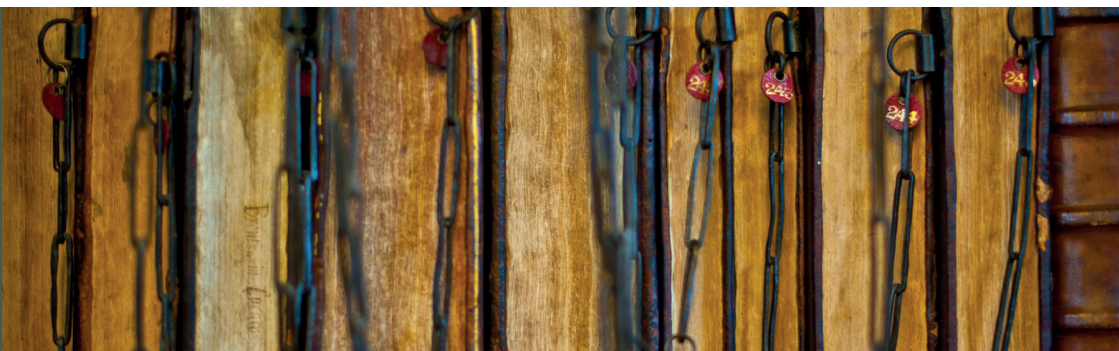


Royal Grammar School Guildford

Middle School Curriculum Guide 2020



RGS
GUILDFORD

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INTRODUCTION

Boys at the RGS have important choices to make about GCSE subjects before they enter the Fourth Form. This booklet aims to provide information about those choices and to explain the thinking behind the School's view of the curriculum in the Fourth and Fifth Forms. Consultation with teachers at Parents' Evenings provides further guidance, as does the School's Careers Department.

The Fourth and Fifth Form curriculum offers access to all the aesthetic, creative and literary, human and social, linguistic, mathematical, moral and spiritual, physical, scientific and technological 'areas of learning'. It is designed to retain breadth as well as balance and to ensure that no decisions made at this stage restrict university and / or career opportunities. However, there is still flexibility within this framework to allow for a certain amount of specialisation regarding the particular interests and expertise of individual boys.

In the Fourth Form, boys are divided into two streams for Mathematics. The top stream (accounting for approximately 60% of all boys) study for both IGCSE Mathematics and Further Mathematics. They take two IGCSE qualifications at the end of Fifth Form: Mathematics and the Level 2 Certificate in Further Mathematics. The remainder of the year take IGCSE Mathematics only.

OPTIONS

Boys take a total of ten GCSE subjects of which seven form the core curriculum with the other three being drawn from a range of options.

The core curriculum, followed by all boys, consists of:

English Language and English Literature	4 periods
Mathematics	4 periods
Core Language (<i>French, Spanish or German</i>)	4 periods
Biology	3 periods
Chemistry	3 periods
Physics	3 periods
Religious Education (non-examined)	1 period
Tutor Period	1 period
Monday Period 8	1 period
Physical Education	1 period
Games	3 periods



Boys then select a further three subjects to study to GCSE level following the criteria below:

- All boys must select one humanities subject from History, Geography or Religious Studies.
- Boys select a further two subjects from Art and Design, Design and Technology, Drama, French, Geography, German, Greek, History, Latin, Music, Physical Education, Religious Studies and Spanish.
- Each option subject is allocated four periods per week.

In selecting their option subjects, boys are encouraged to choose subjects that they are both good at and which they enjoy. Much has been written in the press about the relative value of some subjects in relation to others, with specific reference to so-called 'soft subjects'. The RGS does not endorse these comments and would stress the value of continuing to study subjects that foster the further development of practical, aesthetic, creative and cultural learning. No subject offered at the RGS is seen in a less favourable light by university admissions tutors.

Provision is made to support boys who wish to study additional languages beyond the formal curriculum. This applies typically to five to ten boys each year who opt to study Arabic, Chinese, Japanese or Russian.

RGS SCHOOL VALUES

Inclusivity

We educate local boys regardless of their social, cultural, religious and financial background in a welcoming, tolerant community where each individual is valued and enjoys a deep sense of belonging.

Scholarship

We encourage the growth of intellectual curiosity, independence, creativity, innovation and habits of learning within a scholarly community through inspirational subject specialists who provoke and stretch the students' minds and inculcate a lifelong love of learning.

Integrity

We promote the development of self-discipline and responsibility, spiritual values and a personal moral code, and cultivate an ethos where we approach school life with humour and perspective in a community where traditional qualities of decency, politeness and humility are celebrated.

Respect

We nurture an atmosphere of mutual respect between all members of our community, and foster self-respect and self-esteem in terms of physical health, emotional maturity and personal well-being, while establishing lasting friendships in a positive, happy environment.

Tenacity

We develop teamwork, resilience and life skills through a diverse range of activities where all boys, regardless of their talents and attributes, are encouraged to challenge themselves, take appropriate risks and work hard to fulfil their potential.

Service

We collaborate with others, including local girls' schools, for mutual enrichment, and encourage a spirit of altruism and charity, a sense of perspective, and a firm belief that we can work in partnership with others to make a difference, locally and internationally.



EDUCATIONAL PHILOSOPHY

The RGS is a selective school and we are proud that all our students are able, gifted and talented in at least one area of educational endeavour. Academic excellence is at the heart of our philosophy; we believe that the potential of all students is realised by nurturing a love of learning, by cultivating in each individual the School's bespoke set of Learning Habits and by fostering a scholarly mindset; this includes:

- being fiercely curious and intellectually inquisitive;
- looking for opportunities beyond the curriculum and making connections between individual subjects;
- encouraging creativity and a free-thinking approach which is willing to challenge conventional opinion;
- providing opportunities for research and presentation skills;
- mental resilience and flexibility to identify and offer creative solutions to challenges and not be daunted by initial failure and setback, rather seeing it as a constructive and necessary part of development;
- being ambassadors of excellence;
- engaging fully – and often independently – with the opportunities afforded;
- being young men of integrity;
- celebrating aspiration and achievement while always remaining humble;
- enriching and benefiting others within the School and those in the community;
- developing a lifelong love of learning and a lasting thirst for knowledge and self-improvement.

These qualities are not just reserved for academic scholars, but rather are a description of the culture at the RGS and what characterises the ethos of the School. They are the qualities to which every student should aspire and, as such, regular opportunities are provided which are open to all students for enrichment, stretch and challenge as part of the scholarship programme.

LEARNING HABITS

The RGS Learning Habits are a bespoke set of skills that we believe are fundamental attributes for our students to develop during their time at the School. Incorporating core elements of learning, co-operation, independence and organisation, the Learning Habits are interweaved throughout each student's curricular and extra-curricular experience at the RGS to nurture those vital inter-personal skills which will allow them to flourish at school, university and beyond.

Engagement with Learning	
Love of Learning	I enjoy learning for its own sake
Tenacity	I am able to respond positively to challenges and persist when I have setbacks and disappointments
Precision	I take care to understand tasks and complete them to a high standard
Creativity	I am able to be imaginative, creative and/or original when I am learning
Learning with Others	
Teamwork	I am able to collaborate as part of a team with others
Engagement	I am an active participant in learning, asking and answering questions and listening to others
Imitation	I am good at noticing and able to learn from what others do well
Perspective	I am aware and take responsibility for my well-being and that of others
Thinking	
Summarising	I am able to look back at what I have done, picking out key points, summarising, distilling and memorising
Reasoning	I am able to adopt a rational approach and can draw conclusions from accepted truths or evidence
Linking	I am able to apply my skills and knowledge across subjects and in unfamiliar situations
Criticality	I am willing and able to test claims of 'truth'
Taking Responsibility	
Reflection	I seek out feedback on my work and use it to evaluate and improve my learning
Organising	I am able to manage my time and resources effectively
Independence	I am an active learner, able to take the initiative and plan my learning; I am self-motivated and take pride in, and responsibility for, my work
Practice	I practise to improve my learning

ACADEMIC SUBJECTS

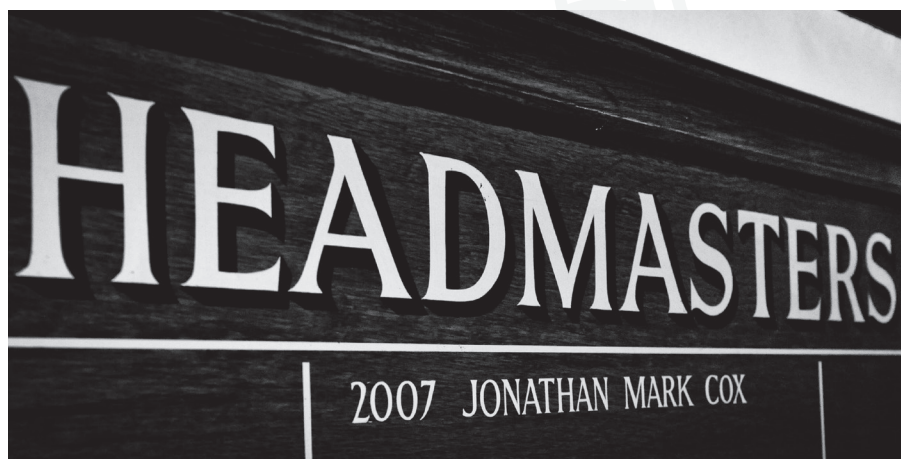
ART AND DESIGN

Board: OCR

The creative industries – ranging from advertising to architecture and fashion to film – constitute one of the fastest-growing sectors in the UK. “It is vital that the key strengths... in the creative sector are nurtured and championed” CBI Creative Industries in Focus. The Fine Art course is designed to equip boys with core technical skills and to develop their aesthetic judgement, and is not only for those who wish to study for its own sake but for those who wish to experience working practices that will enable them to pursue a creative career in the future.

The course consists of a portfolio containing two practical projects (60%) and a practical set task completed over two school days that has been prepared for in the previous six to eight weeks (40%).

The projects have to be produced in the studio during lesson time, so that homework is generally used for research purposes. This research also includes two organised trips: to Tate Modern in the Fourth Form and the National Gallery in the Fifth Form.



CLASSICAL LANGUAGES

LATIN AND CLASSICAL GREEK

Board: OCR

Latin and Classical Greek are challenging and highly-regarded subjects which enthuse boys with the wide range of literature, culture, history, drama and archaeology that the classical world has to offer.

The aims of the GCSE courses in both Latin and Greek are:

- to develop a reading competence focused upon a selection of Latin or Greek literature;
- to appreciate critically and make an informed response to the language, literary forms, techniques and qualities of the texts;
- to develop an awareness of the character of the Latin and Greek language and its influence on English;
- to understand the cultural context within which the literature was produced, an understanding which includes an appreciation of the nature of historical evidence and an ability to compare ancient times with modern;
- to appreciate critically and to make some personal responses to the language, literary forms, techniques and qualities of the text.

In Latin, in the Fourth Form, boys continue to study the Cambridge Latin Course books, completing Books 4 and 5 as well as completing the GCSE prose set text. In Greek, boys complete Taylor's Greek to GCSE Book 2 and study the prose set text. The Latin and Greek verse set texts are studied in the Fifth Form. The two main areas of study for both Latin and Greek at GCSE are language and literature. The language paper consists of an unseen translation and comprehension, and a choice of grammar questions or English to Latin / Greek sentence composition. Boys learn the GCSE word list and grammar syllabus for the language paper. The other two GCSE papers are the verse and prose literature papers. Boys study about 110 lines of Latin or Greek for each of the literature papers and the examination questions take the form of factual and contextual comprehension questions, translation and extended literary criticism.

The Classics Department runs theatre trips to watch classical plays and there is the opportunity to go on the Senior Classics Trip to Greece, Sicily or Turkey for those studying Latin or Greek GCSE. The Senior Classics Society is open to GCSE boys. The Society invites Classics professors from leading universities, who give talks on classical subjects of interest, both on and off the syllabus. There are essay writing and reading competitions open to GCSE classicists.

DESIGN AND TECHNOLOGY

Board: AQA

Design and Technology is a central subject in that it is holistic, cross curricular and multi-disciplinary, fostering problem-solving, critical thinking and independent learning. Its broadness provides a desirable background in which boys can contextualise learning drawn from other subjects. It is taught through a combination of theoretical lessons, focused practical tasks and, in the Fifth Form, a longer-term, student-driven coursework project. The different topics and activities engaged in by boys enable them to develop valuable, transferable skills such as project management and ICT skills. Design and Technology develops boys' innovation, curiosity, initiative, resourcefulness, creativity and ability to recognise and produce high-quality products through stimulating and enjoyable lessons.

The Design and Technology course at GCSE level is an up-to-date and modern syllabus for students interested in the world of design, engineering, materials and manufacturing. All students will follow the same broad and diverse syllabus, learning about a wide range of topics within Design and Technology. There will also be a main focus of wood and systems and control electronics. The School has a very well-equipped, up-to-date and recently built set of classrooms and workshops within which to give boys access to a very wide range of high-tech machines, tools and equipment with which to undertake this course. Extensive materials and resources are available to allow each boy to achieve his full potential.

Boys are assessed via a single written two-hour examination paper worth 50% of the overall marks and a controlled assessment project (known as the NEA) worth 50% (to be undertaken in 30 – 35 hours and produced on a maximum of 20 A3 pages).

Boys will study topics including:

- Industry, Enterprise
- Sustainability, Environment, Ecological Issues
- People, Culture, Society
- Production techniques and systems
- New and emerging technologies
- Energy generation and storage
- Designing and making principles
- Modern materials, Smart materials, Composite materials, Technical textiles
- Input process and output concepts in systems and control
- Mechanical concepts such as changing direction of forces different types of movement
- Tools equipment and processes
- The work of famous designers and how designers work

Elements of mathematics and science knowledge as set out by the DfE are also to be covered.

There are opportunities for boys to enter competitions and many prizes have been won over the years. The Department offers after-school and lunchtime sessions where boys can catch up or work on a speculative project. Outside trips and visits, such as to the Young Designers exhibition, also take place. External speakers also make presentations to the boys.

DRAMA

Board: AQA

At RGS, Drama is taught not because the expectation is for boys to become actors but because the School believes it is a qualification essential in educating the whole person. Top employers demand more than just subject specific skills; they look for young people who communicate well, have advanced social skills, think creatively and have the ability to improvise in a fast changing world. Drama is particularly valuable for boys who may wish to pursue a future career in the creative industries, medicine, law, media and communications, marketing and any area that deals with the public. Boys can continue in Sixth Form to extend their study with GCE Drama and Theatre Studies. Drama combines practical and collaborative teaching and learning, with the academic study of theory and text. The AQA syllabus divides into three units that balance theoretical academic study with experiential and discovery methods of learning.

Component 1: Understanding drama makes up 40% of the qualification and is examined through a one hour and forty-five-minute written paper. The questions cover general knowledge and understanding of drama and theatre, the study of one set play (from a choice of six) and critical analysis and evaluation of a live production seen. This unit is taken as a terminal examination at the end of the two-year course along with other GCSE subjects. Boys will be taken to see at least two professional productions over the two years.

Component 2: Devising drama (practical) is worth 40% of the final GCSE and candidates are required to create their own piece of drama from scratch. Candidates produce a significant piece of coursework based on the process which is worth 60 marks with the performance itself worth 20 marks. This component is marked by the teacher and moderated by AQA.

Component 3: Texts in practice (practical) is worth 20% of the final mark. Boys will perform in two short extracts from the same play and this is a free choice of text chosen by the teacher to suit the skills of the group. These performances take place in the Lent Term in the Fifth Form and are for an external AQA examiner. There is no written element to this component.

This course will suit those interested in drama as an art form but also those who wish to balance and broaden their education at this first stage of examination selection. The study of Drama uniquely develops personal skills: self-confidence, leadership, collaborative endeavour and flexibility in problem solving. It engenders imagination, empathy, courage and originality as well as fostering independent thought, critical awareness and cultural growth. Drama students can benefit from extending their knowledge and experiences of the subject through independent involvement with productions either in school or beyond; however, prior experience is not a requirement to study the subject at this level.



ENGLISH LANGUAGE AND ENGLISH LITERATURE

English Language

Board: CIE

English Literature

Board: WJEC

All candidates, in unstreamed forms, will study English Language and English Literature. In both subjects, the course is assessed by means of two summative examination papers.

In English Language, the examination papers assess comprehension, analysis of language use, summary, directed writing and composition.

In English Literature, boys are tested on: Shakespeare; Poetry from 1789 onwards; Post 1914 Prose or Drama; 19th Century Prose; and Unseen Modern Poetry. All papers are now 'closed text', meaning that boys are not allowed to take copies of the text into the examinations with them.

GEOGRAPHY

Board: AQA

This new specification looks at the interdependence of a variety of physical environments and the interaction between people and the world in which they live. It explores case studies in the United Kingdom (UK), higher income countries (HICs), newly emerging economies (NEEs) and lower income countries (LICs). Topics of study include climate change, poverty, deprivation, global shifts in economic power and the challenge of sustainable resource use. Boys are also encouraged to understand their role in society by considering different viewpoints, values and attitudes.

Assessment is through three externally-marked papers: living with the physical environment, challenges in the human environment, and geographical applications. This final paper consists of an issue-analysis paper based on an issue outlined in a pack given to boys twelve weeks before their GCSEs begin. They are able to discuss the topics in lessons with their teacher but then answer questions based on the material under examination conditions. The second part of the paper assesses boys' understanding of how to carry out fieldwork; for example, they might be asked how they went about collecting primary data. Although there is fieldwork at GCSE, there is no longer any coursework.

Boys who study Geography at GCSE will have the opportunity to get involved in fieldwork in the local area and abroad. Most recently we looked at the geomorphology of the River Tillingbourne, flooding on the River Wey and the structure of Guildford's Central Business District (CBD). We also run a voluntary four-day residential trip to Iceland where students have the opportunity to study the geographical features taught in the course, such as glaciers, rift valleys and geysers.





HISTORY

Board: CIE

The twentieth century syllabus that we study at IGCSE has proved tremendously popular as it provides a fascinating opportunity to study the ideological, political, military, cultural and socioeconomic forces that have helped to shape the modern world. This is achieved via a varied programme comprising many different methods of study: the analysis of primary multi-media archive material alongside the reading and understanding of modern historians and commentators with a healthy dose of personal investigation. History promotes an independence of mind and superb critical thinking skills. It also equips boys with the ability to judge between rival points of view and develop and express their own cogent and coherent arguments or judgements. Finally, we believe it helps boys develop as twenty first century citizens who are well-informed and possess a vital and enriching contextual awareness of the contemporary world and its most immediate past.

The History IGCSE course is divided into two areas of study; an 'Outlines' course on International Relations 1918 – 2000 (that covers everything from the Treaty of Versailles via the Causes of the Second World War and the Cold War to more recent conflicts in the Persian Gulf) and two 'Depth' studies on Germany 1918 – 1945 and Russia 1905 – 1941. The 'Outlines' and 'Depth' courses respectively are delivered by two different teachers. There is a coursework element on the significance of Lenin between 1917-1924, and the boys are also assessed via two separate written examinations.

IGCSE History always rewards high levels of content knowledge and understanding that are above-and-beyond the norm. This is both one reason why it is highly suitable for RGS boys but also provides immense opportunities for further independent study on those aspects of the course that really fire the imagination. There is a plethora of relevant wider reading that the Department can offer to interested boys whilst many IGCSE boys regularly attend History Society meetings. Annual trips in the Fourth Form to the First World War Battlefields of the Western Front, and the Fifth Form to Berlin/Munich complement the syllabus nicely and are always found to be immensely enjoyable and highly memorable by those who go.

MATHEMATICS AND FURTHER MATHEMATICS

Mathematics is a rigorous, problem-solving discipline and a unique way of thinking which is applicable to real-world situations as well as being worthy of study in its own right. We aim for every student to achieve his full potential in Mathematics.

Mathematics Board: Edexcel (IGCSE)

This course gives boys a foundation in mathematical skills and develops their knowledge and understanding of how to use and apply mathematical techniques and concepts to solve problems. The course content consists of the standard areas of Mathematics including Number, Algebra, Shape and Space, Handling Data, Calculus, Set Theory and Functions and tests the knowledge, understanding and application of these areas. The year group is split into two streams and the top 60% or so study content from the Further Mathematics course alongside IGCSE topics. There are no early entry candidates.

Additional Mathematics Board: AQA (Level 2 Certificate)

This course complements IGCSE and provides an ideal preparation for Sixth Form work, particularly for those who wish to study Further Mathematics. It offers students an extension to familiar topics such as trigonometry and geometry while providing an introduction to some of the subjects studied at A Level, including exponentials and matrices. The course also develops problem-solving skills which overlap with the top end of IGCSE and allow students to tackle unstructured, unfamiliar challenges with success. Boys in the top stream take this qualification alongside their IGCSE Mathematics examination at the end of the Fifth Form.

There are many opportunities at the RGS for boys to engage in Mathematics outside of the classroom. On a national level, boys in all years enter various competitions with several regularly progressing to the latter stages of the UKMT Challenges and winning medals for high ranking. At a local level, each year group enters a team, often with great success, in the local Guildford Schools' Mathematics Competition.

MODERN LANGUAGES

FRENCH, GERMAN AND SPANISH

Board: AQA

All boys in the Fourth Form continue to study a core language (French, German or Spanish). In addition, they can also choose to continue with their second modern language as an option.

The Department aims to teach boys to communicate effectively and confidently in the foreign language, whilst inspiring them to extend and pursue language learning outside the classroom. The objective is for the boys to become relatively fluent in the language or languages they are studying which provides many fundamental benefits for further study and future careers. It is firmly believed that exploring cultural aspects is crucial. All courses are geared towards purposeful language for boys to feel able to tackle real life situations. In addition, the aim is to inspire boys to extend and pursue language learning outside the classroom by providing them with the skills needed to become effective language learners at any stage of their lives.

The examination comprises three papers: a listening paper (25% of the total GCSE), a reading and writing paper (50% of the total GCSE) and a speaking test (25% of the total GCSE). These test the four basic skills of listening, speaking, reading and writing, and the emphasis is on authentic language. These skills are therefore developed in lessons using a range of authentic materials: written articles, film extracts, short video clips and a range of audio materials. The purpose is for boys to take an active part in everyday situations, talking about personal interests, sharing opinions and experiences as well as writing short essays. Lessons are varied, interactive and aim to develop a wide range of positive language-learning habits.

The Department runs a range of trips across the year groups. The aim of these trips is to boost boys' confidence and motivation by allowing them to practise the foreign language in real-life situations and to experience at first-hand the culture of the country where the foreign languages are spoken. Recent destinations have included Bordeaux, Biarritz and the Normandy region in France, Madrid, Barcelona and Andalucía in Spain, the Rhineland region and Berlin in Germany. In addition, the Department runs a range of co-curricular activities aimed at developing the boys' wider interests in languages: the Junior Film Society, Foreign Language plays, day trips, conferences, competitions, and the Debating Society.



MUSIC

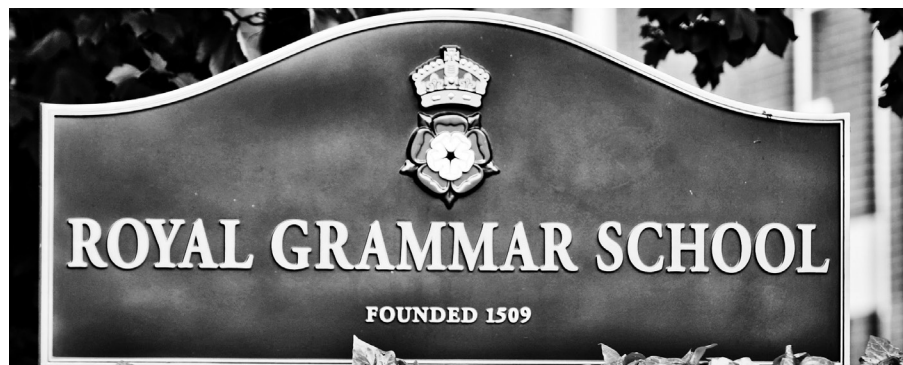
Board: Edexcel

The music course requires boys to engage actively in the study of music while developing their own musical skills and interests. The course encourages boys to understand and appreciate a range of different music enabling them to develop broader life skills and attributes, including critical and creative thinking, aesthetic sensitivity and wider cultural understanding.

- Unit 1 (Performance: 1MU01)
- Unit 2 (Composing: 1MU02)
- Unit 3 (Listening and Appraising: 1MU03)

The GCSE course is extensive in scope and encourages boys to undertake a broad yet coherent course of study. Boys are required to perform as a soloist (at approximately Grade 5 standard) and as part of an ensemble. Performances must have a combined duration of four minutes and are recorded in March of the examination year. Additionally, each boy must produce two compositions. One must be in response to a brief set by the examination board while the second can be a free composition. Each composition should be at least one-minute long and have a combined duration of three minutes. Unit 3 requires candidates to study a total of eight pieces across four contrasting areas of study. Boys undertake the analysis of each of these pieces in class and are required to answer questions on them in an examination taken at the end of the course. Here, boys listen to musical extracts and answer questions covering all four areas of study. They must identify key musical features of each piece aurally before writing an essay on one of the set works selected by the examination board. Boys are also examined on their wider musical listening and understanding through aural and written questions comparing both familiar and unfamiliar musical works.

Each of the units encourages independent study, self-discipline and self-motivation thus giving each boy the confidence to become effective and independent learners. Boys are encouraged to take responsibility for their own musical development as performers throughout the duration of the course. Regular practice on their chosen instrument is essential in order to succeed in Unit 1. Analytical skills are developed in class and boys develop these skills through independent and group work. Many opportunities are provided outside of the classroom including regular concert trips, overseas tours, and an extensive range of co-curricular activities.



PHYSICAL EDUCATION

Board: AQA

Studying GCSE Physical Education will allow students an academic insight into the ever growing world of sports science. The combination of physical performance and academic challenge provides an exciting opportunity for our students: an opportunity to not only improve performance in their chosen sports, but also analyse their capabilities and discover how to improve performance through the precise application of theory.

Career opportunities to those wishing to further their studies in Physical Education include employment in the fields of, but not limited to: sports nutrition, physiotherapy, sports psychology, biomechanics, sports medicine and pedagogy.

Theoretical assessment:

Paper 1 – The human body and movement in physical activity and sport.

Topics assessed in this paper - Applied anatomy and physiology, movement analysis, physical training and the use of data.

This is a 1 hour and 15 minute examination. It is worth 78 marks and equates to 30% of the GCSE.

Paper 2 – Socio-cultural influences and wellbeing in physical activity and sport.

Topics assessed in this paper - Sports psychology, socio-cultural influences, health, fitness and well-being and the use of data.

This is a 1 hour and 15 minute examination. It is worth 78 marks and equates to 30% of the GCSE.

Non-examined assessment:

Students are firstly assessed on their practical performance in three different physical activities (approved by AQA). They are judged on their ability to perform prescribed skills and then the subsequent application of these skills within a fully competitive situation.

This is a practical assessment administered by the RGS staff and moderated by the AQA examining board. It is worth 75 marks and equates to 30% of the GCSE.

Students will then be expected to analyse and evaluate their own or a peer's performance in a chosen activity. They will explore the strengths and weaknesses of the performance and, following this, create an action plan that stipulates how performance is to be improved.

This will be recorded in a written or verbal format, assessed by the RGS staff and moderated by the AQA examining board. It is worth 25 marks and equates to 10% of the GCSE.

SCIENCE (BIOLOGY, CHEMISTRY AND PHYSICS)

All boys study all three sciences and emerge with separate IGCSEs in Biology, Chemistry and Physics. Subject specialists teach each science subject for three periods per week. Boys are in the same set (determined by GCSE options rather than ability) for all three subjects.

The IGCSE courses are academically rigorous enough to provide both a sound footing for A Level and a competent level of scientific literacy for those pursuing other subjects. The courses are examined via two written papers at the end of the Fifth Form. There is no coursework, although an understanding of practical work and the ability to evaluate experimental evidence is examined through the written papers. Nevertheless, great emphasis is placed upon practical work in science; hands-on experimentation and investigation are at the core of all three subjects.

Biology Board: Edexcel

The aim is to give the boys the best and most inspiring introduction to the fascinating world of Biology, while at the same time equipping them with the knowledge and skills to excel in their public examinations. This is achieved through the hard work of a highly qualified, knowledgeable and committed team of teachers who consistently teach beyond the scope of the curriculum to ensure the boys reach their full potential.

Topics covered at IGCSE include human anatomy and physiology, genetics, nervous and hormonal control, evolution, photosynthesis, digestion, reproduction, ecology, classification, biochemistry and homeostasis. IGCSE boys have the opportunity to undertake an independent research project in the Fourth Form. The Biology Department holds several events during the course of the school year, such as visits to conferences and lectures and boys have the chance to compete in the national Biology Challenge competition. Potential medics also have the opportunity to participate in the School's Medical Society.



Chemistry Board: Edexcel

The fundamental concept of moles is introduced at the beginning of the course and it enables us to work out the quantities of substances involved in chemical reactions. The factors affecting the rate of reactions are investigated and boys learn about energy changes. Organic Chemistry is introduced to understand the nature of crude oil. Naturally, practical work is an important and highly enjoyable part of the course. Boys are shown how molten iron is produced in the thermite reaction, make a seemingly endless nylon rope and perform titrations requiring extreme care and accuracy. Flame tests and precipitation reactions are used to find the identities of unknown salts.

Boys have opportunities to take part in a number of enrichment activities such as the Fourth Form RSC Chemistry Challenge and the Top of the Bench Competition. In addition, boys can carry out Silver CREST projects and attend Scientific Society Lectures.

Physics Board: CIE

The fostering of intellectual curiosity and the enjoyment of discovering the natural world are key aims of the Physics teaching. The Fourth and Fifth Form courses develop previous work on topics such as Forces and Motion, Electricity and Energy, as well as introducing new ideas such as Nuclear Physics and Electromagnetic effects. In recognition of the ability and ambition of RGS boys, the material explored ventures some way beyond the confines of the examination syllabus and ensures that every boy is given a broad, deep understanding of the subject. Practical and theoretical skills are equally developed throughout the course. A highly qualified, motivated team of staff with diverse interests offer exceptionally well-resourced lessons to ensure that boys are impressively well prepared for public examinations and further study in the subject.

The lively interest of staff and boys alike ensures a thriving co-curricular programme, giving boys the opportunity to enter the national Physics Challenge, visit a hydro-electric power station built into a mountain and attend national lectures. Revision classes are offered for boys who benefit from further consolidation whilst those performing at the top of the ability range in the Fifth Form are entered for the national 'Physics Challenge' competition. The rich opportunities available in Physics both reflect and cultivate the excitement of all involved in the subject.



RELIGIOUS STUDIES

Board: AQA

Religious Studies is open to any boy, irrespective of their religious beliefs or lack of them. The aim of Religious Studies is to study moral and philosophical issues and religious responses to them, and to encourage intellectual engagement with complex contemporary and theological issues, not to encourage (or discourage) religious faith. The aims of the Religious Studies GCSE course are threefold. First, boys learn to examine and understand religious and non-religious practices and attitudes towards complex moral, social and philosophical issues. Second, they should develop an alert and inquiring mind, an ability to critically analyse the views of others, and an increasing degree of independent judgment which can select salient points. Third, they learn to communicate effectively, both orally and on paper, so that they can present their own views and the views of others logically and coherently.

The syllabus chosen is deliberately a highly relevant, practical and academically stimulating one. Over the two years a range of philosophical, moral and religious topics are examined from a range of contrasting viewpoints. Topics covered include: Crime and Punishment; Peace and Conflict; Sex and Relationships; arguments for and against the existence of God. There is also the chance to develop an understanding of the key spiritual and theological ideas in Buddhism and contrast these with the key features of Christianity.

Boys are encouraged to develop independent learning habits by preparing for class discussion and debate through wider reading: for example, the news and comment pages of a quality daily newspaper. Boys have the chance to make use of these skills not only in their lessons, but also through attending the School's Philosophy and Debating Societies. There are also opportunities to enter national essay competitions in both theology and philosophy, run by external agencies.

OTHER TIMETABLED LESSONS

RELIGIOUS EDUCATION

The Religious Education course in the Fourth and Fifth Forms aims to continue to explore social and moral issues and aspects of personal development not already covered in the Lower School.

Fourth Form

In Search of Community

In the Fourth Form one period per week is devoted to Religious Education which, through the topic of 'In Search of Community', aims to provide clear information for enabling the boys to come to reasoned conclusions concerning a number of moral and social issues. Part of this process involves the challenging of perceived, stereotypical ideas, be they racial, sexual or social. In all cases, the religious dimension of each topic is fully explored.

Fifth Form

In Search of Values

In the Fifth Form, again for one period per week, the course aims to introduce the key themes in the areas of Philosophy and Ethics, and to give boys the chance to explore a range of personal and moral issues related to contemporary values and personal relationships. The aim is to promote an understanding of the range of religious and non-religious responses to these issues and to critically assess their viability and authority. The boys are encouraged to construct their own appropriate system of morality founded on sound knowledge and reasoned theory. An important part of this process is to provide opportunities in a non-judgmental environment for boys to articulate and explore their beliefs and values.

TUTOR PERIOD

Throughout the Fourth and Fifth Forms, all boys have one period per week, with their Tutor, devoted to a study period. During this period, boys undertake a further course in study skills, as well as continuing with their Information Technology course: parts of the School's policy on Sex Education and Health Education are also delivered.

Fourth Form

The Fourth Form programme includes: Library Skills Development; Study Skills; Health Education; Critical Thinking; Revision Skills; Emotional Wellbeing; Record of Achievement; Online Self-Assessment; Global Citizenship; and Economic Literacy.

Fifth Form

The Fifth Form programme includes: Revision skills; Health Education; Record of Achievement; Young Citizen's Passport; Critical Thinking; Online Safety; Political Literacy; Financial Literacy; Emotional Wellbeing; Debating Skills; Lateral Thinking; Online Self-Assessment; and Economic Literacy.

Health Education advice is provided by the School Nurse where appropriate.

PHYSICAL EDUCATION AND GAMES

Boys in the Fourth and Fifth Form continue to take part in a full and active programme of Physical Education and Games. This consists of a single lesson of Physical Education and a Games session (three periods) per week. During lunchtime and after school, there are a number of sports clubs and team practices which take place.

Activities covered in Physical Education lessons include: basketball, volleyball, tennis, badminton, weight and circuit training, skills and invasion games, health-related fitness and outdoor adventurous activity.

Rugby is played in the Michaelmas Term, hockey in the Lent Term and cricket is played in the Trinity Term. In the Fourth Form and above, boys have the option to play either rugby or hockey for two terms. Other options for the Fifth Form include sailing, cross-country, athletics, fencing and shooting. There are up to five teams fielded in the rugby and hockey terms per age group and two 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. If a boy shows exceptional sporting talent, then he is encouraged to gain representative honours at county, regional and national level.

In order for the RGS to maintain its strong sporting reputation, boys are expected to represent the School when invited to do so, especially on a Saturday, including the first Saturday of half terms.

CAREERS AND HIGHER EDUCATION

In the Fourth Form, the Careers and Higher Education Department begins to discuss A Level options with the boys, outlining how these link with possible degree courses and career aspirations. In the Trinity Term, there is the opportunity for boys to take part in a careers analysis programme organised by Cambridge Occupational Analysts. The programme consists of a series of aptitude tests and an interest questionnaire, followed by two interviews with an external careers adviser.

The main work of the Department is carried out in the Fifth Form. In the Michaelmas Term, boys and parents attend a consultation meeting at which the A Level programme is outlined. This is another opportunity for the links between these courses and their degree or career aspirations to be discussed.

In the Lent Term, after the boys have made their provisional A Level choices, each boy meets with a member of the Careers Department to confirm that the choices made match their degree and career intentions, if these are known. The Careers Convention held in January is an ideal opportunity for boys to discuss possible career plans with experts in their fields.

In the Trinity Term, all boys undertake a week of work experience following the completion of their GCSE examinations. Approximately 40% of boys use school contacts with the remaining 60% using private placements which they have arranged for themselves. However, administration and follow-up for all placements are coordinated by the Careers Department.

The Director of Higher Education and Careers is always happy to meet with either boys or parents. Boys can call in any morning before school, lunchtime, or after school. Parents are welcome to make an appointment for any morning before school or evening, after school has finished for the day.

