills to Economics.

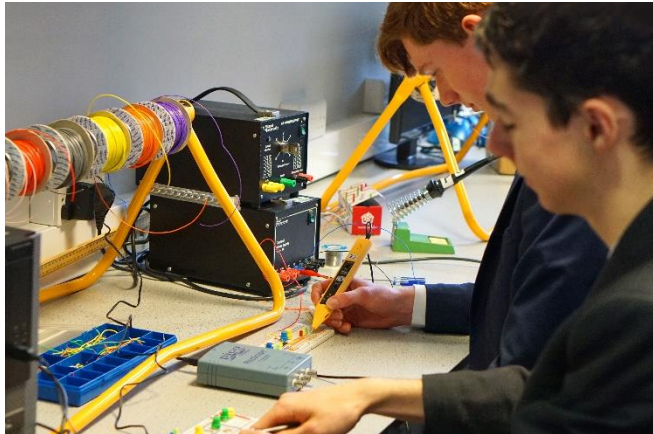
Skills

Being able to think Economically and approach problems with an Economics mindset is a skill you that will stay with you for life. Economists are able to abstract and simplify in order to model the essence of problem. They are able to assimilate information from a range of sources to analyse and reason and communicate their findings confidently and concisely. Economists are critical thinkers that test the limits of their analysis and consider broader political and social contexts when making policy recommendations.

Beyond the Curriculum

Our Economics Society is thriving offering passionate students the opportunity to explore the subject beyond the course and prepares our students to enter highly regarded essay competitions. The Economics Department also provides domestic and international trips to apply their learning to a real-life context; this year we have travelled to Amsterdam and Brussels students will typically visit the Mini factory in Oxford.

A LEVEL ELECTRONICS AT THE RGS



Course Outline

The study of Electronics will enable you to develop an understanding of electronic components, systems, processes and methods. The contents of the course will help you answer questions about practical circuits and solve practical engineering tasks.

The theory covered will be reinforced by practical investigations, including design and make tasks, throughout the course. You will study a course with 20 topic areas divided between a common core and two components. In each topic you will study the theory and put the theory into practice by carrying out practical investigations wherever possible.

Assessment is through two theory exams and two practical projects.

Course Content

A Level Electronics Specification

Component 1

- Semiconductor Components
using transistors in switching circuits.
- Logic Systems
Logic gates, Boolean Algebra and Karnaugh maps.
- AC Circuits and Passive Filters
how to make an audio graphic equaliser.

“The contents of the course will help you answer questions about practical circuits and solve practical engineering tasks.”

“You will learn about and work with a wide range of digital and analogue electrical and electronic systems.”

Component 2

- Power Supplies - how we change 240V ac into 9V dc for your phone charger.
- Microcontrollers - programmable ‘chips’ and assembly language programming.
- Timing Circuits - generating pulses and square waves.

Basis of Assessment

Component 1: 40%

Assessed by Exam.

Component 2: 40%

Assessed by Exam.

Component 3 NEA: 20%

Two practical projects.

Entry Requirements

There are no entry requirements for the course and we do not expect prior knowledge of Electronics. Electronics complements other A Levels such as Physics, Maths, Computer Science and Design and Technology.

Skills

You will develop the scientific and engineering skills to analyse and design electronic systems for a range of practical situations. You will learn about and work with a wide range of digital and analogue electrical and electronic systems. For instance, you will be involved in:

- Designing logic circuits to perform a set task.
- Testing amplifier circuits for their suitability.
- Studying digital communication systems, including optical fibre systems.
- Programming a microcontroller (a computer on a single chip) through assembly language to control a real-world process.

Beyond the Curriculum

You will have the opportunity to take part in the Student Robotics competition, a national competition to design, build and programme an autonomous robot which engages in an arena game!

[Student Robotics](#)

A LEVEL ENGLISH LITERATURE AT THE RGS



Course Outline

The study of English Literature will help you become a more perceptive, critical, and interesting person. You will read texts that challenge your understanding of the world around you; you will work as part of a group, discussing and arguing your opinion on a range of topics; and you will establish an understanding and appreciation of different cultures and time periods throughout history.

Course Content

[Specification \(A level\) \(pearson.com\)](https://www.pearson.com/UKHigherEducation/catalogue/subject-guides/english-literature/a-level/english-literature-a-level-specification)

Lower Sixth

- **Component 1:** (Drama – tragedy)
Anthony and Cleopatra by William Shakespeare and *A Streetcar Named Desire* by Tennessee Williams.
- **Component 3:** (Poetry)
Geoffrey Chaucer's *The Wife of Bath* from *The Canterbury Tales* and selected poems from *Poems of the Decade (2000-2010)*.

Upper Sixth

- **Component 2:** (Prose - colonisation and its aftermath)
Heart of Darkness by Joseph Conrad and *The Lonely Londoners* by Sam Selvon.
- **Component 4 Non-Examined Assessment:**
This comprises one 3,000-word coursework essay that explores two works of literature and their relationship with areas of literary and critical theory.

“You will read texts
that challenge your
understanding of the
world around you.”

“Intellectually curious students who bring enthusiasm to class discussion and a willingness to challenge the world around them.”

- *The Handmaid's Tale* by Margaret Atwood is studied at the end of Lower Sixth, and students select a second text with complementary themes. Students also have the opportunity to create their own essay question. Popular texts for comparison include *Nineteen Eighty-Four* by George Orwell; *The Bloody Chamber*, by Angela Carter; and *Brave New World* by Aldous Huxley.

Basis of Assessment

Pearson Edexcel (9ET0) - English Literature A Level.

Component 1: 30 %.

Drama - tragedy: 2 hours 15 mins open-text exam.

Component 2: 20%

Prose - colonisation and its aftermath: 1 hour 15 mins open-text exam.

Component 3: 30%.

Poetry - 2 hours 15 mins open-text exam.

Component 4 NEA: 20%.

Non-examined Assessment (Coursework)

3,000 word comparison essay on two texts (based on the student's choice of texts and question).

Entry Requirements

Having read the complete works of Dickens, Shakespeare, and Hardy is not a prerequisite for success at English Literature A Level (although it would help!). Instead, we are looking for hardworking and intellectually curious students who bring enthusiasm to class discussion and a willingness to challenge the world around them. If you are not particularly well-read at the start of the course, then you certainly will be by the end of it!

Skills

Success at English Literature A Level focuses on developing the following skillset:

- Analysis: you will develop a shrewd eye for language, nuance, and meaning.
- Evaluation: you will develop the wisdom to measure the quality of someone's ideas and make your own judgements on a text.

Beyond the Curriculum

English Literature A Level complements all academic disciplines across the humanities and sciences. The host of transferrable skills (mentioned above) are invaluable across a range of degree subjects and career pathways.

There are range of wider opportunities available with your study of English Literature A Level including:

- Regular theatre trips in London and across the South.
- Audiences with guest speakers, including writers and university lecturers.
- Entrance to creative writing and essay writing competitions.
- Opportunities for formal debate in our debate society.
- Participation in reading initiatives like "World Book Week".

A LEVEL GEOGRAPHY AT THE RGS



Course Outline

A Level Geography helps students to understand the complexities of the changing world as well as encouraging an interest in current events. The course takes an issues-based approach, exploring a range of relevant global concerns such as the consequences of globalisation, the changing order of world superpowers, tectonic hazards, water and energy insecurity and, of course, climate change.

By the end of the Upper Sixth, students should have a thorough understanding of how people and the world interact and will be confident using a range of analytical tools such as statistical analysis and GIS. Geography is a unique subject that bridges STEM, social sciences, arts and humanities.

Course Content

[Edexcel A level Geography \(2016\) | Pearson qualifications](#)

A Level Geography looks at a range of physical and human geography topics.

Lower Sixth

- We investigate the causes, impacts and responses to globalisation, regeneration in Guildford and London, coastal landscapes and the water cycle and water insecurity. This is supported with regular fieldwork opportunities. This includes a residential fieldtrip to Dorset, a day trip to the London Olympic Park together with fieldwork in the local area.

“Geography is a living, breathing subject, constantly adapting itself to change. It is dynamic and relevant. For me geography is a great adventure with a purpose.”

Michael Palin

“Geography explains the past, illuminates the present and prepares us for the future. What could be more important than that?”

Michael Palin

Upper Sixth

- Our focus shifts to the geopolitics side of the course. We look at Superpower geographies and ‘Health, Human Rights and Intervention.’ This unit looks at the impact of international aid, trade, sanctions and the reasons for military interventions such as the Iraq war. We evaluate the impact of these interventions on global development, health and human rights, pulling together many of the synoptic themes from across the course. This is complemented by two physical topics: Tectonic hazards and carbon, which covers issues such as managing energy security, the impact of continued dependency on fossil fuel consumption and responses to climate change such as the development of radical technologies such as hydrogen fuel cells.

Basis of Assessment

Paper 1: 30%

Physical systems.

Paper 2: 30%

Human Geography.

Paper 3: 20%

Synoptic paper.

Paper 4: NEA 20%

This is based on individual research carried out by each student independently.

Entry Requirements

Whilst it is not necessary to have studied GCSE Geography in advance of A Level studies, it might be considered unusual not to have. What is essential is to enter the classroom with an interest in the world around you!

Skills

All skills needed for A Level Geography such as methods of statistical analysis will be taught in the classroom.

Whilst guidance will be offered, an ability to work independently to manage and meet deadlines is advantageous for the NEA.

Beyond the Curriculum

A Level Geographers run the lunchtime “Seymour Society”, our student-led society.

We help to run local Geographical Association (GA) lectures and organise trips to other events such as talks at the Royal Geographical Society and local events on an *ad-hoc* basis.

Students are encouraged to participate in essay competitions. Recently we have had winners of the Trinity Essay Prize and the Financial Time essay competition.

The IHECSU Prospects 2020/2021 report [what do graduates do? 2020/21 \(prismic.io\)](https://www.prismic.io) notes that geography graduates have the highest percentages in full-time employment fifteen months after graduation of all the social sciences, with about 75% in professional-level jobs.

A LEVEL GREEK AT THE RGS



Course Outline

The course is divided equally between language and literature and gives students the opportunity to study some of the most influential and exciting pieces of literature in the history of western civilisation.

Utilising the skills and knowledge gained at GCSE, the language work encapsulates the challenges of de-coding, problem-solving, logical thinking and analysis. Students enjoy a strong sense of satisfaction in accessing an ancient text and then representing it using contemporary, appropriate phraseology.

The *Iliad* and *Odyssey* by Homer, studied in the Lower Sixth, are the beginnings of Western literature. The epics show us what it means to be human and are full of stirring tales of warring armies, feuding gods, romance and tragedy. The *Iliad* looks unflinchingly at life, death and mortality and is just as relevant today as when it was composed. The *Odyssey* examines the core Greek value of hospitality and includes some of the most famous of all Greek myths. Prose authors include the influential philosophical writings of Plato, Herodotus, the first of all western historians, and Thucydides who records the spectacular decline

of Athens in the Peloponnesian War at the hands of the all-conquering Spartans.

A profound understanding of literature and genre, as well as an insightful understanding of the mechanics of language and the etymology of vocabulary, will stay with the students for the rest of their lives.

Course Content

OCR A Level Greek specification

Language

- Students improve their translation skills with unseen translations of both prose and verse passages.
- English to Greek translation hone students' language skills. The task of carefully communicating a message precisely is at the heart of translation into Greek, and develops many skills, as well as being a rewarding exercise in its own right.

“Students enjoy a strong sense of satisfaction in accessing an ancient text and then representing it using contemporary, appropriate phraseology.”

“For students applying to take a Classics degree at university, having Greek A Level can give them a competitive edge.”

Literature

- Students study a verse and prose set text in both the Lower Sixth and Upper Sixth.
- The literary texts offer great topics for discussion that parallel our own lives. Making sense of the thoughts and feelings of someone from another culture is challenging as well as enriching.

Basis of Assessment

A Level Greek OCR consists of four written papers. No coursework is set.

Language

Paper 1: Unseen translation - students translate one passage of unseen prose and one passage of unseen verse.

Paper 2: Prose composition or comprehension - students translate a passage of Greek into English. Students can opt for comprehension questions on a passage of Greek prose, including some grammar questions.

Literature

Paper 3: Prose Literature - students study two Greek prose authors. Paper includes a translation of a passage from the text, comprehension questions requiring literary criticism and appreciation, and an essay requiring over-arching analysis of the whole text.

Paper 4: Verse Literature - students study two Greek verse authors. Paper is the same format as the Prose paper.

Entry Requirements

Students need to have studied Greek at GCSE and they will have achieved a Grade 7 or above in their GCSE Greek examination. Greek can be studied in combination with any other A Level subjects. For those students wishing to study Classics at university, Greek is often studied in combination with Latin.

Skills

The study of Greek develops the ability to:

- Absorb a vast amount of data and recognise the key points of a task.
- Analyse language, both to find the explicit meaning and to discover what is lurking beneath the surface.
- Communicate in a lucid, coherent, concise manner.
- Construct logical and sound arguments, combining a strong reliance on evidence with convincing rhetoric.
- Question established opinions, before reaching a considered conclusion.

Beyond the Curriculum

The Classics Department runs a Senior Classics society and there are regular lectures, from the students and outside speakers, which inspire students to look beyond the syllabus. Trips are to various parts of the Ancient World, including Greece, Sicily and Italy so that students can see what they have studied. Students are encouraged to take part in university essay and translation competitions, the Department also provides weekly sessions for the Linguistics Olympiad competition. Students are encouraged to investigate Classics at university and beyond, including the many careers, such as banking, coding and law.

A LEVEL HISTORY AT THE RGS



Course Outline

History is an integral part of a well-rounded education. As the author Michael Crichton says

"If you don't know history, then you don't know anything. You are a leaf that doesn't know it is part of a tree."

It allows students to explore the past and make connections through time. We live in societies which have an array of complex cultures, religions and traditions. These have all not just been created, but rather have changed and evolved over the previous decades and centuries. Understanding our link with the past helps us to understand our present world. Not only that, but it encourages us to question, reason and formulate our own conclusions about why events happened and what their consequences were. This critical thinking is a highly valued skill, not just academically, but also professionally. Because of the nature of the subject, history encourages students to be able to express their ideas, not just in writing, but also verbally. This helps develop articulate individuals who are adept at communicating complex ideas.

Course Content

AQA History A Level Specification

Making of Modern Britain 1951-2007

This course enables you to have a full understanding of how our country has been shaped in the modern era:

- Key political and economic events of the post-war era - the role of the Welfare State; inflation and economic problems; polarisation of politics.
- British Foreign policy - from decolonisation, through to the EEC/EU and Britain's interventionist foreign policy.
- Social change - including youth culture, protest, the emancipation of women, development of LGBTQ+ rights and immigration.

“If you don't know history, then you don't know anything. You are a leaf that doesn't know it is part of a tree.”

“Understanding our link with the past helps us to understand our present world.”

The Crusades c.1071-1204

This course involves intrigue, battle, murder and drama and includes amazing tales such as the Patriarch who was covered in honey and tied to a roof to be eaten by flies; the Byzantine Emperor who was deposed, blinded and then reinstated; and the rise of a mysterious Islamic sect known as the assassins.

- Western Europe's violent response to rising Islamic Empire with the launch of the First Crusade.
- The development of Crusader kingdoms and the response of the Islamic world.
- Deep dive studies into key individuals e.g. Richard the Lionheart and Saladin.
- In-depth analysis of the economies, politics, military defences and diplomacy of the Crusader Kingdoms.

Basis of Assessment

Exam Board AQA

Examination: Two exam papers taken at the end of the Upper Sixth.

Coursework NEA: Research, focussing on historians interpretations and contemporary sources. Current topics include: African American Civil Rights 1865-c.1991; The British Raj and the struggle for Indian Independence; The European Reformation and Catholic Counter-Reformation.

Entry Requirements

It is not necessary to have studied History at GCSE although this is advisable. Our main requirement is for you to come to lessons enthused to learn and with a love of the subject.

Skills

Universities and employers value the skills of a historian. This is because they are thoughtful, critically minded and articulate individuals, who are able to consume large amounts of information and communicate it in a clear and concise manner – either verbally or through their writing. This is a key skill for careers such as law, consultancy, politics, public relations, advertising, academia, to name but a few. History will open doors and allow you to access a huge range of careers. It is the skills of a Historian which are highly valued. This is why it is such a highly respected and popular subject.

Beyond the Curriculum

There are a wide range of external essay competitions that are available for students to take part in. We also have a regular History society which is student led and provides opportunities to give and listen to talks on a whole range of different subjects.

A LEVEL LATIN AT THE RGS



Course Outline

The course is divided equally between language and literature to give students a deep understanding of some of the most exciting personalities and events of the Roman world.

The language work encapsulates the challenges of de-coding, problem-solving, and logical thinking and analysis. Students learn to unlock the meaning from the Latin, developing a sensitive grasp of nuance, meaning and genre.

The Cicero prose literature topic, studied in the Lower Sixth, provides an overview of persuasive rhetoric whether that is through the medium of modern-day political speeches, advertising campaigns, or social media soundbites. The use of language to manipulate, persuade and influence is then contextualised through the historical context of the Roman period – murder trials, extortion, corruption and character assassination are ever-present!

The verse texts studied range from the epic backdrop of Virgil's Aeneid, in which heroes,

gods, and nations clash in an almighty battle with the destiny of a nation at stake, to a selection of satire and love poetry, that offer an insight into the everyday emotions and culture of the Roman world. Satire and love poetry present the relatable elation and heartbreak of young love, as well as comedic insults of the more irritable acquaintances of the authors.

A profound understanding of literature and genre, as well as an insightful understanding of the mechanics of language and the etymology of vocabulary, will stay with the students forever.

Course Content

OCR A Level Latin specification

Language

Students improve their translation skills with unseen translations of both prose and verse passages.

- English to Latin translation hone students' language skills. The task of carefully communicating a message precisely is at the heart of translation into Latin, and develops many skills, as well as being a rewarding exercise in its own right.

“Making sense of the thoughts and feelings of someone from another culture is challenging as well as enriching.”

“Students are encouraged to investigate Classics at university and beyond, including the many careers that Classicists embark on, such as banking, coding and law.”

Literature

- Students study a verse and prose set text in both the Lower Sixth and Upper Sixth.
- The literary texts offer great topics for discussion that parallel our own lives. Making sense of the thoughts and feelings of someone from another culture is challenging as well as enriching.

Basis of Assessment

A Level Latin OCR consists of four written papers. No coursework is set:

Language Paper 1: Unseen translation

Students translate one passage of unseen prose and one passage of unseen verse.

Paper 2: Prose composition or comprehension

Students translate a passage of Latin into English.

Literature Paper 3: Prose Literature

Students study two Latin prose authors. The Prose Literature paper includes a translation of a passage from the text, comprehension questions requiring literary criticism and appreciation, and an essay requiring over-arching analysis of the whole text.

Paper 4: Verse Literature

Students study two Latin verse authors. The Verse Literature is the same format as the Prose paper.

Entry Requirements

Students need to have studied Latin at GCSE and will have achieved a Grade 7 or above in their GCSE Latin examination. Latin can be studied in combination with any other A Level subjects and is often successfully combined with STEM subjects, languages (including Greek) and humanities.

Skills

The study of Latin develops the ability to:

- Absorb a vast amount of data and recognise the key points of a task.
- Analyse language, both to find the explicit meaning and to discover what is lurking beneath the surface.
- Communicate in a lucid, coherent, concise manner.
- Construct logical and sound arguments, combining a strong reliance on evidence with convincing rhetoric.
- Question established opinions, before reaching a considered conclusion.

Beyond the Curriculum

The Classics Department runs a thriving Senior Classics society and there are regular lectures, both from the students and outside speakers, which inspire students to look beyond the syllabus. We run trips to various parts of the Ancient World, including Greece, Sicily and Italy so that students can see at first hand what they have studied in the classroom. Students are encouraged to take part in university essay and translation competitions and the Department also provides weekly sessions for the Linguistics Olympiad competition. Students are encouraged to investigate Classics at university and beyond, including the many careers that Classicists embark on, such as banking, coding and law.

A LEVEL MATHEMATICS & FURTHER MATHEMATICS AT THE RGS



Course Outline

Mathematics is a unique way of thinking and understanding structures and patterns, both abstract and real. It has an important role to play in many different areas and disciplines, including science, engineering and technology as well as being a very important subject in its own right. It reflects the ability to think logically and analyse problems in a clear and concise way and is therefore well regarded by universities and employers alike.

Course Content

[Pearson Edexcel AS and A level Mathematics \(2017\) | Pearson qualifications](#)

Mathematics

- Pure Mathematics extends GCSE knowledge of areas like algebra, trigonometry and geometry and introduces new topics such as logarithms and calculus.

- Mechanics involves the study of physical concepts such as velocity, acceleration, forces and moments.
- Statistics considers analysis and representation of data including working with computers on a real world large data set. Topics such as probability are extended to include random variables and distributions, while ideas of correlation and regression are studied.

Further Mathematics

- Further Pure Mathematics extends ideas of algebra, calculus and geometry and introduces new topics which include complex numbers, matrices, hyperbolic functions, polar coordinates and differential equations.
- Further Mechanics gives a formal basis for the study of elasticity, collisions in two dimensions and centres of mass. New concepts for solving problems are introduced, including impulse-momentum and the Work Energy Principle.
- Further Statistics explores more models which are used to analyse real-world problems including the Poisson, Geometric and Negative Binomial distributions as well as more abstract concepts like Probability Generating Functions and Type I and II Errors.

“A much sought-after degree in the financial and technological industries as well as elsewhere.”

Basis of Assessment

Single Mathematics:

Three two-hour papers.

Pure Mathematics 1, Pure Mathematics 2,
Applied Mathematics (Mechanics and Statistics).

Further Mathematics:

Four 90-minute papers, taken from:

Core Pure 1, Core Pure 2, Further Pure 1,
Further Statistics 1, Further Mechanics 1 and 2.

(Some choice is available including taking extra papers with the best marks counting.)

Entry Requirements

To achieve success in Mathematics at A Level requires considerable commitment and a willingness to work hard, alongside strong ability in the subject, demonstrated by a minimum of Grade 7 at GCSE. The majority of those taking Further Mathematics A Level will also have taken Further Mathematics at GCSE, although this is not a strict requirement.

Mathematics A Level works well as a choice alongside any other subjects. There is a significant overlap with the Sciences and Technology as well as the numerate areas of subjects like Economics and Geography.

Students considering reading Mathematics, Computer Science, Natural Sciences, Engineering or Economics at Oxbridge or other top universities should, if they are able, very seriously consider Further Mathematics. Many students study Mathematics at university and it is a much sought-after degree in the financial and technological industries as well as elsewhere.

Skills

Mathematical thinking combines a range of valuable skills including the ability to apply known techniques creatively in order to solve unfamiliar problems. Logical, deductive reasoning and the ability to reach clear conclusions are developed alongside an appreciation of the constraints and limitations that might occur. The ability to critically analyse data and offer interpretations and refinements to models are skills that can be transferred across disciplines and will prove useful throughout higher education and employment.

Beyond the Curriculum

Students enter and compete at a national level in the Senior Mathematics Challenge and British Mathematics Olympiad. A team of four takes part in the UKMT Team Mathematics Challenge, usually progressing to a high place in the national final, and the weekly Turing Mathematics club explores interesting Mathematics problems from all manner of sources.

There are a range of additional courses run in both Lower and Upper Sixth to support students preparing for competitive Mathematics and Science courses at university, including those taking STEP examinations, and the department runs an annual trip to the Exploring Mathematics conference at Royal Holloway University.

A LEVEL MODERN FOREIGN LANGUAGES AT THE RGS



Course Outline

French, Spanish and German

It is widely recognised that the ability to speak at least one other foreign language not only provides the opportunity to understand and engage with other cultures but also is a highly valued asset in the increasingly globalised business world. The current A Level specification is very much centred on the practical use of languages, and it allows students to develop a range of skills through the study and analysis of societal, political and artistic trends of the countries where the foreign language is spoken. Languages will develop critical thinking and interpersonal skills such as debating whilst enabling students to access global issues, literature and film.

Course Content

French

[AQA | Languages | AS and A-level | French](#)

Lower Sixth

- Aspects of society are studied, together with aspects of the artistic life of French-speaking countries, such as family, film, heritage, music and charity work across the Francophone world and their roles in society.
- Analytical study of a film, essay writing developing critical thinking.

Upper Sixth

- Focus on life for those on the margins of French-speaking society, the positive influences that diversity brings, politics and political engagement in the French-speaking world, immigration and its challenges, criminality and racism are all key themes.
- Study of a literary text.
- Independent research project on a topic of the student's choice.

All lessons are conducted in French, with students supported by a language assistant.

“The ability to speak a foreign language...is a highly valued asset in the increasingly globalised world.”

Spanish

[A-level Spanish Specification for first teaching in 2016 \(aqa.org.uk\)](http://aqa.org.uk)

The A Level Spanish course is a dynamic and engaging 2-year exploration of Hispanic Language, Culture and life. A strong emphasis is put on the importance of communication and lessons are designed to develop the confidence and fluency to discuss, debate and to offer views and opinions on a wide range of contemporary topics.

By the end of the course, students will have developed the skill set to thrive in a Hispanic country; they will be happily able to hold conversations on a variety of topics, to comfortably read and listen to authentic materials and to write analytically and critically.

Lower Sixth

Students look to develop a wide range of transferable and highly sought after skills.

Critical thinking, observation and independence as learners are explored through a range of topics that explore:

- Traditional and modern values.
- Cyberspace and diversity.
- Equality and inclusion.

Upper Sixth

These skills are built upon as students look to develop a sophisticated cultural awareness, open-mindedness, and a resilient problem-solving approach, engaging in topics such as:

- Regional identity in Spain.
- Cultural heritage.
- The influence of modern idols.

All aspects of the course are introduced and developed through authentic, Hispanic materials, and lessons regularly involve video clips, films, music and newspaper articles.

Learning is far from limited to the traditional classroom and all students will have a weekly conversation lesson with a native Spanish Assistant.

German

[A-level German Specification Specification for first teaching in 2016 \(aqa.org.uk\)](http://aqa.org.uk)

The A Level German course focuses on language, culture and society.

Lower Sixth

- The changing state of the family.
- Cultural life in Berlin.
- The digital world.
- Highlights of German-speaking artistic culture, including art, architecture.
- How the past has shaped present-day German through the study of film.

“It is undeniable that having a modern foreign language is an invaluable and much sought-after skill.”

Upper Sixth

- Aspects of political life in the German-speaking world.
- Germany and the EU.
- Immigration, integration and racism.
- The reunification and its consequences.
- Literature - students will write critical and analytical essays on the work studied, in German.
- Independent research project on an area of their choice.

Throughout the course

- Authentic sources in both spoken and written form are used. Students are strongly encouraged to explore the language outside of the classroom - watching films, listening to music and following the news in German.
- German conversation lessons with German language assistant once a week.
- Students take part in a range of national competitions include the Goethe Institute. Debating Competition and the Oxford German Olympiad.

Basis of Assessment

The A Level examination consists of:

Paper 1: Listening, reading and translation 50%

Paper 2: Writing 20%

Students will write two essays during 2 hours:

One essay will be on the film they have studied and the other on the literary work.

Paper 3: Speaking 30%

This includes a discussion on independent research.

Entry Requirements

Students should show willingness to participate in discussions in the target language and to be open to developing speaking skills throughout the course. It will be necessary to demonstrate grammatical prowess from the GCSE course.

Having an interest in the French / Spanish/ German speaking world is beneficial to studying a language at A Level.

Skills

Over the course of two years you will develop skills in communication, literary analysis, essay writing, translation and critical thinking.

Beyond the Curriculum

A whole array of activities and opportunity is available to our Sixth Form students ranging from international cookery competitions, theatre trips in London, BFI excursions, to work experience abroad and cultural trips abroad for all languages.

Students are encouraged to enter translation prizes and national Olympiads in linguistics. The RGS has a good history of debating in a foreign language and students will have the opportunity to be part of the RGS French/Spanish/German debating societies that enter competitions on a regional and national level.

It is undeniable that having a modern foreign language is an invaluable and much sought-after skill in our increasingly globalised society, labour market and economy.

A LEVEL MUSIC AT THE RGS



Course Outline

Aimed at the more advanced musician, this A Level offers pupils a broad and varied curriculum, allowing musical development in the three core areas:

Performing, Composing and Listening/Appraising.

Students develop their practical skills through their private individual instrumental lessons.

Opportunities to hone their performance skills are provided through regular concerts, masterclasses and competitions.

Course Content

Pearson Edexcel - A Level Music Specification

Lower Sixth

- Students are introduced to the techniques of composition required at this level. Throughout their first year, students work on a series of projects exploring different compositional styles.

- Seven works are covered during the course of the Lower Sixth year exploring each of the different areas of study. Students analyse each work in turn, placing it in its musical, historical, and social context. Aural skills are developed through listening exercises in relation to each work.

Upper Sixth

- Recitals are prepared throughout the Upper Sixth year. Opportunities to perform are encouraged ahead of the official recording in March.
- One free composition is developed from the previous year and students enhance their understanding of four-part harmony.
- The remaining six works are analysed from each area of study.

Basis of Assessment

Unit 1: Performance (NEA) 30%

Solo recital on their chosen instrument. (including Voice) recorded in March of the exam year.

Eight minutes long and of Grade 7 standard or above.

Externally Assessed.

“Students hone their performance skills through regular concerts, masterclasses and competitions.”

“Activities are complemented by a thriving series of concert trips, competitions and masterclasses led by some of the country’s finest professional musicians.”

Unit 2: Composition (NEA) 30%

Total of two compositions, one to a brief set by Pearson and one either free composition or to another brief.

Compositions to a brief are in the form of a technical study. Students harmonise two short chorales in the style of JS Bach with a combined length of two minutes.

Free composition must be of at least four minutes in length.

Total time across both submissions must be a minimum of six minutes long.

Externally assessed.

Unit 3: Appraising (Exam) 40%

This unit tests students’ application of knowledge through the context of thirteen set works, from each of the following areas of study:

- Vocal Music
- Instrumental Music
- Music for Film
- Popular Music and Jazz
- Musical Fusions
- New Directions.

Exam consists of one written paper of 2 hours 10 minutes, with a total of 100 marks.

Entry Requirements

Students of A Level Music will need to be strong musicians, playing at approximately Grade 7 ABRSM Standard (or the equivalent) by the end of the A Level course. We expect all our A Level musicians to play an active role in the co-curricular life of the department and be members of as many school ensembles as appropriate – these include the School Choir, Chamber Choir, Symphony Orchestra, Big Band, and many smaller chamber groups.

Our musicians must have an interest in listening to, and reading about, a wide range of styles and genres. Students develop performance and composition skills and gain a thorough understanding of four-part harmony. Analytical and aural skills are nurtured through the study of a wide range of set works from a variety of diverse genres, cultures and traditions.

Skills

The A Level course not only provides an excellent foundation for any student wishing to study Music at university, but also sits equally well alongside applications to study other subjects. Many of the skills demonstrated by our musicians, such as creativity, independence, teamwork and organisation are highly respected by universities and in many careers.

Beyond the Curriculum

Students perform regularly in concerts both in Guildford and further afield. Music tours take place every year with recent tours to Tuscany, Venice, Barcelona, and Croatia. These activities are complemented by a thriving series of concert trips, competitions and masterclasses led by some of the country’s finest professional musicians.

A LEVEL PHYSICAL EDUCATION AT THE RGS



Course Outline

Studying an A Level in Physical Education will afford students the opportunity to explore the reasons for participation in physical activity and sport, and also those factors affecting optimal performance. Throughout the course, students will scrutinise principles and theories from across the sporting world. This will enable them to not only develop their knowledge of theoretical physical education, but to also cultivate an interest in how that theory is applied in a broader sporting context.

Career opportunities for those wishing to further their studies in physical education include employment in the fields of, but not limiting to; sports nutrition, physiotherapy, sports psychology, biomechanics, sports medicine and pedagogy.

Course Content

Board: AQA (specification number 7582)
[A level Specification - teaching from 2020.PDF](#)

- Students will develop theoretical knowledge and understanding of the factors that underpin physical activity. They will understand how physiological and psychological states affect performance, and appreciate the influence that key socio-cultural factors and technology can have on involvement in physical activity and sport.
- Students will also have the opportunity to analyse and evaluate their own or a peer's performance in a chosen activity. This 'Analysis and Evaluation' will take the form of two pieces of written work. These pieces will identify and explain weaknesses within a performance, justify possible causes, and explore potential corrective measures to bring about improvement.

“Throughout the course, students will scrutinise principles and theories from across the sporting world.”

“Despite benefitting from a curriculum that is continually being applied in the sporting lives of our students, we also offer a range of other opportunities for further application.”

- In addition, students will refine their ability to perform effectively in physical activity and sport by developing skills and techniques and selecting and using tactics, strategies and/or compositional ideas in one AQA approved sport. To this end, students must be actively competing in their chosen sport (AQA approved - see specification) throughout their time in the Sixth Form.

Basis of Assessment

Paper 1: 35%

Factors affecting participation in physical activity and sport. This is a 2-hour examination. It is worth 105 marks.

Paper 2: 35%

Factors affecting optimal performance in physical activity and sport. This is a 2-hour examination. It is worth 105 marks.

NEA: 15%

The practical Non-Examined Assessment is assessed using video footage/live performances and student commentaries. It involves performance/coaching in one AQA approved sport (see specification). It is worth 45 marks.

NEA: 15%

The written Non-Examined Assessment is assessed through two pieces of written work - Analyses and Evaluations. These pieces are worth a total of 45 marks.

Entry Requirements

Students considering studying Physical Education at A Level should be expected to demonstrate a strong grade in GCSE Physical Education. Students who have not studied Physical Education at GCSE should have performed strongly in GCSE Biology.

In addition, to complete the practical element of the course, students must be actively competing in their chosen sport (AQA approved – see specification) throughout their time in the Sixth Form.

Skills

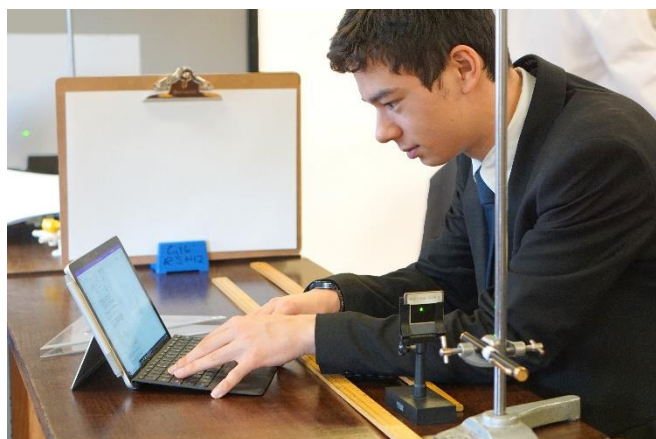
Students will develop their ability to demonstrate knowledge and understanding of physical activity, and to apply this to a range of sporting contexts.

In addition, students will develop their ability to think synoptically, as multiple areas of the course are often drawn together in the same examination question. The majority of the questions are long-answer format and focus on a student's ability to coherently analyse and evaluate.

Beyond the Curriculum

Despite benefitting from a curriculum that is continually being applied in the sporting lives of our students, we also offer a range of other opportunities for further application - the highlight of these is our visit to the Surrey Human Performance Institute at the University of Surrey. Students administer and participate in a range of physiological tests including: VO2 Max, Strength Dynamometer, Spirometry trace and reaction/speed tests using light gates.

A LEVEL PHYSICS AT THE RGS



Course Outline

Physics is the study of how our universe works from large-scale ideas about the cosmos to the fundamental particles of matter and everything in between. A big part of the course is sharing a sense of curiosity and wonder about how the universe works. However, Physics is not just about abstract theories - practical work plays a great part as well as studying about the applications of the subject e.g. in engineering, materials and communications. You will begin to appreciate the profound impact, intellectual and practical, of physics and engineering on all our lives.

Studying Physics in the Sixth Form combines mathematical and logical thinking with hands-on practical experimentation alongside digital technology and computational modelling. You will develop skills in numeracy, communication, problem-solving in unfamiliar contexts, all of which support a wide range of university courses and careers.

Course Content

OCR Advancing Physics specification

Lower Sixth

- Familiar topics such as forces and motion and electricity are applied in more complex scenarios.
- The physics of materials, for everything from construction to technology.
- Theoretical physics considers the fundamental nature of matter, introducing ideas of wave and quantum physics, and the dual wave-particle nature of everything in our universe.
- Images, data and digital signals, exploring the principles behind modern technology.
- Computational models and algorithmic thinking are used to solve complex problems.

“*Mathematical
and logical thinking
with hands-on practical
experimentation.*”

“*Physics trains you to understand and interpret data, solve problems, and build theoretical models of complex systems.*”

Upper Sixth

- More complex topics, such as oscillations, capacitor circuits and nuclear decay.
- The mathematical concept of a “field” is introduced to describe gravity, electrostatics and electromagnetism.
- Statistical thinking, to analyse nuclear decay and thermodynamics.
- The physics of the cosmos and also Einstein’s theory of relativity.

Basis of Assessment

Fundamentals of Physics:

Assesses core concepts using shorter questions.

Scientific Literacy in Physics:

Places these concepts in a wider context, with an emphasis on applications of core ideas to unfamiliar situations.

Practical Skills in Physics:

Examines theoretical concepts alongside practical skills and data handling.

In addition, practical skills are continuously developed and assessed throughout the course in a series of required practical activities. The practical assessment (CPAC) does not contribute to your overall grade but is reported separately as a pass/fail on your exam certificate.

Entry Requirements

Students will require a strong foundation in both GCSE Maths and Physics, achieving a minimum of Grade 7 in both subjects.

There is no requirement to study Mathematics A Level alongside Physics, but the two do support each other well. Mathematics is essential if you wish to study Physics or Engineering beyond the RGS. Further Mathematics is recommended, but not essential, for those considering an Oxbridge Engineering/Physics application. Physics can make an excellent supporting A Level choice as a numerical and practical subject where Mathematics is not taken.

Skills

Scientific thinking combines a number of valuable and transferrable skills. Building on your existing knowledge and skills, Physics trains you to understand and interpret data, solve problems, and build theoretical models of complex systems. You will bring together practical, mathematical, computing, and graphical skills to link your knowledge together and apply it to a wide range of technological and social contexts. Creative thinking and logical analysis go hand in hand as you develop skills which are highly valued in many sectors of employment.

Beyond the Curriculum

The Physics Department runs a “Further Physics” course for those wanting to go beyond the syllabus, especially helpful for those applying for competitive Physics or Engineering courses at university. In addition, we support the British Physics and Astronomy and Astrophysics Olympiads, Student Robotics and various engineering competitions. We run trips to NASA and to CERN for optional enrichment.

A LEVEL POLITICS AT THE RGS



Course Outline

At a fundamental level, Politics is about the study of power. Who holds it? How did they acquire it? How is it legitimised and held accountable? What principles guide those who wield it? To answer these, we introduce a range of relevant and contemporary political ideas, institutions, key thinkers, processes and issues, in the UK, the USA, and in our political past.

The remarkable changes and events of recent years, be that Trumpism in the USA, or Brexit in the UK, are the landscape that we introduce students to, and there has never been a more exciting time to study the subject.

Course Content

[A level Politics - Specification \(pearson.com\)](https://www.pearson.com/UK-edexcel/A-level-politics-specification)

The Edexcel course is made up of three elements, each worth 33.3% of the total assessment:

Component 1

UK Politics and Core Political Ideas (9PLO/01).

- UK Politics: Democracy and Participation, Political Parties, Electoral Systems, Voting Behaviour and the media.
- Core Political Ideas: Conservatism, Liberalism, Socialism.

Component 2

UK Government and Non-Core Political Ideas (9PLO/02).

- UK Government: Constitution, Parliament, Prime Ministers and the executive, the Supreme Court (and its relationship to the other branches of government).
- Non-Core Political Idea: Anarchism.

“At a fundamental level, Politics is about the study of power.”

“ *The remarkable changes and events of recent years...are the landscape that we introduce students to, and there has never been a more exciting time to study the subject.* ”

Component 3

Comparative Politics – Government and Politics of the USA (9PLO/03A).

- USA: Constitution, Federalism, Congress, Presidency, Supreme Court and civil rights, Democracy and Participation, comparative theories

Basis of Assessment

3 x 2 hour written papers:

84 marks each.

Extended written responses:

12 marks, 24 and 30 mark essays.

Assessment Objective 1:

Knowledge and Understanding.

Assessment Objective 2:

Analysis.

Assessment Objective 3:

Evaluation.

Entry Requirements

There are no specific entry requirements for A Level Politics. However, an interest in current affairs, perhaps previously explored in other humanities subjects (English, Geography, History, Religious Studies) is an advantage.

Skills

The best Politics students have the following attributes by the end of the two-year course:

- A passion and interest in the world around them.
- Excellent discursive and debating skills, as this is the daily reality of the Politics classroom.
- A fluent and organised writing style.

Even if these are not your initial perceived strengths, the skills learnt in Politics are just as important as the content delivered.

Beyond the Curriculum

We encourage students to enter various essay competitions (for example, the John Locke Institute Prize and the R A Butler Prize (Trinity College, Cambridge). Politics students will visit the Houses of Parliament and the Supreme Court. Students attend talks and lectures, and the Politics Department runs a weekly Politics Society, with presentations and political films. We have previously run trips to Washington DC and Philadelphia.

A LEVEL RELIGIOUS STUDIES AT THE RGS



Course Outline

Religious Studies A Level is a highly demanding, academically rigorous and thought-provoking subject. It is not Scripture or Divinity, but rather focusses on Themes in Philosophy, Ethics and Theology. The course allows for wide-ranging debate in class and the teaching is structured to encourage participation. It is appropriate for those of any faith or none - many of our best students have had no religious commitment - and has been successfully combined not only with subjects such as English, History and Politics, but with Practical subjects, Modern Languages, Mathematics and Science.

Every university in the country accepts this A Level as being of the same academic value as any other 'literary' A Level. In previous years students studying RS at A Level at the RGS have gone on to read a wide range of subjects including PPE, Medicine, Maths, Economics, Science, History, English, Philosophy and Theology at top universities.

Course Content

OCR Religious Studies A Level

There are three areas of study:

Philosophy

- The study of the ancient origins of philosophical thinking in the work of Plato and Aristotle supports the subsequent analysis of both modern and ancient ideas about the nature of the relationship between the human mind, body and soul. Evaluation of traditional and contemporary arguments for the existence of God are complemented by a detailed consideration of the problems of evil and suffering. The course concludes with a wide-ranging study of issues in the philosophy of language and how this affects religious language.

Ethics

- Students study a range of normative ethical theories, considering the different way in which we might establish what is morally good. This leads to the application of these theories to three important contemporary issues: sexual ethics, euthanasia and business ethics. Discussions about the very nature of ethical language and theories leads into a study debates surrounding the significant idea of conscience and the influence on ethical thought of developments in religious beliefs.

“The Course allows for wide-ranging debate in class and the teaching is structured to encourage participation.”

Developments in Christian Thought

- Critical assessment of different Christian concepts of human nature and the purpose of life as well as a study of the relationship between faith and reason goes alongside the consideration of how Christians view other religions and how they respond to the challenges of atheism and scepticism, including the relationship between Christianity and Marxism. The nature of Christian moral action and belief develops the analysis of different ways in which Christianity has understood the nature and purpose of Jesus Christ.

Basis of Assessment

Assessment is all by terminal examinations, of which there are three, one for each of the areas described above.

All exams have the same structure: a choice of three essays from four, each of which must be written within forty minutes.

Entry Requirements

It is not necessary to have studied RS GCSE to successfully take up this A Level, but we would expect students to be willing to undertake reading and research of each topic in their homework time in addition to completing formal written tasks.

Skills

RS A Level develops an incisive and critical mind that can select and deploy relevant information, that can dissect arguments, that can see through poor reasoning, that can defend clearly thought-out opinions, and that can construct (both orally and on paper) concise and clearly defined answers to a range of complex and important questions. These skills are, of course, transferable, and will be of great value in whatever degree course is chosen they are much sought after by those pursuing careers in the law, medicine, the sciences, journalism, the Civil Service, and in business and commerce at managerial levels.

Beyond the Curriculum

As well as the planned departmental trip to Italy, opportunities to engage beyond the classroom include the weekly meetings of Hume Society (the Senior Theology and Philosophy discussion group), opportunities to act as academic support to boys in the Lower and Middle School studying RS, and a range of external essay competitions.



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