A LEVEL OPTIONS

Each day, discovery.

ELTHAM COLLEGE SIXTH FORM

Each day, discovery.

Introduction

INTRODUCTION

Life in the Sixth Form is a significant stage in a student's academic and personal development. It offers the opportunity to pursue chosen academic subjects in much greater depth, whilst offering a wealth of sporting, recreational and cultural opportunities, as well as preparation for university.

We aim to provide an environment that:

- promotes academic and co-curricular excellence
- offers an outstanding co-educational experience
- provides excellent pastoral support
- places a clear emphasis on the holistic development of the individual
- develops a strong sense of personal responsibility
- engenders a positive and creative sense of community

We therefore expect that our students will:

- take greater responsibility for the management of their studies
- develop the self-discipline and motivation to thrive academically
- conduct wider independent reading and research which is linked to university-related study and extends their learning beyond the prescribed syllabus
- possess the skills needed to excel in their academic studies
- develop intellectual, cultural and sporting interests
- show appropriate initiative and the desire to help others
- act as excellent role models to younger students
- hold positions of school responsibility

Sixth Form students learn to balance the greater freedoms that exist alongside the ability to cope with new challenges, pressures and responsibilities. To make the most of the opportunities on offer, students will need to use effective study habits in a more independent manner than at GCSE.

Their success in overcoming these challenges successfully is excellent preparation for the students' professional life and will make them a highly attractive prospect to both universities and employers alike, as well as enabling them to achieve excellent academic grades.

FORTHCOMING DEADLINES

This booklet is issued now to provide you with the information you need to enable you to select your A level options.

In order to discuss and confirm your choices there are two Parents' Evenings at the College in January.

- External candidates are invited to attend the Options Evening on **Thursday 17 January 2019**
- Internal candidates are invited to attend the Options Evening on **Monday 21 January 2019**

The aim of this Parents' Evening is to ask questions you may have about the subjects on offer, and your suitability to take them. Teachers and the Sixth Form pastoral team will be available to help with any issues you may have at this stage and in the following weeks.

After the Parents' Evening, we will ask you to choose your subjects, and to communicate your choice on the A level Subject Choice Form no later than **Thursday 24 January 2019**. The form will be sent out via email prior to the Parents' Evening. The timetable for next year will be constructed on the basis of the replies you provide at this stage; later changes to your choices are possible only if they can be accommodated within the sets allocated after the initial choices are made.

A '3 Plus' Sixth Form curriculum

3 PLUS

With the re-introduction of linear A levels, universities are adapting their offers for prospective students. For most students the offer of a university place is dependent on receiving three strong A level grades as well as showing wider interests and ability. As the new A levels also contain significantly more content, the amount of teaching time per A level has increased by 25% since 2018 to ensure that all students are able to explore their subject in full and achieve their potential.

In addition to their choice of three core A levels, we also help students to prepare for the most competitive universities with an extended curriculum – this is the 'Plus' side of academic life at Eltham College.

Students must therefore choose from one of the three options below:

1. An accelerated Further Maths fourth A level on a reduced timetable

OR

2. The Extended Project Qualification (see below)

OR

3. Be able to demonstrate significant co-curricular commitments such as playing county level sport, playing for a number of music ensembles, LAMDA etc.

EXTENDED PROJECT QUALIFICATION

The EPQ allows students to learn and develop the independent learning and research skills that are recognised and valued by universities. This is a process based qualification where students plan, research, write up and present their project to staff and peers. Students go through a taught element of the project by the centre co-ordinator which includes critical thinking, reflection and analysis of research. They are supported throughout by an allocated trained supervisor. It is an ideal opportunity for researching a topic outside, or an extension of, their A level choices. Past titles have included;

- Should the NHS care for those with self-inflicted illnesses?
- Is the USA inherently Fascist?
- A critical analysis of current theories of how the human lifespan can be extended.
- Do the benefits of hydraulic fracking supersede the environmental threat that it poses?

REPORTING PROGRESS

The progress of all students is formally assessed around five times a year, consisting of a mixture of grades, reports and Parents' Evenings. Every student is given a Challenge Grade for each subject early in the Lower Sixth. The Challenge Grade is the grade that a student could realistically be expected to aspire to with consistently strong application. We then report progress against this target throughout the A level course with On Track to Achieve grades.

The On Track to Achieve background is coloured to indicate progress, as follows:

Blue	The On Track to Achieve grade is above the Challenge Grade.
Green	The On Track to Achieve grade is the same as the Challenge Grade.
Red	The On Track to Achieve grade is below the Challenge Grade.

In the case of a red grade, a short formative comment is provided to advise how progress can be improved.

Every time we communicate progress home we take time and care to discuss this with students. We set aside a full week of pastoral time every half term for the Form Tutor to discuss progress and targets with each student individually. This allows us to help the student act on the information provided by teachers, in order to make as much individual progress as possible. Full written reports, with longer comments, are sent home once a year and there are two Parents' Evenings in Lower Sixth and one in Upper Sixth.

Choosing your options for A level

CURRICULUM OPTIONS

At Eltham College, students will typically study either three or four A levels in the Sixth Form. Students should consider both their enjoyment of the subject and combinations that will allow them to access the degree programme and career of their choice when picking their options. Heads of Departments will be available to discuss appropriate A levels for relevant degrees. All advice from Universities at this stage is that three strong A levels put students in the best position during application.

PICKING SUBJECTS

A level choices are an exciting opportunity for students to specialise in the subjects that they find most interesting. Picking three subjects at A level allows students to access the full breadth of the new, more detailed courses. Whilst our experience has been that students that pick the subjects they enjoy most achieve the most success, it is important to ensure that choices at this stage don't prevent further study of a desired subject at University. An exhaustive list can be found on the UCAS website, but our Heads of Department are happy to provide information and context to subject combinations and choices at the 16+ Options evenings. Some common combinations and requirements have been listed below:

	Subject 1	Subject 2	Subject 3
Physical Sciences	Physics	Chemistry	Maths
Biological Sciences	Biology	Chemistry	
Engineering	Physics	Maths	Further Maths*
Economics	Maths	Economics	Further Maths*
Medicine	Chemistry	Maths	Biology

*Cambridge and/or Oxford

Whilst picking options watch out for:

- A wide range of disparate subjects
- A lone science in an Arts combination
- Requirements for University course
- Unrealistic combination by picking subjects you have to do instead of picking subjects you enjoy

CHECK: Do I have to do it?
http://www.ucas.ac.uk/students/coursesearch/

ENTRY REQUIREMENTS

Students wishing to study A levels at Eltham College must achieve a minimum of six 9/8/7 grades or equivalent at GCSE.

Where a subject has been studied at GCSE a 9/8/7 grade in that subject is required to continue the subject at A level:

- For Economics and Computer Science (if not studied at GCSE), a 9/8/7 grade is required in Mathematics
- For Psychology, a 9/8/7 grade is required in either Biology or English Language, and a good understanding of Maths
- For Politics, a 9/8/7 grade is required in History
- For Geology, a 9/8/7 grade is required in either Chemistry or Geography
- For English Literature, a 9/8/7 grade is required in *both* English Literature and English Language
- For Further Mathematics at A level, a 9/8 is required in GCSE Mathematics and (if studied) an A/B in Additional Mathematics or a 9/8/7 in IGCSE Further Mathematics
- For Physics at A level, a 9/8/7 grade is required in both Physics and Mathematics

A level results summary

RECENT A LEVEL RESULTS BY SUBJECT

Some students have asked for recent subject grades, which are given below. Students should, nonetheless, choose subjects that they enjoy and are good at and not be overly guided by previous results.

	2018 Percentages			3 Year Rolling Average Percentages 16/17/18		
Subject	**A***	**A*-A**	**A*-B**	**A***	**A*-A**	**A*-B**
Art	0.0	30.0	80.0	25.0	46.9	87.5
Biology	29.2	66.7	79.2	27.3	62.1	89.4
Chemistry	6.3	68.8	100.0	17.3	65.4	90.4
Computer Science	75.0	100.0	100.0	28.6	57.1	85.7
Design and Technology	20.0	100.0	100.0	12.5	68.8	87.5
Drama	15.4	53.8	84.6	11.5	57.7	88.5
Economics	11.8	70.6	91.2	12.4	66.3	92.1
English	23.8	52.4	90.5	17.9	46.2	91.0
French	20.0	40.0	100.0	33.3	76.2	100.0
Geography	44.1	70.6	97.1	23.2	58.5	95.1
Geology	25.0	75.0	100.0	15.4	46.2	76.9
German	100.0	100.0	100.0	9.1	72.7	90.9
Greek	0.0	100.0	100.0			
History	7.7	50.0	92.3	14.1	54.7	93.8
Latin	0.0	100.0	100.0	0.0	60.0	80.0
Mathematics	27.7	66.0	85.1	32.2	62.2	79.7
Mathematics (Further)	33.3	77.8	88.9	58.6	79.3	96.6
Music	0.0	0.0	100.0	25.0	40.0	95.0
Physics	9.1	81.8	100.0	18.0	63.9	78.7
Politics	29.4	64.7	100.0	20.4	61.1	92.6
Psychology	12.5	68.8	93.8			
Religious Studies	50.0	75.0	100.0	16.7	83.3	100.0
Spanish	50.0	75.0	100.0	30.0	70.0	90.0
A level Totals	**22.4**	**63.2**	**91.1**	**22.2**	**60.0**	**88.9**

Please note Psychology and Greek are new courses and as such do not feature on the rolling average list.

Subjects

ART

Students studying Art at Eltham College take a Fine Art course, which allows them to work across a wide range of materials and techniques including painting, drawing, mixed-media, sculpture, land art, installation, printmaking, film, animation, video and photography. The art department is well-resourced with materials, equipment and a substantial art library. There is an Artist-in-Residence who has a studio in the department and all the staff in the department are practising artists, which makes for a creative environment with a wide range of expertise.

The course introduces a range of materials and techniques along with the opportunity for students to experiment extensively and discover their own interests as artists. Experimentation is supported by their exploration into the work of other artists. The course starts with a trip to Dungeness and Margate to generate ideas and leads into an exploratory unit that offers the students a good grounding for the course. The coursework is worth 60% of the A level mark which needs to include one major project that covers all areas of the assessment. The externally set task is set in early February giving students a wide range of starting points and the chance to develop their own interests. Both aspects of the course require students to be able to record confidently through drawing and photography, to use artists to support their work and to experiment extensively refining their work to bring it to a conclusion. The course becomes gradually more focused upon the students' strengths and interests. There are a highly diverse range of approaches adopted which support many students to gain places on art-related course at university: from Architecture to Graphic Design, Fashion to History of Art.

There are many opportunities throughout the course, including a trip to a European city in October half term and weekly workshops each Monday evening. The Gerald Moore Gallery also offers the students a whole host of unique opportunities. It is a professional gallery space on the school site which exhibits work from national collections and also commissions new works, hosts events and runs classes. There are regular workshops in the space, the opportunity to meet and collaborate with artists, run events and the chance for students to curate an exhibition of their own work.

BIOLOGY

Biology is an amazing subject - every day there are references to biological topics in the news. No other subject gives such an insight into how the human body works and the importance of other animals and the surrounding environment. This course is suited to those who appreciate science, are interested in learning about how living organisms interact with each other and enjoy practical work.

Eltham College follows the OCR Biology A course. Students will be taught through a combination of practical work and theory, with a variety of approaches including discussion, group and independent work and compulsory practical experiments and research. The content of the course includes biochemistry, cell biology and immunology, transport systems in animals and plants and genetics, biodiversity and natural selection. In Upper Sixth, the additional material covered includes photosynthesis and respiration, energy transfer, nerves and muscles, homeostasis, inheritance, evolution, ecology and gene technology.

Practical work is central to any study of biology. The A level course includes core practical activities which form a thread linking theoretical knowledge and understanding to practical scenarios. Students will build on practical skills learned at GCSE, becoming confident practical biologists, handling apparatus competently and safely. Using a variety of apparatus and techniques, students will design and carry out both the core practical activities and their own investigations, collecting data which can be analysed and used to draw valid conclusions. Skills developed during the course include risk assessment and consideration of ethical issues presented in their work. They will also have the opportunity to plan investigations and analyse and communicate the findings using a variety of forms. Included in the practical endorsement is the opportunity for students to evaluate the wider role of the scientific community in validating new knowledge and the ways in which society as a whole uses science to inform decision-making.

A level Biology is now required for the study of Medicine, Dentistry and Veterinary Medicine at university and highly recommended for a wide range of health care professions such as Physiotherapy, Nursing, Radiotherapy, Radiography and Pharmacy. Biology is also very relevant to Environmental Science, Agriculture and science-based psychology courses. Microbiology provides the basis for many biochemical engineering processes, including food science and technology. Biology degrees, requiring both numeracy and literacy skills, together with a considerable amount of ICT and project work, have become very attractive to many prospective employers, including the financial sector.

CHEMISTRY

Chemistry is central to an understanding of natural phenomena and the creation of useful products. Chemists are at the forefront of research in new technologies in medicine, materials, food and alternative energy production. It is because of this key role in emerging markets that employment prospects are good. However, it is important to remember that the skills acquired in Chemistry are applicable to many different and varied career choices.

Eltham College follows the Edexcel Chemistry specification (9CH0) at A level. The modern syllabus builds on the `How Science Works' topics begun at GCSE, but not at the expense of a fundamental understanding of key principles. Many skills are developed throughout the course, such as mathematical problem solving, analysis and evaluation.

Students may already be familiar with some topics in this course from GCSE, but these are now studied in much more depth. In the Lower Sixth, students study foundation topics such as atomic structure, periodicity, quantitative chemistry, energetics, organic chemistry and analytical techniques. During the Upper Sixth, students are introduced to topics which include equilibria, aromatic chemistry, thermodynamics, and inorganic chemistry.

Subjects

The A level course is designed specifically to ensure that the learning of the subject is, where possible, practically based. It is necessary to provide evidence that around 20 core practical tasks have been completed. The practical tasks enable students to develop the necessary observational and analytical skills required of a good scientist. Students learn to handle chemicals with confidence and gain the dexterity to carry out practical procedures with due care to accuracy and safety.

Chemistry A level is almost always essential for entry into Medicine, Veterinary Science, Dentistry, Chemical Engineering as well as most Medical and Biological Sciences. An A level qualification in Chemistry provides a sound training in scientific methodology and enquiry, which is highly regarded in higher education and in the wider world of employment. As well as becoming scientists, engineers and doctors, students with Chemistry often move into areas of Business Management, Law and Finance where a logical, enquiring mind is a highly desirable asset.

COMPUTER SCIENCE

This course assumes no previous knowledge of either computing or IT and has been usefully combined with other subjects such as Sciences and Maths and also Economics, History and Geography.

Being able to use a computer is an undeniably useful skill, but if a user is restricted to programs developed by others, then their horizon will be limited by the developer's imagination. By taking the time to learn how to design and create programs, a user will be constrained only by their own imagination; the possibilities become almost endless. The course has lots of hands-on programming opportunities, though it is the design and testing of algorithms, that such code will implement, which provides the real learning experiences.

While some who follow this course will continue to further study of the subject at university, the learning experience offered through A level Computer Science is, in the words of past students, "absolutely amazing". Not only does the subject demand the development of problem-solving expertise, but the skills acquired have proven themselves most advantageous, in some cases obligatory, in the world of work.

The department has chosen to follow the AQA A level in Computer Science as it allows the programming section of the syllabus to be taught using modern Object-oriented programming languages (Java and C#).

DESIGN AND TECHNOLOGY

Design and Technology at A level endeavours to challenge creativity in students, providing a thought-provoking qualification which strengthens their practical skills, theoretical knowledge and, importantly, the confidence to succeed in a number of careers. Eltham College follows the newly introduced AQA Design and Technology: Product Design qualification and the students gain a level of criticality that is useful in all subjects and particularly useful in higher education, through the substantial undertaking of their major written and practical project.

Students will investigate historical, social, cultural, environmental and economic influences on Design and Technology, whilst enjoying opportunities to put their learning in to practice by producing products of their choice. Students increase their understanding and practical application of leading industry software, including Solidworks and CREO 3D CAD and explore the relationship between solid modelling of their design ideas and prototype realisation through several of the CAM solutions available to them. Eltham College has well-equipped workshops, with several 3D printers, including a highly accurate SLA 3D printer, a CNC combination router and powerful laser cutter, in conjunction with traditional fabrication facilities.

The A level is examined through two written papers, a written portfolio and a final prototype for the non-examined assessment (NEA), worth 25% each and 50% of the qualification, respectively. The Design and Technology A level is recognised as a third A level for most Engineering courses for prospective students wishing to apply to Oxford, Cambridge and Imperial Universities.

Students will gain a real understanding of what it means to be a designer, alongside the knowledge and skills sought by higher education and employers. They will follow an iterative design process, investigating valid solutions to real problems with real clients, placing them into relevant design situations at an early stage. The course is strongly recommended for students wishing to read a design related discipline, Engineering or Architecture.

DRAMA

The WJEC Eduqas A level in Drama and Theatre is an exciting and inspiring course. This highly practical specification provides students with the opportunity to work as either performers and/or designers on three different performances.

It is a natural progression from GCSE Drama, but it is not essential to have taken that course. Students should have an interest in how play texts are brought to life in performance. There is something very special about live performance to an audience, as this form of communication has been part of human life for thousands of years and is still very much alive today. In following this course, students will gain a deeper understanding of how theatre works and have numerous opportunities to be a performer, a designer and an active audience member.

The course is designed to encourage students to make connections between dramatic theory and their own practice. While preparing their practical work, they will explore the work of two theatre practitioners (individuals or companies) and then apply their research to their performances or designs. Students are also required to watch live theatre productions and learn about the processes and practices involved in interpreting and performing theatre. They will explore two complete performance texts and one extract from a third text. Being a Drama student will be thought provoking, challenging and exciting.

ECONOMICS

Economics is the study of resource allocation. In short: who gets what, how much, and why? The subject is divided into two broad areas: microeconomics and macroeconomics. The former addresses issues to do with the allocation of resources within individual markets, with the focus on the operation of these markets, the misallocation of resources (market failure), and government intervention. Within this, there is considerable attention paid to consumer behaviour (including elements of psychology) and the theory of the firm. This forms a significant part of the second year of study and is concerned with the costs, revenues and profits of firms operating under different market structures. The macroeconomics component considers the performance of economies as a whole (economic growth, international trade, financial markets, economic development, unemployment, inflation) and the policy tools to help improve this (government expenditure, trade policy, taxation, monetary policy, regulation). The focus is initially on the UK economy but, as students grow more confident in the analytical tools at their disposal, a broader, more complex range of economies is introduced, covering emerging markets (e.g. China, India), LEDCs, and developed economies whose structures and performances contrast with that of the UK.

The department follows the AQA specification, as this offers the opportunity to investigate the most up-to-date economic theory (behavioural economics, post-crash financial markets) in the greatest detail, whilst retaining the best of more well-established topics.

The subject will be of interest to a wide range of students. It is possible to approach Economics from either a humanities or a mathematical perspective. The course combines the critical skills of scientific analysis and applies them to human contexts to create a challenging social science. The A level course itself is not overtly mathematical – students need only a reasonable grasp of simple calculations (e.g. % change), basic graphs, and an ability to analyse data, but an aptitude for abstract conceptualisation, such as might be encountered in Mathematics or the Sciences, is vital. However, studying Economics at university requires significantly more formal maths (largely statistics and calculus). As such, many universities have A level Mathematics as a requirement for single honours Economics courses. Some strongly favour those with Further Mathematics – e.g. LSE and Cambridge. There are, however, a growing number of courses in Economics that do not have the same mathematical requirement, so those without A level Mathematics are not disadvantaged.

ENGLISH LITERATURE

"*We tell ourselves stories in order to live.*" – Joan Didion
Those who enjoy stories will enjoy English Literature. The course is designed to encourage wide reading and detailed research within the field of literary studies. It offers a programme that will be rewarding and enjoyable in its own right, and forms a basis for further specialist work at degree level.

The principal aim of the two-year course rests in students exploring different literary styles from different cultural periods and emerging as confident, subtle analysts. The core focus therefore consists of twelve texts ranging from Chaucer through Shakespeare to the modern age.

The greatest proportion of the two years involves seminar-style discussion centred on the set texts, related works, critical technique and the chronology of literature through the last six centuries. Students are taught by two members of staff who divide up the syllabus content according to their areas of expertise and fields of research. Lessons are student-centred in format, with 'pair' and 'group' work employed strategically to enhance formal discussion sessions and as the basis for essay preparation.

GEOGRAPHY

Geography A level leads to the development of a wide range of skills that are important for study at university and beyond. These include; problem solving, numeracy, literacy, working collaboratively, empathy, ICT skills, and independent learning. Geography is an important element of the Sixth Form curriculum in that it provides for the study and learning of a richly varied body of facts about natural and cultural phenomena and about places and areas on the earth's surface. Study may be developed at spatial scales ranging from local to global. Geography fieldwork is used to supplement classroom learning rather than as an assessed part of the course. There is a four-day residential field trip to Yorkshire for the Lower Sixth at the start of the Easter holidays and an optional expedition to Iceland and New York or Sicily at October half term. Students will also have access to a programme of geographical lectures as well as a Geography Society and a Wider Reading Group.
Eltham College follows the Cambridge International A level Geography syllabus. It is a modular course which is assessed in a linear fashion (at the end of two year Sixth Form). The subject is split into Physical and Human Geography, each with a specialist teacher, and students sit four one and half hour written exams

Paper 1: Core Physical Geography 1 hour 30 minutes
Candidates answer questions on all three topics below:
- Hydrology and fluvial geomorphology
- Atmosphere and weather
- Rocks and weathering

Section A: Three data response questions (30 marks)
Section B: One structured question from a choice of three (30 marks) 60 marks

Paper 2: Core Human Geography 1 hour 30 minutes
Candidates answer questions on all three topics below:
- Population
- Migration
- Settlement dynamics

Section A: Three data response questions (30 marks)
Section B: One structured question from a choice of three (30 marks) 60 marks

Paper 3: Advanced Physical Geography Options 1 hour 30 minutes
Candidates answer questions on two of the optional topics.
- Tropical environments
- Coastal environments

Subjects

- Hazardous environments
- Hot arid and semi-arid environments

Each topic consists of one structured question (10 marks) and a choice of essay question (20 marks) 60 marks

Paper 4: Advanced Human Geography Options 1 hour 30 minutes
Candidates answer questions on two of the optional topics

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

Each topic consists of one structured question (10 marks) and a choice of essay question (20 marks) 60 marks

GEOLOGY

Volcanic eruptions, devastating earthquakes, dramatic mass movements and life changing tsunamis seem to becoming more the norm for the human race these days. Natural resources are becoming scarce and the management and conservation of these resources is crucial. What better time is there to study and understand the dynamics and workings of our planet?

This will be a new and exciting course offered this year with more emphasis on fieldwork (minimum of four days) and practical work (with a minimum of 20 practical activities leading to a Practical Endorsement) over the two-year course.

There are three components which are set out as follows:

Fundamentals of Geology

- Elements, minerals and rocks
- Surface and internal processes – sedimentary and igneous
- Time and change – preservation and dating techniques
- Earth structure and global tectonics

Interpreting the Geological record

- Rock forming processes – rock cycle and volcanics
- Rock deformation – structures, folding and faulting
- Past life and past climates – fossils, extinctions and climate change
- Natural resources – metal deposits, oil, water, coal and exploration techniques

Geological themes

- Geohazards – seismic activity, mass movement, tsunamis, waste disposal and issues with contaminated land
- Geological maps – interpretation, cross sections and applications
- And one of the following: Quaternary geology, Evolution of Britain, or the geology of the lithosphere

HISTORY

At its root, History is an ongoing debate about the past. Historians aim to arrive at persuasive theories about what happened in the past and why, and it is the continual dialogue between these competing theories that makes the subject such a fascinating one. In the Sixth Form, we encourage our historians to reach their own conclusions on complex historical questions, by developing their ability to analyse evidence and craft convincing arguments. Through their lessons and wider preparatory reading, students not only develop a detailed understanding of past societies, but also refine their ability to evaluate the competing interpretations of other historians. Students are therefore encouraged to undertake their own wider reading for each lesson, and we aim to teach our Sixth Formers in a style akin to undergraduate seminars. This allows students to question what they have read, air their ideas, test theories, and challenge competing interpretations. As well as the examination board textbooks, students are provided with a range of historians' work to deepen their understanding of the syllabus content, and are also encouraged to make use of the excellent text and electronic collections in the Mervyn Peake Library to support their learning.

Students who choose to study History at A Level will follow the Edexcel syllabus. This requires candidates to study four modules: two units in the Lower Sixth and two units in the Upper Sixth. For 2019-20, these topics include a depth study on Mao's China between 1949 and 1976, and a breadth study on Russia from 1917 to 1991 in the Lower Sixth. In the Upper Sixth, students complete a breadth module on the British Empire 1763 and 1914, and a coursework element linked to historical interpretations from the Russia course. The course is assessed through this internally marked coursework assignment, and three examination papers at the end of the Upper Sixth. Overall, the course gives students the chance to engage with and learn about some of the major transformations in modern global history, that have shaped the current political and economic climate.

Students who have enjoyed GCSE History, who have a passion for the past, and a love of reading should certainly consider taking the subject at A Level. Studying History develops students' skills of analysis, synthesis, deduction, and evaluation, as well as helping them to become expert essay-writers and convincing debaters. This set of skills opens many doors, and is highly-valued by top universities and employers alike.

LATIN

The A level Latin course builds on the language and grammar learnt at GCSE. Students will be introduced to more complex grammatical constructions and more advanced vocabulary, and will begin to read unabridged Latin texts from authors such as Ovid, Tacitus and Cicero. Students will be encouraged to be more analytical and critical in their appreciation of Latin texts, combining their knowledge of Classical history and culture with their language skills.

In both Lower and Upper Sixth, the course is broken into two segments. The language side of the course involves reading texts from a variety of authors, translating and analysing in preparation for the exam. This part of the exam comprises an unseen passage for translation, and then an option of either a second translation with comprehension questions, or composition of a passage from English into Latin. The language section of the exam is worth 50% of the overall qualification.

In addition to this, students study a variety of set texts for the literature half of the course, both prose and verse. Currently, the prose text is Cicero and the verse is a combination of Virgil and Ovid. Throughout the year, students will read these texts together, analysing them within their socio-political contexts and discussing literary techniques and writing styles. The literature section of the exam is worth 50% of the overall qualification. Students are expected to develop their own personal responses to the texts and be able to critique them accordingly.

Students who have enjoyed the GCSE course should consider further Latin study in the Sixth Form. It is a challenging but very highly regarded A level, well received by the top universities. Classes are usually small, which means focused teaching tailored to each student's particular needs.

MATHEMATICS

A level Mathematics is a challenging subject, comprising of in depth study of familiar topics such as algebra and trigonometry, alongside the exploration of new areas, such as calculus. Studying Mathematics at A level supports the development of a range of transferable and essential skills, such as problem-solving, analysis and critical reasoning.

A level Mathematics is required for the study of Mathematics, Statistics, Physics, Computer Science, Engineering or Accountancy at university, and furthermore is desirable for the study of other disciplines, including Economics, Geography, Psychology, Biology, Medicine and Sports Science.

The Edexcel GCE specification is followed, for first examination in 2018, the content is 100% compulsory, comprising of a range of topics covering Pure and Applied Mathematics.

Pure

- Algebraic processing
- Graphs and functions
- Trigonometry
- Calculus
- Numerical methods
- Sequences and series
- Powers and logarithms
- Vectors

Applied

- Mechanics; the study of forces and motion
- Statistics; the analysis of data; the application of probability

The A level examination is taken at the end of the Upper Sixth, and will consist of three papers:

- A level Pure Mathematics – two papers, each two hours long
- A level Applied Mathematics - one paper covering both Statistics and Mechanics – two hours long

A scientific calculator may be used in all examinations.

MATHEMATICS (FURTHER)

Studying Further Mathematics is an enjoyable, rewarding, stimulating and empowering experience, which allows students to extend and deepen their knowledge and understanding beyond A level Mathematics. This course provides a substantial challenge and the chance to explore new and more sophisticated mathematical concepts including the study of complex numbers, matrices, differential equations, and advanced calculus techniques. In addition, students choosing Further Mathematics have the opportunity to explore a range of applications of mathematics to advanced problems in mechanics, statistics and decision-making.

The study of Further Mathematics supports the transition from Sixth Form to university courses which are mathematically rich. This is an essential qualification for students planning to study Mathematics at University, and often for courses such as Engineering, Sciences, Computing or Economics. Students who take Further Mathematics are demonstrating a substantial commitment to their studies, enabling them to distinguish themselves as able mathematicians in their applications for university and future employment.

Further Pure

- Extended Algebraic processing
- Graphs and functions
- Trigonometry
- Advanced Calculus
- Numerical methods
- Linear algebra
- Hyperbolic functions
- Matrices

Applied

- Mechanics; the study of forces and motion
- Statistics; the analysis of data; the application of probability; assessing the reliability of statistical models
- Decision Mathematics; algorithmic procedures to solve practical problems

Within the Edexcel A level Further Mathematics course, 50% of the content is compulsory at A level. The remaining 50% can be selected from a range of Pure and Applied options. This will complement the A level Mathematics course, and give students the opportunity to study further concepts in Mechanics and Statistics, follow new courses in Decision Mathematics, or extend their understanding of Further Pure Mathematics.

The A level examination is taken at the end of the Upper Sixth, and will consist of three papers:

- A level Pure Mathematics – two papers, each two hours long
- A level Applied Mathematics - one paper covering both Statistics and Mechanics – two hours long

A scientific calculator may be used in all examinations.

The A level Further Mathematics examination is taken at the end of the Upper Sixth, and will consist of four one-and-a-half-hour papers. A scientific calculator may be used in all examinations.

Subjects

MODERN LANGUAGES

Modern Languages in the Sixth Form bring together the practical skills which can remain as assets throughout life; in work, travel and leisure. Developing and debating ideas in a foreign tongue will give students the confidence to communicate. They will learn to organise thoughts and present themselves with self-assurance and clarity. Universities and employers want candidates who can think independently, have original ideas and who cope under pressure in foreign situations.

Languages are challenging but can instil courage, enable open-mindedness and open up opportunities to work almost anywhere in the world without restricting career choice. Languages are also enjoyable through the enriching experience of another country's society, literature, cuisine, cinema and attitudes. Languages also provide a frame of reference for one's own culture, enabling better understanding.

The ability to speak an additional or multiple languages is a much-valued skill by employers looking to retain Britain's position in the global economy and some students choose to study two at A level. All languages are supported by native speaking teachers who help to prepare students for the oral component, which is a major element in any A level language examination.

CHINESE

Due to the nature of the course, Chinese A level is currently offered to native Chinese students in Sixth Form to study it as an additional subject. There are weekly lessons off time table. We follow the Pearson Edexcel specification and students should study for two years to complete the A level course. At A level Chinese students study a range of topics under the four themes. They are

- 当代华人社会变迁
- 中国文化
- 演变中的华人社会
- 1978年改革开放对中国的影响

At the end the A level students take three examinations:

- Paper 1: Listening, reading and translation 40%
- Paper 2: Written response to works and translation 30%
- Paper 3: Speaking 30%

Studying A level Chinese is to enable students to:

- Enhance their linguistic skills and promote and develop their capacity for critical thinking on the basis of their knowledge and understanding of the language, culture and society of the country or countries where the language is spoken;
- Develop knowledge about matters central to the society and culture, past and present, of the country or countries where the language is spoken
- Equip themselves with transferable skills such as autonomy, resourcefulness, creativity, critical thinking, and linguistic, cultural and cognitive flexibility that will enable them to proceed to further study or employment
- Develop their capacity for critical and analytical thinking through the language of study
- Develop as independent researchers through the language of study.

FRENCH

French is spoken by over 300 million people as a native or second language and is also the official language in 29 countries. The ability to communicate in French is not only an essential skill for travel, but it also competes strongly with English as a main language of business and politics. French, along with English, is the official language used by the United Nations, UNESCO, NATO, International Courts and a large number of other international organisations. French is the language of the three cities where the EU institutions are headquartered: Strasbourg, Brussels and Luxembourg. A proficiency in French will certainly appeal to the increasing number of French native speakers working in London's finance sector and it is a must for anyone planning on a career in an international organisation.

At A level we follow the AQA course which is designed to build on the vocabulary and grammatical skills you have acquired during your (I)GCSE course. Therefore some topics will feel familiar, however, there is a particular emphasis on cultural knowledge; therefore, watching French films, reading articles and visiting France will be important and useful ways of you developing an understanding of the culture which underpins and influences the language. Aside from studying a range of topics, you will also undertake close study of a film and a novel.

The French Department offers a study trip each Easter for Sixth Form students studying French. This involves students staying in pairs with French host families, attending lessons each morning in a language school following by visits and excursions each afternoon. One advantage of this type of trip is the opportunity to live with a French family and experience evenings meals both with the family and/or in local restaurants. The trip takes places during the Easter holidays so that students can fully benefit from the language lessons which target the demands of the A level oral exams which take place in May. We alternate destinations: one year the trip heads to the south east coastal city of Nice and visits include time spend not just in Nice but other cities along the Côte d'Azur such as Antibes, Cannes and Monaco. The year after, the trip visits the south west of France and is based in Bordeaux. Here we dabble with wine tasting, scaling Europe's largest sand dune (La Dune du Pyla) and other cultural visits as well as a city tour by Segway.

GERMAN

German is mother tongue to more Europeans than any other language and is widely spoken across Central and Eastern Europe. The CBI rated it as the top language (50%) valued by UK managers. Germany remains the economic powerhouse of Europe and it still holds the upper-hand in the European Union. Currently Germany is Britain's main European trading partner and remains the most important European economic power, producing more than one quarter of the EU's gross domestic product. Almost 1000 British companies, including all the major UK multinationals, have subsidiaries in Germany. The German language sits well with Science: it is the second most commonly used language in which to write a work of scientific research – especially Engineering, Chemistry and Physics. In terms of complexity, German and English belong to the same West Germanic language family and share thousands of similar words and phrases, especially in terms of computer, telecommunications and medical vocabulary.

The AQA German A level is designed to build on knowledge gained at IGCSE. Therefore, topics studied include the media, popular culture, healthy living and relationships, whilst A level topics include the environment, the multicultural society and contemporary social issues. The study of German literature and/or a film is also incorporated into the course to broaden cultural awareness.

As the capital city not only features as a topic in itself but also provides the background to some of the literature and films available for study in the Sixth Form, the department often arranges short trips to Berlin. Such trips not only provide a wider context for the study of the language but also offer first-hand experience of the cultural aspects of the A level course. Sights visited include Potsdamer Platz, the Reichstag, the remnants of the Berlin Wall, the East German Stasi (Secret Police) prison and the Olympiastadion.

SPANISH

Spanish is spoken globally by over 500 million people and some predict that it will soon take over from English as the dominant language in the United States of America; it is spoken by financial sector workers and Andean tribespeople, by Amazonian farmers and Argentine lawyers. It is a language of revolution and adventure with a great heritage at Eltham College and the aim is to reflect something of this diversity in the cultural material used as it is taught at A level.

Eltham College follows the AQA languages A level course. In the Lower Sixth, students will become familiar with various poets and directors including Neruda and Almodóvar as well as honing their grammatical skills and increasing their vocabulary discussing various themes of the Hispanic world. In the Upper Sixth, students study one significant text or play and embed their cultural knowledge in the history, tradition and diversity of Latin America and Spain. A student should finish the course understanding some of the intricacies of the Latin-American and Spanish psyche and able to articulate, understand and work within a Hispanic understanding of the world.

Co-curricular highlights of the course include participating in the London Hispanic Theatre Festival in which we have won a number of prizes, the London Spanish Debating Competition, seeing numerous films and plays in Spanish, visiting various Spanish cities and more. Students should expect to immerse themselves in a fully-orbed Hispanic experience.

MUSIC

Few subjects draw on as many skills as are needed for A level Music. A level Music students are some of the strongest academic individuals in the College. Students must be literate and knowledgeable enough to write critically about Music in its historical context, and must have a secure understanding of music theory and notation. They must also be confident and sensitive performers to excel in the performing component. High degrees of artistry and creativity are needed for the composition papers, and aural skills must be refined to a high degree.

The Edexcel specification provides an engaging opportunity to study European cultural heritage, as well as other cultures across the world. Accordingly, the A level courses include an eclectic mixture of musical traditions and styles. Great emphasis is placed upon developing independence of thought and expression, a capacity for intellectual study, and greater personal awareness of the social and cultural factors that permeate the creation of music. Most students will have successfully followed the GCSE course, although gifted performers or composers, after consultation with the Head of Academic Music, could be accepted without GCSE Music. Those taking the course must be fully involved in practical music-making within the College, and so enthusiasm and dedication are essential. Regular participation and attendance at school concerts, as well as concert trips, will be expected.

All candidates need to play (and be having regular one-to-one lessons for) at least one instrument/voice. In order for students to access the top grades for the performing element of the course, students should be able to play to a Grade 6 (or equivalent) standard by the end of Year 11. If students are not at this standard this does not necessarily exclude them from opting for Music A level, but they should be aware of the limitations imposed on them in the performance element of the examination, and should seek advice from the Head of Academic Music.

The A level Music course is invaluable for those wishing to prepare for a music diploma, and is highly regarded as an academic subject by all universities, including Oxbridge, for any chosen course.

PHYSICS

Physics is the most fundamental of the experimental sciences, as it seeks to explain the universe itself, from the very smallest particles, quarks, to the vast distances between galaxies. A level Physics allows students to explore some of the most interesting and complicated concepts in the known universe some of which are at the forefront of human understanding. Students will develop the skills and creativity needed to solve the most fundamental questions on the nature of the universe.

In the first year, students will cover the topics of classical mechanics, electricity, materials, waves and the particle nature of light. During year two, students will also study thermodynamics; gravitational, electric and magnetic fields; oscillations and nuclear and particle Physics. There is an emphasis on practical work through which students develop their manual dexterity and analytical skills.

Subjects

Throughout their study of Physics at A level, students will also develop their knowledge and understanding of what it means to work scientifically. They will develop their competence in working with a variety of scientific instruments using a range of techniques in order to learn how to take accurate and precise measurements.

Many of the models used to explain the phenomena studied across the two years require an ability to manipulate equations, therefore, a strong mathematical understanding is an advantage. Studying both Physics and Mathematics at A level complement each other well, although this is not essential.

A level Physics is essential for students if they want to pursue a career in Physics or Engineering and is highly recommended for some university courses such as Mathematics, Architecture, Geology, Material Science and Medicine.

There are a large range of co-curricular activities offered for A level Physics students. In the Lower Sixth students have the option to visit the CERN laboratories in Geneva, which provides them with a hands on way to see how discoveries are in genuine laboratories, and see the real world applications of the Physics concepts they are learning about in the classroom. There are also a large range of activities that take part closer to home such as; the UK Space Design competition, Physics Olympiad, Physics in Action lectures, Physics Society, Engineering Club, Rocket Club and a programme of guest speakers.

POLITICS

With the world still feeling the aftershocks of 2016's political earthquakes, and with the old political order under attack on myriad fronts, there has arguably never been a more exciting time to study Government and Politics. The Edexcel Government and Politics A level is a broad based, dynamic and engaging course that will give students a strong academic grounding in the government and politics of the UK and the USA alongside the opportunity to explore some of the political ideas that have shaped modern world history. The study of Politics prepares students for a variety of Social Sciences and Arts subjects at university. The subject is directly relevant to any career requiring knowledge and understanding of the political process and the motives underpinning economic decisions and policies. The emphasis on current affairs serves as an excellent grounding for both journalism and law whilst the intellectual skills required for success in the subject make Politics a robust academic subject.

The Government and Politics A level course comprises three components and is structured in the following way:

UK Politics
- Political Participation: democracy and participation, political parties, electoral systems, voting behaviour and the media
- Core Political Ideas: conservatism, liberalism, socialism

UK Government
- UK Government: the constitution, parliament, Prime Minister and executive, relationships between the branches
- Optional Political Ideas: one idea from the following: anarchism, ecologism, feminism, multiculturalism, nationalism

Comparative Politics
- The US Constitution and federalism, US congress, US presidency, US Supreme Court and civil rights, democracy and participation, comparative theories

PSYCHOLOGY

The brain is a collection of cells made up of the same materials as all the cells in the human body. However, this collection of cells has a peculiar property associated with it – a mind. It can feel love, hate, fear, desire, pride, guilt, it can think thoughts, plan, dream, imagine, make decisions… but how does a few kilograms of meat produce a person? Psychology attempts to provide explanations for how this collection of cells and chemical and electrical signals produces a person and why people behave in the ways they do. It considers development from before birth through to old age, the changes taking place, and how these affect thought and behaviour. Psychology also considers how people affect, and are in turn affected by, those around them and the wider society. It tries to explain why people are so alike in some respects and yet so different in others.

The course will involve lectures, discussions, experiments, research, seminars and presentations as well as some flipped learning. Students will be expected to take responsibility for their own learning, and to see their teachers not as the people who tell them all of the answers, but as aids to them finding those answers themselves.

Students can expect to encounter questions such as these while studying Psychology:
- What makes Psychology a science?
- Why can I remember the latest celebrity gossip from a magazine easily, but not the material I need for an examination?
- What can happen if a person doesn't form attachments?
- Under what circumstances will people obey orders and why?
- What does it mean to be abnormal?
- Why are some individuals more likely to commit crimes than others?

Students will gain considerable experience in thinking critically, as they will be required to not only understand the theories covered but also evaluate them, taking into consideration evidence for and against, quality of evidence, and the logical coherence of the theories. Students will design and carry out research and learn the limitations of different methods.
Psychology complements many other subjects; from Biology to History, Chemistry to Politics, English to Art. It provides a useful perspective on these subjects, as well as being a fascinating subject in its own right.

To study Psychology successfully students should have a combination of curiosity, skepticism, an interest in explaining human behavior and a willingness to read around the subject.

RELIGIOUS STUDIES

This subject in the Sixth Form covers three components of study:

Philosophy of Religion; students have the opportunity to study ancient philosophical influences, the nature of the soul, mind and body, arguments about the existence or non-existence of God, the nature and impact of religious experience, the challenge for religious belief of the problem of evil, ideas about the nature of God and issues in religious language.

Religion and Ethics; students study normative ethical theories, the application of ethical theory to contemporary issues, ethical language and thought, debates surrounding the significant idea of conscience, sexual ethics and the influence on ethical thought of developments in religious beliefs.

Developments in Christian thought; students explore Christian religious beliefs, values and teachings, sources of religious wisdom and authority and practices which shape and express religious identity, and how these vary within the Christian tradition

Students have always found the Religious Studies course to be fascinating because of the challenge to think about ideas and topics that are of perennial interest and the subject of continuing debate. Students who enjoyed Religious Studies up to GCSE level and are interested in understanding more about religion and philosophical issues should consider this subject. This is a course that would be suitable for students of any faith tradition, and indeed by those who do not specifically identify with any particular faith, due to the level of debate that is required.

Gloria Filiorum Patres

Eltham College
Grove Park Road
London SE9 4QF

+44 (0)20 8857 1455
mail@eltham-college.org.uk

www.elthamcollege.london

01/19