



EPSOM

COLLEGE

Sixth Form
Information Booklet
2012

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EPSOM

COLLEGE

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INTRODUCTION TO THE SIXTH FORM

The Sixth Form at Epsom is a busy, buzzy, vibrant community of 340 students. Sixth Form life is demanding but fun. The focus is on academic success and supporting students as they become increasingly independent learners: the ideal preparation for university life.

Students in the Sixth Form choose four subjects (five for Further Mathematicians). Many Sixth Formers opt to enhance their academic programme (and, of course, their UCAS application) with a challenging range of additional courses; Critical Thinking AS, the Extended Project Qualification, Young Enterprise or the Securities and Investment Qualification. University admissions preparation courses for SATs, BMAT, LNAT and Oxbridge are undertaken by a large number of students*.

Study facilities in the Houses and in the impressive Library are excellent. The Sixth Form Centre gives Sixth Formers a chance to relax, read the papers, chat with friends over coffee or study in a less formal atmosphere. The Careers Department is based in the Sixth Form Centre, giving all Sixth Formers ready access to specialist careers advice.

The Sixth Form at Epsom College gives every student the opportunity to make new friends, develop new skills and take on new responsibilities – as a Prefect, a member of the Sixth Form Committee or in a leading role in sport, drama, music or in any of a huge range of extra-curricular activities.

* AS results are cashed in.



HEAD OF DEPARTMENT – MRS K H P LENHAM

- Outstanding results achieved
- Opportunities to develop specialist practical skills, working with Artists
- An ideal subject to add creative breadth to your A Levels
- Portfolios carefully planned for those taking Art further to Higher Education

ACADEMIC RECORD

Over the last 5 years: **100% of AS pupils passed A - C, 98% achieved an A or B grade.**

100% of A2 pupils passed A - C, 96% achieved an A or B grade.

COURSE OUTLINE AND SPECIFICATION DETAILS

The structure of the course is a logical continuation of GCSE Art. The course is made up of the Advanced Subsidiary (AS) and the A Level (A2). We follow the OCR GCE Fine Art (Endorsed) Specification at AS (Code H161) and at A2 (Code H561).

The AS is both a stand-alone qualification, and the first part of the A Level qualification. Throughout the Lower Sixth year pupils produce a Coursework Portfolio, that reflects their continued practical development and also encourages independence and far greater personal direction. This body of work accounts for 60% of their AS mark. The AS course concludes with the Controlled Assignment, which makes up the final 40% of their AS mark. The mark that they achieve at AS then makes up 50% of their final A Level mark. It is not possible to achieve a full A Level without first taking the AS.

The A2 year is an exciting conclusion to the A Level course, once again producing a Coursework Portfolio and culminating with the Controlled Assignment. At this level pupils largely initiate their own course of study, building on personal strengths, refining creative thinking and practical techniques, to an impressive level.

ASSESSMENT OBJECTIVES**AO 1**

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

AO 2

Experiment with and select appropriate resources, media,

materials, techniques and processes reviewing and refining their ideas as their work develops.

AO 3

Record in visual and/or other forms, ideas, observations and insights relevant to their intentions, demonstrating an ability to reflect on their work and progress.

AO 4

Present a personal, informed and meaningful response demonstrating critical understanding, realising intentions and where appropriate, make connections between visual, written, oral or other elements.

These assessment objectives are weighted in % as follows:

	AS	A2
AO 1	30%	20%
AO 2	30%	20%
AO 3	20%	30%
AO 4	20%	30%

DEPARTMENT AIMS AND EXPECTATIONS

Art A Level develops intellectual, imaginative, creative and intuitive powers. It encourages pupils to investigate, analyse and experiment, developing practical, technical and expressive skills, aesthetic understanding and critical judgement. Studying Art at A Level encourages an independent mind, in relation to developing personal ideas, refining intentions and outcomes. Pupils will gain experience working with a broad range of media, including traditional and new media and technologies.

The course will also develop an interest in, enthusiasm for, and enjoyment of art, craft and design and an understanding of the inter-relationships between art, craft and design processes, historical traditional and contemporary.

Pupils are advised and encouraged to visit relevant Galleries. They will also have the opportunity to work with the resident Artist and attend workshops and lectures to support their studies.

All AS/A2 pupils have their own studio space, so that they are able to work in their own time. Pupils are allocated six periods each week and can also make use of Study periods and any available time that does not interfere with other College commitments.

Pupils are expected to attend extra sessions each week in lieu of evening preps, these extra sessions should be structured in consultation with the teacher responsible and should not have

ART

precedence over other prioritised College commitments. The recognised prep, allocation per AS/A2 subject in the Sixth Form is about **4 hours** per week.

COURSE REQUIREMENTS

A pass at GCSE Art is required at A* or A. Part of the course involves research and a written dissertation, therefore candidates will be expected to have a secure knowledge of written and spoken English.

HIGHER EDUCATION AND CAREER GUIDANCE

Pupils wishing to enter Further Education specialising in Art are carefully counselled with up-to-date information. Close contacts with leading Art Colleges are maintained. Life Drawing classes are offered to pupils as they prepare portfolios and interview techniques carefully monitored. In recent years all Art Foundation applicants have been successful in gaining places at their chosen College. Pupils from Epsom have also been accepted by the Royal College of Art, for Post-Graduate Courses. Such places are extremely competitive on an international level.

Architecture applicants are also prepared and their portfolios thoughtfully put together. Over the past few years several candidates from Epsom have entered Cambridge and other prestigious schools of architecture.

The Assessment Objectives that provide the framework for the Art A Level course, ensure that it is a diverse and demanding subject; practically and academically. The course also encourages risk taking and importantly a creative approach to problem solving which is essential for real success in all areas of study. As a result unless there are specific requirements for a particular course, most Universities accept and many welcome a high grade in A Level Art, as one of three A Levels offered. It is essential for those intending to study Architecture, Fine Art, and many Design courses, and can be usefully combined with both arts and science subjects. AS Level Art provides an excellent and attractive method of adding breadth to a totally science based A Level course or adding a different cultural dimension with a Modern Language, History or English.

Further details about the Art School and the Course we offer are available from: Mrs Katie Lenham (Head of Department)
e-mail: khpl@epsomcollege.org.uk

BIOLOGY

HEAD OF DEPARTMENT – MR M D HOBBS

- Practical and investigative work
- Essential for further studies in Medicine
- Dentistry and Veterinary Science

HISTORY AND ROLE

The medical foundation of Epsom College has meant that the Biology Department has always had a high profile within the College. The traditional links with the medical profession have been maintained over the last 150 years and Epsom College has probably produced more doctors than any other school. The Department has always played a significant part in the success of the College as a whole. The physical nature of the Department and the presence of a registered museum reflect this history.

ACADEMIC RECORD

The strength of the department is reflected in its academic success and the academic background of the staff. It is a strong

and thriving Department with over 90% A* to B at IGCSE and 65% A* to B at A2 in June 2011.

Traditionally the Department has been one of the biggest in the school. At A2 there are currently 38 students with 56 embarking on a new AS course this year. A range of visits are made and several students enjoy membership of the Curie Society, where topical issues are debated outside of lesson time.

DEPARTMENT AIMS

The key aims of the Department are to help students to develop lively independent and inquiring minds in order to participate in their Biology lessons so that they can acquire the knowledge and skills described in the National Curriculum, GCSE and AS/A2 Level specifications. Through this we hope to develop the students' awareness of the social, moral, economic and environmental relevance of Biology and the importance of Science and Biology in industry.

In addition, we want to help students to use language and statistics effectively; to develop effective study techniques and

BIOLOGY

computing skills. To help students develop self-respect and confidence, the ability to discuss issues rationally and to work effectively in a group.

We also see that it is important to encourage students to value and have a healthy life style and to foster an understanding and an appreciation of our multicultural society to include respect for the rights and values of individuals regardless of their sex, colour, age, nationality religion and disability.

THE DEPARTMENT

The Department is housed in its own purpose built accommodation block. It comprises six teaching laboratories, a reading room, greenhouse, museum and generous staff and technical support space. Each laboratory and work area has its own dedicated links to the school IT network giving access to both the Internet and Intranet. The laboratories were refurbished recently and each lab has 'state of the art' facilities including projection, audio and IT.

UPPER SCHOOL SCHEME OF WORK

The Upper School consists of a Lower and an Upper Sixth. Setting occurs based on subject choice and performances at IGCSE. Some of these sets are determined after joint consultation with other departments or by the options chosen by the students.

A LEVEL SPECIFICATION

In the Sixth Form we aim to provide a coherent course for those not intending to study biological topics beyond AS Level whilst at the same time providing a suitable preparation for those intending to study biologically related subjects to a higher level beyond A2.

From September 2008 we have been following new AQA AS and A2 Biology Courses. At AS this involves studying three units in the Lower Sixth for the award of an AS Level in the

subject, and 3 units in the Upper Sixth. In each case two units will be examined through written papers and the third unit will be coursework leading to an A2 qualification.

At AS the two units will be: Biology and Disease and The Biology of Living Organisms. Within these units is a built in practical coursework component (Unit 3) focusing on Planning, Implementing, Analysing and Concluding and Evaluating data. This will be based on the GCSE type of assessments in the AQA course and be assessed through the year.

A2 will be studied in the Upper Sixth, where two further units are studied. These again include a practical coursework component, which will make up Unit 3. The two units are Populations and Environment and Control in Cells and Organisms. The coursework component will again consist of practical work assessed through the year. A combination of the AS and A2 results lead to an overall A level qualification.

COURSE AND LECTURES

When possible, we organise visiting speakers or take pupils to lectures and other science visits. These are advertised on the notice boards in the Department.

BIOLOGY BEYOND A LEVEL

Higher education courses where Biology is directly relevant or required include Medicine, Veterinary Science, Biochemistry, Biotechnology (a rapidly expanding field), Agriculture, Environmental Sciences, Pharmacy, Pharmacology, Physiotherapy etc. Each year, a number of biologists take up Law, Accountancy and Business orientated courses where scientific 'A' levels are considered very favourably. Several of our former pupils have read Biological Sciences at University have then gone on to careers in areas totally unrelated to their original field of study.

For further details about the Department and the Courses we offer are available from: Mr. M. D Hobbs (Head of Department) e-mail: m-hobbs@epsomcollege.org.uk

HEAD OF DEPARTMENT – MR P J GILLESPIE

- A dynamic, contemporary and relevant subject
- Outstanding external exam and value added results
- Well taught and delivered in a well equipped and resourced department

INTRODUCTION

In recent years there has been an increase in the amount of business coverage in the media. Issues such as China's economic expansion, supermarket dominance, the enlargement of the EU, the growth of fast fashion, falling share prices and the aggressive marketing of junk food to children. These are Business Management issues and make this subject one of the more varied, diverse and interesting available. The course structure is based on management activities from financial planning to motivating workers.

If you have ever wondered about any of the following:

- How companies effectively plan and market new products?
- How to assess the financial viability of a company?
- Developing an insight into how to manage and motivate people?
- Examine the state of the economy and its effect on business?
- Consider the ethics of different business practices?

Then you might like to think about studying Business Management at AS and/or A2.

REQUIREMENTS AND SUBJECT COMBINATIONS

To be numerate is an advantage, but not a prerequisite of the course. The main requirement is an interest in business affairs and a desire to find out how businesses operate. Business Management can combine with virtually any combination of subjects. Popular combinations include ICT, Mathematics, Geography, History, Economics and Biology.

Business Management was introduced at Epsom College in September 2000 and has gradually grown in popularity and is normally in the top 5 A levels at Epsom. It falls within the Economics and Business Management Department. Three sets of students will be studying the subject in the lower sixth and three sets will continue at A2 level in the upper sixth. Business Management is a very rewarding, challenging and interesting subject. There are around 70 students studying this subject in the 6th Form. Retention rates from AS to A2 are high with well over 90% of students continuing to A2.

EXAM RESULTS

Examination Results have been outstanding and the value added one of the best in the college. Based on the last two year's exam results, students have achieved over 55% A grade and last year just under 20% achieved an A*.

COURSE OUTLINE AND SYLLABUS DETAILS

The course followed is the new AQA GCE Business Studies (2130) specification

The objectives of the specification is to: enable candidates to focus on the dynamic nature of the contemporary business world provide opportunities for research into topical business issues offer opportunities for the development and application of a full range of academic skills.

The AS specification has 2 units:

Unit 1: Planning and Financing a Business – Starting a Business

Financial Planning – Key financial concepts needed to start a business including: sources of start up finance, planning cash flow, contribution and break even.

Written Paper: 1 hour (60 marks)

Unit 2: Managing a Business

People – Communication; motivation; recruitment; HR planning.
Operations Management – adding value; quality; customer service.

Finance – improving cash flow, measuring profit, improving profitability.

Marketing and Competition – planning; 4 'P's; analysing the competitive environment.

Written Paper: 1 hour 30 minutes (80 marks)

The A2 specification has 2 units:

Unit 3: Strategies for Success

Financial Strategies and Accounts – financial information, measuring performance, financial decisions.

Marketing Strategies – analysing markets, devising marketing strategies.

Operations Strategies – location, R & D, improving operational efficiency.

Human Resource Strategies – workforce planning, measuring performance, adapting organisational structures, employee relations.

Written Paper: 1 hour 30 minutes (80 marks)

5 questions focusing on measuring business performance and assessing appropriate functional strategies to achieve success. Unseen case study with a range of numerical data.

BUSINESS MANAGEMENT

Unit 4: The Business Environment and Change

External Influences – the effects of changes in the economic, political, legal, social and ethical; corporate culture; risk strategy; change management and responses of organisations.

Leadership, Corporate Culture, Ethics – leadership styles, role of leaders in responding to change, corporate culture.

Managing Change – planning for change, corporate strategies, managing change, decision making.

Written Paper: 1 hour 30 minutes (80 marks)

RESOURCES

A variety of teaching strategies are used by the nine members of the department. Five teachers are qualified to teach Business Management. These range from the traditional delivery of theory, case study material, videos and the use of contemporary business issues.

The Department is based in the Mackinder building where five

classrooms are designated for the teaching of Economics and Business Studies. One of these rooms has a bank of computers for use by students beyond lessons. All classes are fully equipped with electronic Whiteboards and the Department has a set of 16 laptops for student use during lessons.

THE FUTURE – HIGHER EDUCATION AND CAREERS

Naturally, many students take this subject to degree level and enjoy careers in many areas of business from Accountancy, Management and Law. Around 70% of last year's students went on to study a Business related degree at the following Universities: Bath, Exeter, KCL, Cardiff, Brunel, Manchester, Liverpool and Nottingham.

However, it is a very useful subject to study even if the student is not considering a business-orientated career.

Come and join us!

CHEMISTRY

HEAD OF DEPARTMENT – MRS T M MULLER

- Outstanding results
- Taught by highly experienced and established team of chemistry specialists
- Modern and well-equipped laboratories
- The central subject amongst the three sciences and fundamental to medicine

THE AS/A2 QUALIFICATION

The course followed is a traditional and academic one that tends to suit students with strong scientific and mathematical skills.

Edexcel Advanced Subsidiary GCE in Chemistry (Code 8CH01) is the specification followed by the AS candidates.

Exam	Type of assessment	Avail.	% of GCE	Timing
AS	Unit 1: External written	Jan & June	20%	1 hour 15 mins
AS	Unit 2: External written	Jan & June	20%	1 hour 15 mins
AS	Unit 3: Internal	June	10%	Through year

Students will be internally assessed on 3 practical skills over the course of the academic year and will be given the opportunity to be assessed twice on each type of task. The best marks from each skill will be selected and will make up 20% of their overall AS total. The students will take both of the unit exams in June, at the end of their academic year. Each theory exam makes up 40% of their AS total.

Edexcel Advanced GCE in Chemistry (Code 9CH01) is the specification followed by the A2 candidates in the Upper Sixth from September 2009. Students will be entered for Unit 4 in the January of that academic year and encouraged to resit Unit 1, where needed. They will then take Unit 5 in June along with the retakes of any other modules that they wish.

The summary of the Assessment Scheme, the exam weightings and timings are shown below.

Exam	Type of assessment	Avail.	% of GCE	Timing
A2	Unit 4: External written	Jan & June	20%	1 hour 40 mins
A2	Unit 5: External written	Jan & June	20%	1 hour 40 mins
A2	Unit 6: Internal	June	10%	Through year

CHEMISTRY

Students will be expected to have access to an electronic calculator in all parts of the examination. A Periodic Table will be printed in all question papers for all examinations. The Periodic Table will include the names and symbols of all the elements together with their atomic numbers and relative atomic masses corrected, in most cases, to the nearest whole number.

WHY STUDY GCE CHEMISTRY?

This course will try to give you the skills and understanding to make decisions about the way chemistry affects your everyday life by applying concepts into contemporary areas of chemistry.

In addition, a GCE in Chemistry allows you to develop a range of generic skills requested by both employers and universities. For instance, a successful GCE level chemist will be an effective problem-solver and be able to communicate efficiently both orally and with the written word. Handling data will be a key part of your work, allowing you to demonstrate information retrieval skills as well as numeracy and use of ICT. You will build up a range of practical skills that require confidence and accuracy as well as developing a firm understanding of health and safety issues. As chemistry is a subject in which much learning stems from experimental work it is likely that you will need to work effectively as part of a group, developing team participation and leadership skills. As you become more skilled you will take responsibility for selecting appropriate qualitative and quantitative methods, recording your observations and findings accurately and precisely as well as critically analysing and evaluating the methodology, results and impact of your own and others' experimental and investigative activities.

SUBJECT COMBINATIONS

The normal subject combinations are:

- 1. Chemistry, Maths, Physics and another** – this combination provides the greatest freedom of higher education and career choice in the Physical Science/Engineering field. Double maths for Oxbridge physical scientists, DT for a material scientist or a language for one wishing to work or study abroad.
- 2. Chemistry, Biology, Maths and another** – this would suit Biological scientists and aspiring Medics. Physics would complete the scientific group, Philosophy would support ethics and essay writing, Economics could be relevant to budgeting/NHS fund holding and Latin is often popular with interviewers.
- 3. Chemistry, Maths, Economics and another** – this would

suit those going towards businesses in and the management of chemical industries. Three of this year's successful Oxbridge economists had chemistry as one of their four A2 subject choices.

Other combinations also work well, particularly where other related subjects support or complement Chemistry. Only the most able of students tend to be successful when this subject is taken as a stand-alone option or unrelated fourth choice.

AS RESULTS

L6th students have achieved an average of 74% A/B grades over the last three years.

A2 RESULTS

U6th students have achieved an outstanding average of 91% A/B pass rate over the last three years, with almost 67% of all A2 students achieving A grades.

HIGHER EDUCATION AND CAREERS

A2 level Chemistry is considered an excellent all round discipline and is a required/preferred subject for over 30 different subjects at University. A good grade in A level Chemistry illustrates good mathematical skill, an excellent memory and the ability to think logically.

Chemistry at University becomes increasingly mathematical, so anyone wishing to study Chemistry further is strongly advised to have taken Maths to A2. Some courses require students to take a mathematical component, such as Oxford University, where chemistry undergraduates must study Maths and pass an exam on it at the end of their first year.

A good grade at A2 level is a necessary requirement for the study of Medicine, Dentistry, Veterinary Science, Geology and Environmental Sciences. Students aspiring to study medicine at Oxford, Cambridge and University College, London are currently required to sit exams in Numeracy, Science (Biology, Chemistry and Physics) and Ethics. Students need to be able to write a well structured and argued essay for their third paper and should consider their fourth AS choice carefully, if this is one of their goals.

Unit 1 – The Core Principles of Chemistry

- Formulae, equations and amounts of substance
- Energetics
- Atomic structure and the periodic table
- Bonding
- Introductory organic chemistry – alkanes and alkenes

CHEMISTRY

Unit 2 – The Application of the Core Principles of Chemistry

- Shapes of molecules and ions
- Intermediate bonding and bond polarity
- Intermolecular forces
- Redox
- The periodic table – groups 2 and 7
- Kinetics
- Chemical equilibria
- Organic chemistry – alcohols and halogenoalkanes
- Mechanisms
- Mass spectra and IR
- Green chemistry

Unit 4 – General Principles of Chemistry I

- How fast? – rates
- How far? – entropy
- Equilibria
- Application of rates and equilibrium
- Acid/base equilibria
- Further organic chemistry – chirality, carbonyl compounds, carboxylic acids and their derivatives
- Spectroscopy and chromatography

Unit 5 – General Principles of Chemistry II

- Redox and the chemistry of the transition metals
- Organic chemistry – arenes, nitrogen compounds and synthesis

COMPUTING

HEAD OF DEPARTMENT – MR T C V THOMAS

- A challenging and exciting technical subject
- Emphasis on programming, software development and networking
- Superb preparation for all science/technology disciplines at university
- Highly regarded by university admissions tutors
- Combines well with Mathematics, Science, Design Technology, Business Studies and Economics

INTRODUCTION

One of the most important changes of the last 30 years is that digital technology has transformed almost everyone into an information worker. The use of computers is now central to all aspects of industry, commerce, education and leisure. The skills you will learn on this course are directly relevant to almost all modern vocations, which is why Computing A level is so highly regarded by employers and university admissions tutors alike. This is not a soft subject! Whilst many technological industries have declined in the United Kingdom in recent years, Computing and Information Technology are becoming ever more important. If you decide to go one step further and make your career in this field, you will find no shortage of rewarding employment opportunities; with the current world-wide demand for computing specialists, the potential is very exciting indeed.

ENTRY REQUIREMENTS

There are no special entry requirements for this course. Many students will have studied Information Technology at GCSE level, but it is not a prerequisite; this new syllabus assumes no

prior knowledge of Computing or ICT. More important is the ability to think logically, and whilst there is not a great deal of mathematics in the course, it is likely to appeal to students who are good at maths or science. In the past many of our students have successfully combined the subject with Economics, Geography, Business Studies and DT.

COURSE OUTLINE

This course is designed to develop an understanding of the fundamentals of computer science and to provide the knowledge and skills required for participation in an evolving computer-dependent society. The emphasis is on studying the principles of computation in order to solve real-life problems; there is no particular emphasis on hardware or proprietary technologies. There is a general focus on 'computational thinking', which is a kind of reasoning that is used by both machines and humans, involving abstraction and decomposition. Thinking computationally is an important life skill, directly applicable in all vocations.

There is a clear distinction between this course and "ICT" that is offered at some other institutions. Computing is a somewhat more rigorous and technical subject (in some quarters it is known as 'Computer Science'), whilst ICT focuses on the practical application of the technology, and is considered by many universities to be a less academic and therefore less attractive option.

The new syllabus that we are following has been designed for students who wish to go on to any higher education course or employment where a knowledge of Computing would be beneficial – in particular medicine, law, business, politics or any

science, technology or engineering discipline. It is endorsed by all of the top universities, including Oxford and Cambridge, as a very acceptable entry qualification.

SYLLABUS DETAILS

We will be following AQA syllabus 2511 (*you can see full details on the Web at www.aqa.org.uk/qual/gce/pdf/AQA-2510-W-SP-10.PDF*). There are two modules in the first year: Unit 1 is assessed by practical examination and Unit 2 by traditional written examination. In the second year, Unit 3 is assessed by written examination, and Unit 4 is a practical project.

Unit 1: Problem Solving, Programming and Data Representation.

Topics include:

- Introduction to the principles of computation
- Top-down Design
- Decision tables
- State transition diagrams
- Programming and program design
- Binary
- Information coding schemes
- Systems development life cycle

Unit 2: Computer Components, the Stored Program Concept and the Internet.

Topics include:

- Software and systems
- Logic gates
- Boolean algebra
- Processor architecture
- Input/output devices
- The Internet
- HTML coding
- Legal, ethical, economic & social issues

Unit 3: Problem Solving, Programming, Operating Systems, Databases and Networking.

Topics include:

- Algorithm design
- Turing machine, universal machine
- Backus Naur form
- Reverse Polish notation
- Data structures & associated algorithms – Lists, queues, stacks, linked lists, graphs, trees
- Operating systems
- Databases, including Entity-Relationship modelling, normalisation and Structured Query Language
- Networking & communications

Unit 4: The Computing Practical Project

The project provides an opportunity to consolidate and build upon the theoretical and practical elements of the other parts of the course. You will embark on a significant analysis and programming task of your own choosing which will develop and test your analysis, programming and problem solving skills. This exercise is quite unlike the practical projects you may have tackled for GCSE ICT; it is altogether more interesting, demanding and enjoyable. Most students finish the course saying that the practical project was the most fulfilling and inspiring part of the whole course.

HIGHER EDUCATION AND CAREERS

After leaving school, many computing students continue with the subject at university on courses such as Computer Science or Software Engineering. Those with an interest in business and commerce will find no shortage of degree courses that focus on Business Computing, or courses that combine Computing/IT with Business and Management studies. Students on the first year of such courses invariably report that they enjoy a significant advantage over their peers who did not take the subject at school.

Computing A level is also a popular choice for students wishing to progress to degree courses in mathematics, science and engineering, particularly in the aeronautical, mechanical, electrical, electronic engineering and building services fields. It is also a very acceptable option for those wishing to study a wide range of other subjects, including Geography, Business Studies, Medicine and Law.

Students also have a wide choice of careers they can follow, including banking, finance, the public services, telecommunications, the electronic industries or the specialist computer field.

SUBJECT COMBINATIONS

Computing combines well with a wide range of subjects, but in the past the most popular combinations have included Mathematics, Physics, Chemistry, Biology, Business Studies, Economics and Design Technology.

CRITICAL THINKING

HEAD OF DEPARTMENT – MRS M ODENDAAL

A subject designed to stretch and challenge!

This subject helps students to:

- Analyse and evaluate information
- Decide whether evidence is credible
- Solve problems more easily
- Communicate more effectively
- Think more methodically
- Produce a cogent and logical argument

It is difficult to get a top grade in Critical Thinking, and students who do not have a strong work ethic are advised not to take it.

COURSE OUTLINE

There will be two fifty minute lessons per week, and these will involve learning new ideas, intense discussion and translation of these into well developed and logically written answers.

The OCR Syllabus (H052) is skills based and has minimal content. It teaches the art of argument analysis and evaluation, using the tools of reason and logic. The student will gradually become much more aware of issues which underlie the obvious, and will consequently become much more able to process information effectively.

The AS course has two modules, 'Introduction to Critical Thinking (50%) and 'Assessing and Developing Argument' (50%). These are assessed by written examinations only and consist of short structured questions and a multiple-choice section. The first unit is written in January of the Lower Sixth and the second unit is written in May of the Lower Sixth.

TEACHING METHODS

A variety of teaching methods are employed, but since content is minimal, a necessary component of the lessons is enthusiastic participation by students, who are encouraged (within reason!) to disagree with the status quo. Since the subject involves a written exam, an essential part of the course is learning to write cogently, and in depth, therefore work outside of lessons is a necessary part of the course. Prep will be set each week and it must be completed to a high standard.

REQUIREMENTS AND SUBJECT COMBINATIONS

There are no prior knowledge requirements to this course; anyone wishing to improve their skills can do it, however it should be remembered it is one of the most difficult subjects and is it is very difficult to gain A grade. Students will be able to opt either for this subject or for Young Enterprise. Entry to YE is limited so anyone wishing to take both can enter for both and then decide once applications to YE are complete at the beginning of Michaelmas term in Lower Sixth.

THE FUTURE – HIGHER EDUCATION AND CAREERS

Although AS CT will not form part of a university offer and is counted as a fifth AS it is definitely not a soft subject: universities such as Cambridge are beginning to recognise that it is difficult – only 7 or 8% of the papers written are awarded an A grade. Success at AS level will enhance an application to any university and will provide a competitive edge. Participation in these classes should also help students who may wish to take the additional exams, such as BMAT, TSA or LNAT, which are now being demanded by top universities in subjects such as Medicine and Law.

It is worth noting that research done by OCR has clearly shown that students who do Critical Thinking improve their A levels by one whole grade.

DESIGN TECHNOLOGY – PRODUCT DESIGN, 3D DESIGN

HEAD OF DEPARTMENT – MISS A M R WICKHAM

The Design Technology Department at Epsom College has the great advantage of being able to offer students a well equipped facility with excellent technical support.

INTRODUCTION

Design Technology AS/A2 is similar in outline to that of the GCSE Design Technology.

For those who are new to the subject, having not studied it at GCSE, it requires the following:

- Enthusiasm for and an understanding of all aspects of Design in our Society
- An understanding of materials and of the tools, machinery and processes used to manufacture the products around us and how this affects us all
- An enquiring mind and an ability to look beyond the existing boundaries of current Design and Technology
- The ability to use information and communications technology (ICT) to enhance your designs
- Finally, you need a passion to build the products you have designed

Currently we follow the Product Design, 3D Design, specification, offered by AQA, which gives students an excellent opportunity to develop their interest in a wide range of design-based areas. It also provides excellent preparation for those who wish to study Product, Interior or Industrial Design, Architecture, the range of Engineering disciplines or associated subjects at a higher level. Students not wishing to progress into these areas, will undoubtedly find the skills that they develop over the course useful in future pursuits.

In addition to the 50% emphasis on examinations, students will also be able to resolve practical problems into realistic, viable solutions and pursue more individual design interests through the two designing and manufacturing coursework elements.

Design and Technology is concerned with recognising and meeting needs through the application of scientific and other forms of knowledge, the use of physical resources and the creative process essential to see potential and alternative solutions.

THE COURSE IS DELIVERED THROUGH THREE AREAS OF STUDY

Materials and Components: candidates will be given the opportunity to work and study a variety of resistant materials, including smart materials, so they understand the working

characteristics, physical properties, cost, availability and environmental consequences, which influence the choice of materials in design situations.

Design and Market Influences: Candidates should develop an understanding of the broader perspective of the designed world. They will be encouraged to apply personal judgements and appropriate criteria in the appraisal of manufactured objects and systems. These conclusions should influence the candidates in their approach to designing and manufacturing products that meet specific needs of identified users.

Processes and Manufacture: candidates need to develop a broad knowledge of the manufacturing systems used to make and finish materials used in the production of commercial products. They will be encouraged to explore practical applications of processing methods as appropriate to the products they design.

ENTRY REQUIREMENTS

At least a grade B at GCSE preferably in Resistant Materials.

AS/A2 PRODUCT DESIGN OUTLINE

Product Design is about Three Dimensional Designs.

AS Unit 1: Examination – Materials, Components and Application.

AS Unit 2: Coursework – Learning through Designing and Making.

A2 Unit 3: Examination – Design and Manufacture Synoptic Paper.

A2 Unit 4: Coursework – A single substantial designing and making activity.

ASSESSMENT

AS Examination

Unit 1 – Materials, Components and Application.

50% of the total AS, 25% of A Level

2 hour written examination

Section 1: compulsory limited response questions.

Section 2: choice of one question from two.

Section 3: one compulsory question.

Unit 2 - Learning through Designing and Making

50% of the total AS, 25% of A Level

Coursework – approx. 50 hours

Coursework may take a number of forms; a single design and make project, two smaller projects and/or a portfolio of work.

DESIGN TECHNOLOGY – PRODUCT DESIGN, 3D DESIGN

A2 Examination

Unit 3 – Design and Manufacture

25% of A Level

2 hour written examination

Two sections. Candidates answer one question from 3 in each section plus a final question from either section.

This written paper will include sufficient synoptic assessment to test the candidates' understanding of the connections between the different elements of the subject and their holistic understanding of the subject.

Unit 4 – Design and Making Practice

25% of A Level

Coursework – approx. 60 hours

Candidates submit evidence of a single, substantial designing and making activity.

HIGHER EDUCATION AND CAREERS

After AS/A2 you can then consider the following Engineering or Design courses that are available at University and Art Colleges to study at degree level:

- Design disciplines, including Industrial, Product, Automotive, Furniture
- Architecture
- Engineering disciplines, including Mechanical, Structural, Design, Civil
- Computer Aided Design
- Design Management and Marketing
- Course looking to the problems of the future such as environmental issues and sustainability

These professions rely on an ability to 'think outside the box', problem solve, improve existing designs, design and develop ideas as well as an understanding of material science, technology, construction processes and marketing.

Design is about working within limits – costs, materials, people tastes, sizes, all connected to the environment in which we live, it is fun and it is exciting. You can actively look to improve people's lives.

SUBJECT COMBINATIONS

Design and Technology offers you an opportunity to gain personal satisfaction and a positive experience from working with a variety of materials. The practical problem solving processes in this subject encourages your independent learning skills, creativity and innovation. It therefore links well with

Mathematics and Physics; Art and Theatre Studies; Business Studies and Economics; ICT and Geography and History.

STUDENTS AT BOTH AS AND A2 LEVELS ARE ENCOURAGED TO:

- a. develop and sustain their own innovative, creative and design and technology capabilities. To recognise constraints that products have and to produce high quality prototype products;
- b. develop a critical understanding, from an historical perspective and in current practice, of the influences of the processes and products of design and technology;
- c. apply knowledge of their understanding and to develop their skills of design production processes in a range of technological activities. Through this they will develop an understanding of industrial practices;
- d. use information and communications technology (ICT) to enhance their design and technological capabilities;
- e. recognise the social, moral, spiritual and cultural values inherent in design and technological activities, and develop critical evaluation skills in technical, aesthetic, ethical, economic, environmental, social and cultural contexts;
- f. develop as shrewd consumers able to make informed choices;
- g. develop positive attitudes of co-operation and citizenship and work collaboratively.

THE NATURE OF DESIGN AND TECHNOLOGY

The distinguishing feature of any design and technology course is its practical nature. You will develop knowledge and understanding in order to apply it to the solution of practical problems, which arise in our everyday lives and in industrial and commercial contexts.

Underpinning all learning are your designing and making skills, which make use of your knowledge and understanding in order for you to produce outcomes, which satisfy a design brief.

DESIGNING

Designing is a process based activity involving your progressive engagement with a problem, which requires thinking, creating, inventing, predicting, experimenting, decision making, constant evaluation and, where necessary, modification. As a potential

DESIGN TECHNOLOGY – PRODUCT DESIGN, 3D DESIGN

Designer you will develop an awareness of the opportunities and constraints placed upon you by taking account of the demands of users and producers and of market forces.

The activities detailed above will draw upon your relevant skills and knowledge, which are enriched by the application of human values.

MAKING

The realisation of your design ideas and solutions to problems is achieved by making products where a range of materials and media may be used. In design and technology, making activities may take many forms, ranging from early experiments through experimental mock-ups, prototypes, scale models and trials to a final marketable product. All the aspects detailed above provide opportunities for students to develop making skills as they seek to produce high quality outcomes.

COMMUNICATION

Communication is an integral aspect of the whole design

process and it plays three major roles in any design and technology activity.

1. It enables you as a designer to visualise ideas and thoughts, which permit detailed analysis.
2. It provides a record, which can be referred to, adapted or refined as the process progresses.
3. It provides an explanation for others detailing the development of ideas from the initial conception to the final outcome.

The range of communication methods is wide and becoming wider through the increasing use of ICT. All or any should be used as appropriate to the task in hand notes, sketches, formal drawings, photographs, computer programs, oral communication and two or three dimensional representations are all relevant in particular circumstances.

Coursework portfolios are completed electronically and the students will be taught both 2D and 3D Computer Aided Design skills.

DRAMA & THEATRE STUDIES

HEAD OF DEPARTMENT – MISS K CHANDLEY

- An academic subject that consistently delivers 100% A-B success
- A practical and theoretical subject that explores modern and traditional works
- The life blood of the course is participation in professional workshops, residencies and live theatre review, working with renowned international theatre practitioners

AS/A2 DRAMA & THEATRE STUDIES (AQA)

INTRODUCTION

Theatre Studies is an exciting, rewarding course which develops students' appreciation and understanding of theatre's social, cultural and artistic function in an active forum, where they can experiment as directors, actors and designers.

ENTRY REQUIREMENTS

Theatre Studies forms a natural progression from Drama GCSE, though it is not essential to have studied it prior to September 2009. Whilst GCSE Drama is not a pre-requisite of the course, it is desirable. Grade B or above in English is a pre-

requisite of the course, as the ability to write analytically and with flair is vital to any candidate's success.

The other requirement is a passion for theatre arts coupled with the maturity to work with shared responsibility in the practical exams each year; both of which demand excellent time management and academic discipline from each member of the team.

COURSE OUTLINE

There are two papers at AS and A2 levels: one practical and the other written, though we approach the work practically. Students study set plays each year in close detail, developing a confident knowledge of the historical, cultural and political influences of the day. The AS text studied next year will either be Shakespeare's 'The Taming of the Shrew' or 'Antigone' by Sophocles; at A2 level, the texts are Berkoff's 'The Trial' and Moliere's 'Tartuffe'. Students also gain an insight into the theories and practice of three theatre practitioners and companies, whose ideas and work have transformed the face of modern drama.

Students are examined in a written paper each year on their response to and understanding of theatre styles and genres and

DRAMA & THEATRE STUDIES

this takes the form of theatre view at AS and a synoptic analysis and direction of 'The Trial' set text at A2 level. Students are encouraged to make links between Artaud, Stanislavski and Brecht's theories and their own performance exams, consisting of a scripted performance at AS and a devised performance at A2. For each practical exam, students have to research and apply a modern theatrical practitioner's influence on their work as directors, designers and performers. We have developed close links with Complicite and Shared Experience, who have delivered physical theatre workshops at AS level and will help us devise the practical work at A2 level with a residency at the College. We deliver an extensive course focusing on expressionism in the practical, set text and live theatre work.

SYLLABUS DETAILS – COURSE STRUCTURE AND ASSESSMENT

AS: 1241

Unit 1: DRAM1 – Live Theatre Production Seen and Prescribed play (60% of AS; 30% of A2)

1 hour and 30 minutes written examination:

Section A: response to live theatre seen on the course
(1 question to answer)

Section B: study of one set play: Shakespeare's 'The Taming of the Shrew' (1 question to answer)

Unit 2: DRAM2 – Presentation of an extract from a play (40% of AS; 20% of A2)

Performance by a group of an extract of a published play, supported by written notes

A2: 2241

Unit 3: DRAM3 – Prescribed plays (30% of A2)

2 hour written examination:

Section A: study of set play: Moliere's 'Tartuffe'
(1 question to answer)

Section B: study of set play: Berkoff's 'The Trial'
(1 question to answer)

Unit 4: DRAM4 – Presentation of Devised Drama (20% of A2)

Performance by a group of a devised drama, supported by written notes

HIGHER EDUCATION AND CAREERS

There are many varied courses for reading Theatre Studies at Universities, as well as opting for Drama schools. Besides training to go into performance, direction, design or technical careers in theatre, television, radio and film, Theatre Studies is an excellent qualification to have for entry to any creative

or analytical degree course. It is also helpful for those wishing to enter courses such as Law, Medicine, Education and the Social Sciences, as it develops effective people skills and communication.

Between 20 to 30% go on to study Drama at University or Drama Schools. Many, however, use their high result in Theatre Studies to secure entrance to other courses, including Psychology, Economics, Geography and English. Students with high AS grades in Theatre Studies have gone on to study Veterinary Science and Medicine.

We take pride in our record with Oxbridge candidates, where students applying to Cambridge gained entrance to the college of their choice to continue their study of Drama. Our most recent graduate gained a first from Cambridge and is now studying to teach Drama and English at secondary level.

STUDENT NUMBERS AND EXAM RESULTS

Two members of Department deliver the course at this level and our numbers are restricted to 16 per year group for this reason.

Our results consistently reflect our high standards of excellence and our ability to inspire each pupil to achieve their personal best, often gaining their highest result in Drama. Our results are between 92 – 100% A-B grades at AS and A2 level over the past 5 years, with 100% grade A achievement at AS this year.

SUBJECT COMBINATIONS

If you enjoy English, History, Politics, RS and Philosophy, you will enjoy the essay writing challenges of the course and the analytical skills you will develop in set text study and theatre research. If you are highly creative and wish to pursue a career in theatre design or performance, Art, Music and DT will be good subject combinations to choose. Theatre Studies is a subject that encourages you to be an individual and think for yourself within a creatively challenging forum. Before opting for Theatre Studies, however, you should consult the Head of Drama to ensure it's the right course for you in relation to your other subject choices.

HEAD OF DEPARTMENT – MR P J GILLESPIE

- An interesting, challenging and relevant subject
- Well taught within a well resourced department
- A thriving Economics and Business Society that attends regular talks
- The most popular A level subject at Epsom

INTRODUCTION

Economics referred to by Thomas Carlyle as 'the dismal science'. Indeed many consider it to be just about interest rates, inflation and chancellors. However, Economics affects the entire world and presents us with an understanding of human behaviour and has been a motivating factor in much of what you see on the front pages of all the newspapers, not just the Financial Times. Economics is an incredibly wide-ranging subject, where an issue is never black and white and there is always another way of looking at things. Economics provides you with the knowledge and insight necessary to understand the impact of developments in business, society and the world economy. It enables you to understand the decisions of households, firms and governments based on human behaviour; beliefs, structure, constraints and need.

Economics is part of the Economics and Business Management Department at Epsom College. It is based in the Mackinder Building.

REQUIREMENTS AND SUBJECT COMBINATIONS

It is a distinct advantage for embryonic Economists to be literate and numerate. The ability to express oneself fluently and cogently is a distinct advantage for examination purposes even though essays are only set in A2 exams. However, the main requirement is to have an interest in political and business affairs. As a Social Science, Economics is versatile. Economists are drawn from a wide spectrum of subjects. There are no problems concerning the compatibility of subjects. Those students who are considering reading Economics at University are strongly advised to consider studying A Level Mathematics, but this is not a prerequisite for studying A level Economics. Popular past combinations have included Mathematics, Physics, Government and Politics, Geography, Business Management and History.

COURSE OUTLINE AND SPECIFICATION DETAILS

From 2008, the department will be following the OCR GCE Economics HO61 Specification at AS and A2 level. The main aims of the specification are to:

- develop an interest in, and enthusiasm for, the study of the subject
- appreciate the contribution of economics to the understanding of the wider economic and social environment
- develop an understanding of a range of concepts and an ability to use these concepts in a variety of different contexts
- use an enquiring, critical and thoughtful approach to the study of economics and develop the ability to think as an economist

AS – Unit F581: Markets in Action

The reasons for individuals, organisations, and societies having to make choices

- Competitive markets and how they work
- Market failure and government intervention

Unit F582: The National and International Economy

Aggregate demand and aggregate supply and their interaction

- Government economic policy objectives and indicators of national economic performance
- The application of macroeconomic policy instruments; and the international economy

Candidates are required to answer questions based on a particular theme or case study, including some short-answer and some data-interpretation questions, plus one question which requires an answer written in extended continuous prose. Both exams are one and a half hours long.

The 2 A2 modules are

Unit F584: Transport Economics

- Transport, transport trends and the economy
- Market structures and competitive behaviour in transport markets
- Market failure and the role of intervention in transport markets
- Transport economics and government policy

The exam is two hours long and is assessed via a data response and an essay.

Unit F585: The Global Economy

- Macroeconomic performance
- Trade and integration
- Development and sustainability
- The economics of globalisation

ECONOMICS

The exam is two hours long and is assessed via pre-release material and 5 compulsory questions.

RESOURCES

A variety of teaching strategies are used by the nine members of the department. These range from the traditional delivery of theory, case study material and DVD's.

The Department is based in the Mackinder building where five classrooms are designated for the teaching of Economics and Business Studies. One of these rooms has a bank of computers for use by students in lessons. All rooms have an LCD projector and an electronic whiteboard.

STUDENT NUMBERS AND EXAM RESULTS

The Department has had an annual average in excess of 60 students over the last decade, but there are just under 100

students currently studying Economics at AS Level and there are currently around 185 economists in the Lower and Upper Sixth combined. There are 9 teachers within the Economics and Business Management Department and six teachers of Economics.

The Department has an **excellent examination record**.

Over the last two years, just over 65% of grades gained by our mixed ability intake have been A grade and just under 90% have been at the AB grade. 11% of students managed to secure an A* in 2010. Between 30% to 40% of A2 students go on to study Economics at University. Last year's leavers from the Department went to a wide range of institutions including: Bristol, UCL, York, Cardiff, Birmingham, Nottingham.

As regards **Oxbridge**, many Epsomians gain places to read Economics at Cambridge or PPE or Economics & Management at Oxford. Generally one or two students per year secure a place and this was achieved during 2010.

INTRODUCTION TO INVESTMENT QUALIFICATION

This is a new subject introducing students to:

- an overview of the finance industry
- an understanding of financial assets
- the structure of financial regulation
- the importance of finance in a global context

INTRODUCTION TO INVESTMENT QUALIFICATION

This course is being offered as an extra for students in the Upper Sixth. It is taught within the Economics and Business Management department with guidance from the awarding body the Securities and Investment Institute (SII). The course was originally designed, and is still used, as an introductory course for all new graduates in the Financial Services Industry. Corporate members include Deutsch Bank and JP Morgan who use this qualification and subsequent courses as a measure of competence for their employees.

ENTRY REQUIREMENTS

Applications are requested from students during the summer term of their Lower Sixth year. Places on the course are awarded to only those students who can demonstrate a credible interest in pursuing a career in the Financial Services Industry. Most students will naturally come from the Economics and Business management department but this is not a pre-requisite.

COURSE OUTLINE

The course is delivered through one lesson per week plus weekly seminars that take place during activity time. The activity session is taught by an outside Specialist from the Financial Sector. The students have the chance to compete in an online trading investment game that lets them play the role of fund manager. There will also be visits from current City professionals giving the students the opportunity to hear the advice and experiences of those who have not only completed the award but are now working directly in the Financial Services Industry. Official SII learning material is used so that students are fully prepared including a wide range of resources available on the SII website, www.sii.org.uk.

SYLLABUS AND ASSESSMENT

The course gives an introduction to the workings of the Financial Services Industry and the Economic Environment within which it operates. It then covers in detail the main Financial Assets and markets, including equities, bonds and derivatives. Alongside this, the role of regulation is introduced and a study of the impact it has on the industry is undertaken. The principles of taxation are covered along with the use of investment wrappers and trusts before finally looking at the details of retail investments such as savings accounts, property, personal loans and life assurance.

INTRODUCTION TO INVESTMENT QUALIFICATION

The Award is assessed by a single online, 50 questions, multiple-choice examination run by the SII. The qualification is fully recognised by the Financial Services Skills Council (FSSC) and the QCA.

THE FUTURE – HIGHER EDUCATION AND CAREERS

There is no question that this qualification gives students a head

over others in the competitive world of the Financial Services Industry. The range of graduate employment opportunities is enormous, with challenging career paths open to those with the ambition and flair to succeed. Careers paths may include; corporate finance, debt capital, equity capital, mergers and acquisitions, capital markets, private banking, retail banking, fund management, risk management, operations, compliance, global custody or foreign exchange.

CAMBRIDGE PRE-U CERTIFICATE IN ENGLISH LITERATURE

HEAD OF DEPARTMENT – MRS J BATHARD-SMITH

- Teaches students to be informed and discriminating readers
- Stimulates a long-lasting love of literature through the close study of a range of works and their contexts
- Gives students the strategies they need to use language in dynamic and thought-provoking ways
- Is a thoroughly enjoyable course – intellectually challenging and varied

The study of English Literature for the Cambridge Pre-U Certificate is designed not only to provide the student with an academic qualification, but also to lay the foundations of an appreciation of literature which will be an enduring resource in later life.

The course is a literary one, involving the close study of at least eight substantial set texts, during the two-year course, and the

development of an informed critical response through wider personal reading. It is expected that students should positively enjoy reading, and be willing to take up the challenge presented by great literature. A fluent, accurate writing style is an advantage.

The English Department will be preparing candidates for the Cambridge Pre-U Certificate in English Literature, which consists of four assessment units all taken at the end of the two-year Sixth Form course. The course allows for a mixture of texts specified by the examination board and texts chosen by the English Department teachers with their particular sets in mind. It is taught in six periods each week in both Lower and Upper Sixth.

COURSE OUTLINE

Summary of the course, the exam weightings and timings are shown below.

Paper	Component	Assessment	Weighting	Texts
1	Poetry and Prose	2 hour written examination, closed text	25%	Two texts, from selection specified by exam. board
2	Drama	2 hour written examination, closed text	25%	Two texts specified by exam. board
3	Comment and Analysis	2 hour 15 minute written examination, critical appreciation of unseen prose, poetry, drama	25%	Selected by exam. board
4	Personal Investigation	3000 - 3500 word assignment, produced independently	25%	Four texts selected by staff with input from students

THE EXTENDED PROJECT QUALIFICATION

HEAD OF DEPARTMENT – MRS M ODENDAAL

WHAT IS THE EPQ?

The new Extended Project Qualification is designed to give students the opportunity to do independent research. There are no exams, the EPQ can be done in several different ways:

- It could involve research which results in a 5000 word dissertation and an oral presentation
- It could involve the making of an artefact such as a piece of art work, a play, or photography portfolio
- It could involve a piece of specialist writing for example a mathematical proof or a piece of work written in a foreign language
- These are just a few examples: there is tremendous scope for people with innovative ideas

It gives a graded qualification which is the equivalent of half an A level. This means that it is possible to get an A*. The best projects are considered to be as good as a University dissertation.

WHAT DOES IT ENTAIL?

Students will choose a topic of interest to them and will pose a research question which will be answered through the medium of the project. A main part of the aim of this enterprise is to teach students to think at a more sophisticated level. This entails:

- Learning the critical thinking skills of analysis and evaluation
- Learning how to research literature
- Learning how to use the Harvard system of citation
- Learning how to incorporate what you have read in the writing of the dissertation

Students will write a 5000 word dissertation or present an artefact accompanied by a 1000 word report. Everyone will give a presentation on their work. This presentation could take the form of a short talk or a display, usually with an audience. Each student must then answer questions

HOW IS THE COURSE STRUCTURED?

There are two strands to the course. The first strand is learning the how to do a project (this is taught in an afternoon activity slot). The second strand is individual supervision: each student is appointed a supervisor and will meet with him or her weekly to discuss progress. The EPQ is completed in the student's own

time, so a good work ethic is a prerequisite for the course. A high level of organisation is demanded for this course.

There will be two intakes of students.

The first intake will start their project at the beginning of the Lower Sixth year and submit it either in May of Lower Sixth or November of Upper Sixth. The advantage of this is that full advantage of the benefits of an EPQ can be exploited when applying to university.

The second intake will start their project in the second part of the Lent term and aim to finish at the latest in March of Upper Sixth. The advantage of this approach is that the student is more likely to have clearly defined interests and is more mature when it comes to independent study.

WHO CAN DO AN EPQ?

It is open to anyone with strong GCSE qualifications. You are strongly advised to take AS Critical Thinking alongside EPQ.

WHAT ARE THE BENEFITS OF EPQ?

This is an especially useful qualification for Oxbridge candidates, or anyone aiming at a top university. For example, potential medics could write a dissertation on a medical topic. Such a project should enhance a UCAS application: Universities are looking for evidence which demonstrates a facility for independent and innovative work.

Universities are very interested in EPQ: students who have already completed it report that it proves very valuable and is a contributing factor towards the offer of a place. Students not only can talk at interviews about their own original research, but they are also far better prepared for the demands made on them when they eventually enter university.

HEAD OF DEPARTMENT – MR P J IRVINE

Geography has one of the largest Sixth Forms at Epsom. It appeals to a wide variety of candidates who find the subject interesting and highly topical. It fits in well with science and medicine, and it is also a natural foil to the humanities, particularly politics, economics, and history.

It is taught on the top floor of Mackinder, where there are excellent computing resources and plenty of classroom space. The new AQA course has been adopted, with the main text, resources, and interactive questions easily available on-line. The fieldwork component is studied on a termly day release to Juniper Hall field studies centre at Box Hill, and coursework is no longer a feature at either AS or A2.

The Department achieves excellent results and it also has a good track record recently at Oxbridge, with two successful candidates in the last two years.

COURSE CONTENT

We have adopted the new AQA course, which is a challenging enquiry-based course drawing on many contemporary global issues. The entire course has been designed with on-line resources, and we have two excellent supporting textbooks specifically written for this examination board.

The AS course examines the state of the planet's population and resources. We touch on many geopolitical and historical themes, such as Malthus' predictions of apocalypse in 1801, global conflicts such as the sixties Cuban missile crisis (an excuse to play some Bob Dylan songs of the time), through to the threat of pollution, global warming and sea-level rise to our planet in the modern millennium. We focus on river flooding and coastal erosion, and examine the energy situation with particular reference to petroleum, nuclear power and renewable supplies. We study the reasons for change in the British population, its composition, where we choose to live, work, and play, and whether the growth of population is sustainable on the planet.

All courses have been slimmed down from six to four modules (two per year) and it is hoped that the consequent reduction

in the number of examinations will lead to the opportunity for greater depth of study.

Fieldwork is an integral part of the AS course and, although externally assessed coursework has been removed, candidates are expected to show experience of fieldwork in their written examinations. The fieldwork component is studied on a termly day release to Juniper Hall field studies centre at Box Hill.

CAREERS AND SIXTH FORM COMBINATIONS

Geography links with the traditional sciences and mathematics extremely well, setting up pupils for careers in medically related disciplines and engineering. Nationally, Geography, Earth Sciences, and Social Sciences form one of the largest areas of undergraduate entry. In addition to this, Geography fits in well with the 'Arts', particularly History, Politics and Economics. Geographers have a good success rate at Oxbridge entry.

Many pupils will go on to careers in:

Mathematical services such as accountancy, systems analysis, banking, treasury, insurance.

Information services such as libraries, journalism, market research, the media, HMSO, museums and research.

Social services such as the police, social work, consumer services, further education, demography, personnel, census bodies, local government.

Travel and Tourism including National Parks, the British Tourist Board, Rail, Air and Road services, hotel management, and recreational management.

Environmental services such as farming, forestry, building, health, estate management, architecture, marketing, Town and Country planning, estate agency and property.

Finally, geographers usually end up in management because of their ability to study a range of issues and their ability to communicate with other people. These include local government, trade, industry, customs and excise, business management, commodities, buying and advertising.

HEAD OF DEPARTMENT – MR P J IRVINE

COURSE OBJECTIVES

The course provides an opportunity to study a range of issues of environmental importance and the scientific principles and concepts which underpin them. The emphasis of the specification is on a scientific approach to the study of the environment, to provide the knowledge and understanding to enable an informed judgement to be made on matters of actual or potential environmental conflict.

COURSE SPECIFICATIONS

AS level follows the AQA syllabus, and this is supported by on-line resources and good textbooks written for the Board.

RESOURCES

The course will be offered through the Geography Department with access to its extensive resources and experienced teaching staff.

COURSE REQUIREMENTS

It is not necessary for candidates to have studied GCSE Environmental Science before commencing work on this specification and no prior learning or knowledge of Environmental Science is necessary.

SUBJECT COMBINATIONS

Environmental Science will link well with Science and Humanities but will also offer an accessible science subject for those studying the Arts.

AS OUTLINE

At AS, this specification will develop foundation scientific knowledge and skills associated with the environment and how it works. Candidates will study the biodiversity of life on Planet Earth and Physical resources which are essential for life on Earth.

The AS specification has 2 units:

Unit 1: The Living Environment

Topic list

- Reasons why the conservation of life on Earth is important
- Methods which may be used to achieve effective conservation
- Conservation in the U.K., coral reefs, Antarctica and tropical rainforests
- Ecological relationships between organisms and their abiotic and biotic environment

Assessment

Written Paper: 1 hour 60 marks

Weighting: 40% of total AS marks/20% of total A-level marks

This unit comprises 5 short answer questions (45 marks) and 1 structured question (15 marks). All questions are compulsory.

Unit 2: The Physical Environment

Topic list

- Atmospheric gases, water and mineral nutrients
- Human exploitation and management of physical resources to provide higher material living standards
- Unsustainable natural resources

Assessment

Written Paper: 1 hour 30 minutes 90 marks

Weighting: 60% of the total AS marks/30% of the total A-level marks

This unit comprises 8 short answer questions (75 marks) and 1 structured question including extended prose (15 marks). All questions are compulsory.

BEYOND AS/A2

The course lays an appropriate foundation for further study of Environmental Science or related subjects in higher education. In addition, it provides a worthwhile course for candidates of various ages and from diverse backgrounds in terms of general education and lifelong learning. Equally, material studied would be useful for candidates intending to pursue a wide range of careers, for example in business, industry or town planning, as well as careers involved more directly in the environment.

HISTORY

HEAD OF DEPARTMENT – MR M A L TOD

- Large History Sixth Form
- Excellent results
- Early Modern or Late Modern options
- Lively Department in up-to-date accommodation

ALTERNATIVE COURSES:

Early Modern Historians study a wide range of English and European History from the sixteenth century through to the seventeenth. The theme of this four-module course is Absolute Government. We are interested in how monarchs sought to dominate and control their countries. Approximately half of the AS course is set on English history in the sixteenth century, centring on Henry VIII's struggle to dominate the Church, 1529-1547 with connections to foreign policy and the career of Wolsey. In contrast to this, the other half of the course will concentrate France, explaining the height of absolute government under Louis XIV. The A2 course includes Queen Elizabeth's building of a new English consciousness. There will also be a coursework element, with a historical enquiry on Witchcraft, which will be begun in the summer of the Lower Sixth and completed in the following two terms. The Early Modern course may not be taken alongside a similar course in Modern History.

Modern Historians study a wide range of English and European History from the eighteenth century through to the twentieth. The theme of the two AS modules is 'Revolution'. We are interested in why Britain lost the thirteen American colonies and the links to the growth of radicalism in Britain. In contrast to this, the other half of the course will concentrate on the French Revolution so that causes and effects can be contrasted with the British experience. At A2 modern historians will study a wide sweep of international history, from 1945 to 2004, along with a parallel historical enquiry, examined as coursework, on either Russia 1851 to 1956 or the Unification of Germany. The Late Modern course may not be taken alongside a similar course in Early Modern History.

Teaching methods at A Level combine the lecture, the discussion and the tutorial. Candidates are encouraged to discover information and ideas for themselves, to analyse that information, make judgements on it, formulate conclusions and communicate their findings fully and clearly. In addition there will be the opportunity to attend various History conferences and to go on foreign trips to the USA and perhaps to France.

There are regular lectures from outside speakers and an active History Society. Considerable guidance from the teachers is required in the early stages of the course, but once the techniques have been mastered, candidates are well-equipped to cope with the demands of Higher Education in most other disciplines, as well as History itself.

ADVISABLE QUALIFICATIONS

History 'A' Level candidates should be interested in people and society, in finding out why things happen and their consequences. They should enjoy thinking, reading, researching, working things out for themselves and drawing conclusions. They should be able to write clear, precise English.

Almost all History A Level candidates have already passed GCSE at grades A* or A. GCSE is not essential but candidates have much ground to make up without it.

SUBJECT COMBINATIONS

History is taken to 'A' Level with a wide variety of other subjects. For those intending to read History at University a language is highly desirable. English, Economics, Politics and Geography are other suitable 'A' Levels for the potential University History specialist. Pupils hoping to read PPE, Economics or Business Studies at University often take History with Maths, Economics or Geography; History and Maths is also a favoured combination for Law. A small number of able pupils take History with Maths or a Science, keeping open the maximum number of options consistent with a broad 'A' Level course; this combination has proved particularly successful.

HIGHER EDUCATION AND CAREERS

History is a well-regarded 'A' Level and leaves open a vast range of University career paths. 'A' Level History forms a valuable element for Law, Economics and related subjects at University.

A History degree itself is a highly marketable commodity, almost all careers outside the specialist areas of Engineering, Natural Sciences and Medicine are open to the History graduate. The most popular in recent years include Merchant Banking, Accountancy, Law, Industrial Management, Financial Services, Journalism, Retail Management, Marketing and Sales, Advertising and Public Relations.

GOVERNMENT AND POLITICS

HEAD OF DEPARTMENT – MR M A L TOD

THE COURSE

We offer a well-known and highly regarded course from Edexcel to study at AS and A2 levels in Government and Politics. For the first year we concentrate on the nature of politics, the effectiveness of elections, the role of political parties, the constitution, Parliament, the Prime Minister and the judiciary, finishing off with a discussion of the need for reform and an assessment of how united the UK is. In the second year, groups continue with a contrasting study of the US government and democracy. There is no coursework element in this A Level.

Candidates are encouraged to discover information and ideas for themselves, to analyse that information, make judgements on it, formulate conclusions and communicate their findings fully and clearly. Teaching methods at A Level combine the lecture, the discussion and the tutorial. All Key Skills can be taught within this course, most to the top level. In addition there will be the opportunity to attend various conferences and to visit Parliament and other relevant institutions. There is an active Politics Society. Candidates will be encouraged to attend lectures by external speakers organised by the Department and to keep a scrapbook of newspaper cuttings relevant to their studies.

ADVISABLE QUALIFICATIONS

Government and Politics candidates may have taken any combination of GCSE courses, but they will be interested in people and society, and they must be able to express themselves fluently on paper and in discussion. They should be prepared to investigate issues for themselves.

SUBJECT COMBINATIONS

Government and Politics can complement a wide variety of other subjects. It is a highly regarded A Level and would both widen a science-based course and add greatly to a language or humanities-based course. Those wishing to take History with Government and Politics A or AS Levels should be encouraged since the subjects are very different in practice, even though they obviously have skills and many interests in common.

HIGHER EDUCATION AND CAREERS

Government and Politics is an obvious choice for candidates wishing to read History, Law, Economics and Politics at university. It would also be complementary to Human Geography and Business courses, or any career in which students will be involved in management decisions in the real world. Government and Politics is not a lightweight option and a good grade will tell heavily in a candidate's favour in entry into Higher Education.

LATIN

HEAD OF DEPARTMENT – MR K SIVITER

AS AND A2 LATIN INTRODUCTION

Pupils wishing to study Latin Language and Literature at AS level are usually expected to have gained an A or A* in Latin at GCSE. The GCSE Latin course is now completed by the end of the Upper Fourth Year. Pupils wishing to study AS Latin take one of two units in their Fifth Form year and the second in the Lower Sixth year. A2 Latin is studied only in the Upper Sixth year.

The aim of the AS Latin course is to introduce pupils to both aspects of Latin in a more sophisticated and extensive fashion. Appropriate historical and literary backgrounds are also studied, broadening pupils' understanding of the Roman world.

AS LATIN

The two units studied are: **Unit F361 (Language) and F362 (Literature)**

F361 Language

Pupils study accidence and syntax and a Defined Vocabulary list in preparation for a paper of two passages for unseen translation.

F362 Literature

Study focuses on one verse author (Ovid) and one prose author (Cicero). The examination focuses upon comprehension and a wider knowledge of the literary contexts of each author set.

A2 LATIN

Two units are studied over a one-year period.

F363 Latin Verse

Pupils study one verse author (Vergil or Catullus) and are also prepared for one passage of unseen translation from a specified verse author (Ovid).

LATIN

F364 Latin Prose

Authors such as Tacitus, Livy and Sallust are the focal point for this paper, as well as preparation for translation of a prose passage from Caesar or Livy.

Latin can be teamed with Arts and Science subjects at AS and A2 level and is widely available at Universities in conjunction with other disciplines.

MATHEMATICS

HEAD OF DEPARTMENT – MR A J WILSON

- A challenging subject
- Useful basis for most careers
- Pre-requisite for courses in Sciences and Engineering

COURSE

University of London (EDEXCEL) Modular Syllabus

- Modules available:
- 7 Pure Maths (C1, C2, C3, C4, FP1, FP2, FP3.)
 - 75 Mechanics (M1, M2, M3, M4, M5)
 - 72 Statistics (S1, S2)
 - 71 Decision Maths (D1)

COURSE REQUIREMENTS

As Mathematics is a very challenging AS level, it is advisable to have obtained a grade A at GCSE in order to be able to start on the AS course. Those who have taken Additional Mathematics, or an equivalent subject, will generally be setted separately from those who have not.

Only the most able students study the “double subject” of Mathematics and Further Mathematics, for which it is essential to have gained a grade A in GCSE and studied a Maths Module or some form of Additional Mathematics successfully. For Double Mathematicians there are some extra lessons. However, you will still be able to take a further three AS levels.

In general, pupils are taught by two different teachers – one for Pure Mathematics and one for Applied Mathematics (either Mechanics or Statistics). The choice of Mechanics or Statistics is dependent on the pupil’s other AS subjects – Mechanics being advisable if Physics is also being studied, whereas Statistics is helpful for those studying Biology, Geography or Economics. There are 4 lessons per week in Pure Mathematics and 2

lessons per week in Applied Mathematics, in the Lower and Upper Sixth.

COURSE STRUCTURE

Final examinations comprise of one 1½ hour paper for each module. Six modules are required for a Mathematics A2, and six further modules for a Further Mathematics A2.

A LEVEL MATHEMATICS

A student taking Pure Mathematics with Mechanics will take modules C1, C2, C3, C4, M1 and M2. A student taking Pure Mathematics with Statistics will take modules C1, C2, C3, C4, S1 and S2.

A LEVEL MATHEMATICS AND FURTHER MATHEMATICS

A student will take modules C1, C2, C3, C4, FP1, FP2, FP3, M1, M2, M3, and then an agreed choice of two from M5/S1/D1. It is also possible to combine three modules to obtain a variety of AS Levels S1/S2/D1. Further Mathematicians have 4 Pure lessons and 3 Applied lessons per week.

AS MATHEMATICS

For those who choose Mathematics as a fourth subject, they will sit AS Applied Mathematics in the Lower Sixth. These students would join the full A level classes for one year, sitting three modules at the end (C1, C2, M1 or C1, C2, S1).

Mathematics is a very useful basis for most careers, and is a pre-requisite for degree courses in the Sciences and Engineering. It is also good grounding for logical development of the mind. However, although it is an important qualification, it is not for everyone and the decision to study this subject at A level should be a carefully considered one.

MODERN LANGUAGES

HEAD OF DEPARTMENT – MR R ELLISON

- French, German, Spanish
- A useful if not essential ingredient of the modern world
- Opportunities for study visits in France, Germany, Spain
- Can be beneficially combined with a wide range of subjects

The A-level examinations in Modern Languages have undergone substantial changes in recent years, concentrating on relevant topical themes and moving away from an emphasis on Literature.

The Department follows the OCR syllabus, which is arranged as follows:

AS Level: (Two Units)

- Speaking
- Listening, Reading and Writing

A2 Level: (Two Units)

- Speaking
- Listening, Reading and Writing

As at GCSE, all the various skills are given equal weighting and candidates have a chance to retake the AS modules to improve their scores.

AS Topics

- Aspects of daily life
- Leisure and Entertainment
- Communication and Media
- Education and Training

A2 Topics

- Society
- The Environment
- Science and Technology
- Culture

SUBJECT COMBINATIONS

Traditionally, pupils have combined a foreign language with any

of the Arts or Modern subjects, particularly Economics, Business Studies, English Literature, History and Geography and also Mathematics and Statistics. The possibility of four subjects has encouraged more to do two foreign languages, at least for AS, and a number now combine a foreign language with a science-based course.

HIGHER EDUCATION AND CAREERS

It is truer than ever to say that languages have proved to be a useful combination with almost any other subject at University and beyond. They may, of course, be studied on their own at University or lead to the advanced study of a further language – Mandarin would be our current recommendation! However, for many years now our pupils have also proceeded to highly successful university studies and careers through combined subjects such as Economics, Accountancy, Law, Politics, or the Sciences, with a foreign language.

In this way, a degree in languages or in any of the combined subjects can lead to a wide spectrum of careers, for example in Law (especially Commercial Law, International Banking or Finance, Accountancy, Business, Exports, the Foreign Office, the Armed Services etc., indeed any walk of life which has an international dimension. Applicants for such jobs are often asked to give details of any foreign languages they speak and their degree of expertise in them.

The Department organises annual study visits to France, Germany and Spain, and the College offers a number of scholarships for foreign travel. The one requirement we have is that pupils should purchase the Collins-Robert Dictionary at an early stage of their Sixth Form career.

MUSIC

HEAD OF DEPARTMENT – MR G A LODGE

- Four choirs, including the Chapel Choir rehearse each week and perform regularly
- Seven instrumental ensembles, among them Orchestra and Big Band, enjoy a lively rehearsal and performance schedule
- A wide range of concerts each term
- An annual musical theatre production (musical or opera)
- Excellent facilities for rock groups and music technology
- An unrivalled team of instrumental and vocal teachers drawn from all musical fields

INTRODUCTION

The AS/A2 course in Music is challenging and varied because a fully rounded musical education requires a wide range of skills: probably more than any other subject. The diverse nature of the course is reflected in the three unit structure for AS/A2 assessment in each year, outlined below.

To start the AS course you would need to have a strong interest in all areas of the subject. You will also need to be performing on any instrument/voice at approximately Grade 5 standard at least. It is not necessary to have taken GCSE Music, although the skills developed on this course will be useful during the AS/A2 course.

MUSIC

COURSE OUTLINE

The units at AS Level are:

Unit 1 – Performing.

(30%) This involves five to six minutes of recorded solo performance. The standard level of performance expected is approximately Grade 5. Candidates performing well at this level can achieve full marks but it is worth noting that marks for performances at a higher level than this are scaled up. This unit is assessed by the Music Department and externally moderated.

Unit 2 – Composition.

(30%) This involves composing an original piece lasting three minutes based on one of four briefs released by the examination board in September. In addition you will produce notes about your finished composition and the music that influenced you when writing it. This unit is completed under controlled conditions and externally assessed.

Unit 3 - Developing Musical Understanding.

(40%) This is assessed as a two hour examination paper in three sections. The first two will test knowledge on a range of set works from two Areas of Study ("Instrumental Music" and "Vocal Music"), and the third will test knowledge of basic harmonisation.

Those progressing to A2 in the Upper Sixth are required to study the following units:

Unit 4 – Extended Performance.

(30%) This involves a 12-15 minute recorded solo recital, with a standard level of Grade 6 that is marked by the Music Department and externally moderated.

Unit 5 – Composition and Technical Study.

(30%) Two original compositions, two technical studies, or one of each, are submitted for external assessment. They are completed under controlled conditions.

Unit 6 – Further Musical Understanding.

(40%) This is assessed as a two hour examination paper in three sections. The first involves responding to unfamiliar music loosely related to the set works for this unit. The second covers the Area of Study "Applied Music" and involves questions on set works which were composed for a specific purpose (for example, the stage, or for film and TV). The third is an extended essay question based on set works from the "Instrumental Music" Area of Study.

All of these units are only available for assessment in the Summer: there are no January modules in Music

As a subject in the Sixth Form, the breadth of the skills required mean that Music is liked by all universities. It is not just a subject for those who wish to pursue a musical career in the future. It can be combined with most subjects satisfactorily and former pupils have included Music alongside sciences, social sciences, humanities, or a mixture of these.

PHOTOGRAPHY

HEAD OF DEPARTMENT – MR R JOHNSTONE

- Exciting and creative course offered
- Fully equipped Photography Studio
- Mac computers and photoshop used for photography manipulation
- Outstanding results – in recent years most pupils achieve an A or B grade
- Learn artistic techniques using digital media and a traditional darkroom

COURSE OVERVIEW

The course exposes pupils to art and image making using new media techniques. Students will be taught a wide range of digital imagery skills using digital cameras and Mac computers. This is

primarily a photographic course and integration of other art techniques is encouraged. Typically this will include:

- Digital Photography – Pupils learn how to master dSLR cameras and image making using lens and light based media
- Digital Art – learn how graphic designers, web designers and digital artists create art on the computer
- Multimedia and lens based imagery: last year a student created a short film
- Traditional darkroom and modern digital photographic techniques are taught

COURSE OUTLINE AND SYLLABUS DETAILS

Examination Board: Edexcel

Qualification: Art and design – Photography

PHOTOGRAPHY

The AS specification has 2 Units:

Unit 1: Coursework Portfolio – This requires the creation of a sketch book and final image. Topic set by Epsom College.

Unit 2: Exam (Controlled Assignment) – This requires the creation of a sketch book and final image produced under exam conditions. Topic is chosen from list supplied by exam board.

The A2 specification has 2 Units:

Unit 3: Personal Investigation: Coursework – This requires the creation of a sketch book and final image. Topic set by pupil.

Unit 4: Exam (Controlled Assignment). Topic is chosen from list supplied by exam board.

For further information about the course please contact raj@epsomcollege.org.uk

PHYSICAL EDUCATION

HEAD OF DEPARTMENT – MRS F C DRINKALL

- Access to first-class facilities
- Dynamic and experienced Department
- Multi-dimensional stimulating and diversified syllabus
- Vast extra-curricular programme complements the course
- Varied and stimulating material involving applied sports theory and practical sessions
- Increasingly popular option in our 10th year, with an exponential increase in numbers!
- Superb valued-added results and top ranked department for VA scores over past 5 years

AS/A2 LEVEL SYLLABUS DETAILS (AS H154/ A2 H554)

At Epsom College we study the OCR Examination Board's AS/A2 Level Physical Education syllabus. We started the course at the College in 1998 with 5 students in the Lower Sixth; we now have over 40 students taking the subject in the Sixth Form.

QUALIFICATIONS FOR AS/A2 LEVEL

It is important that candidates are literate with a sound GCSE base; a solid Biology grade would be advantageous although not essential. They should be interested in sport and society and linking theory to practice. It is not necessary to be an outstanding athlete or games player but some ability and a keen interest in sport is essential. A GCSE in Physical Education is **not** a prerequisite.

SUBJECT COMBINATION, HIGHER EDUCATION AND CAREERS

Accepted by Universities and Colleges depending on the constraints of the course and the combinations you have chosen.

Students are encouraged to look at individual university websites for specific details.

The course is over 20 years old and has grown nationally from 3 centres and 35 candidates in 1986 to having more than 1000 centres and over 35,000 candidates in 2009. This multi-disciplinary course is seen as compatible with a wide range of other A2 Level subjects.

Career opportunities exist in the ever-growing leisure industry, teaching and coaching, recreational management, the health and fitness industry, sports marketing and professional sport. As a fully recognised AS and A2 qualification, Physical Education will support applications for a wide variety of degree courses.

SCHEME OF ASSESSMENT

The Advanced Subsidiary (AS) forms 50% of the assessment weighting of a full A Level. AS can be taken as a stand-alone specification or as a first part of the full A Level Course.

AS Candidates take Units 1 and 2

A2 Level Candidates take the above units and 3 and 4.

Unit one (AS): G451

2 hour paper; 90 marks 60% AS & 30% A2

An introduction to Physical Education involving Anatomy and Physiology, Acquiring Movement Skills and Socio-Cultural Studies.

Unit two (AS): G452

2 Sports, 80 marks 40% AS & 20% A2

Acquiring, developing and evaluating practical skills. Practical Module.

PHYSICAL EDUCATION

Unit three (A2): G453

2 1/2 hour, 105 marks 35% A2

- Principles and concepts across different areas of Physical Education
- Socio-cultural options, Historical and Comparative Studies
- Scientific options, Sports Psychology

Unit four (A2): G454

1 Sport, 60 marks 15% A2

The improvement of effective performance and the critical evaluation of practical activities in physical education.

KEY SKILLS

This course provides the opportunity for candidates to demonstrate the key skills of Communication, Application of Numbers, Working with Others, Information Technology, Improving Own Learning and Performances, and Problem Solving.

Please consult the Physical Education Department who are all involved in the delivery of this rewarding and exciting course. For more information e-mail: fi@epsomcollege.org.uk

Please feel free to come and find out more about this increasingly popular AS and A2 Level option.

PHYSICS

HEAD OF DEPARTMENT – DR A W HUGHES

- Excellent results at AS and A2 over many years
- Refurbished labs with excellent IT equipment
- Excellent resources for teaching practical aspects of the subject

PHYSICS AT A AND AS LEVEL

If you have an inquisitive mind then Physics is for you. It is the study of how things work and the interpretation of the natural world around us. In studying it, you will gain the ability to think more logically and apply your mathematical skills to solve problems. Analysing complex data and interpreting this will be a highly transferable skill, together with the recognition of the limits of your scientific data. You will also learn to simplify problems and interpret diagrams, both in 2 and 3 dimensions.

Whilst Physics at 'AS' and 'A2' level builds on what you have met at IGCSE level it does become more mathematical in nature, although by doing the IGCSE this change has been reduced compared with the ordinary GCSE. If you have struggled to cope with Maths at GCSE level you would find this course very difficult. It is for this reason that the entry requirements below are in addition to the normal qualifying conditions for Sixth Form study.

ENTRY REQUIREMENTS

- You ought to have at least a grade 'B' at IGCSE, and preferably an 'A' in Physics and also in Maths. Typically you could expect to achieve the following AS or A2 grade:
With an 'A' or borderline miss at IGCSE you should be able to*

*gain an 'A' grade at A-level, provided you work hard throughout
With a weaker 'A' at IGCSE you could gain a 'B' at A level
With a 'B' at IGCSE you will probably gain a 'D' or 'C'*

- If you only had a 'C' at IGCSE you would find A-level Physics very tough
- From a dual award in Science background you should only consider Physics if you have a double 'A' or 'A*'

COURSE OUTLINE

We will be preparing you for the AQA examination for which there are 2 compulsory units together with an internally marked practical component at 'AS' level:

Unit 1: The first of these units deals with the nature of atomic structure and the way in which particles interact. Some new ideas about antiparticles and their strange behaviour will arise, together with the concept of quantum physics, but there will also be plenty of familiar material which develops from your current electricity work.

Unit 2: Involves the study of Mechanics and the properties of materials. Ideas about the behaviour of waves will be introduced, with the concept of superposition of 2 wave trains being used to explain interference.

Unit 3 (practical work): This carries 20% of the AS qualification and is divided into 2 aspects; Practical Skills Assessments (PSA), and Investigative Skills Assessment (ISA). For the PSA you have to demonstrate that you can read a variety of instruments correctly. The bulk of the 20% is awarded though for the ISA. This is a practical set by the examination board, but marked internally. There are also further assessment

PHYSICS

questions set by the Board on your own data and on specimen data produced by AQA.

At 'A2' level a similar structure is used:

Unit 4: Comprises of Electric, Gravitational and Magnetic Fields, together with some more advanced Mechanics.

Unit 5: Consists of Radioactivity and Thermal Physics, together with an option topic. This can be chosen from Astrophysics, Medical Physics, Applied Physics or Turning Points in Physics.

Unit 6 (practical work): This follows the same structure as Unit 3 and is internally assessed. At both levels, the practical work carries 20% of the overall mark.

HIGHER EDUCATION AND CAREERS

A-level Physics is one of the most favoured A-level subjects listed by Cambridge, LSE and other top universities, having the reputation of being relatively difficult. However, do not be put off by the "difficult" tag – if you have done reasonably well at GCSE level you will cope with the change to A-level standard.

It is particularly useful as a career requirement if you are doing any form of engineering, technical work, computer science, or thinking of any pure science at university. For these subjects it is a *vital* requirement.

Whilst not an absolute requirement for Biological, medical and veterinary courses, it is well worth doing Physics as so many processes involve Physics principals. You will make yourself more attractive to the universities if it is one of your A-level

choices. Failure to do the subject for medics will make the nervous system difficult to grasp, whilst concepts like blood pressure will be harder to deal with and the limits of non-invasive imaging or surgical techniques will be a mystery.

SUBJECT COMBINATIONS

Probably the most common combination of subjects is Physics and Maths, since increasingly there is some overlap in the course material. For example, there exists the advantage that you will study mechanics in both subjects and they therefore reinforce each other.

There are also strong links with Chemistry, as so many of the ideas about the structure of materials link with the principles of Chemical bonding. Hence Maths Physics and Chemistry is the most common combination.

If you are thinking of a more Biological need, it is possible to do A-level Physics without the Maths, but this does make the mechanics topic rather harder. There is very little Pure Maths used beyond what you will have met at GCSE level, and those ideas which are new would be taught by the Physics dept. These topics are only in the 'A2' section of the syllabus.

Physics can also be linked with a humanity to give a broader base to your A-levels, with Economics or Geography being quite popular. The latter combination is particularly useful if you are thinking of architecture. When linked to Economics the ability to handle numerical work and abstract concepts means that you can go for a career in accountancy or business.

Physics is thus one of the most useful A-level subjects in opening a range of career paths.

THEOLOGY & PHILOSOPHY

HEAD OF DEPARTMENT – MRS H H HYND

This is an increasing popular course nationally and valued by all Universities.

- Explore ultimate questions about life, existence and morality
- Opportunities to discover the philosophies of others and develop your own thoughts and views
- Develop life skills, decision making, formulating reasoned arguments, engaging in debate
- Departmental trips to hear top speakers in the world of Philosophy and Religious Ethics

AS / A LEVEL: RELIGIOUS STUDIES

INTRODUCTION

If you have ever asked yourself 'Does God exist?', 'Why does God not stop people starving to death?', 'How ought I to act to be good?' then you have already expressed an underlying interest in this course. Although you will eventually gain a certificate in Religious Studies, our course is focused on Philosophy of Religion and Religious Ethics. The course seeks to engage you with some of the great ideas of the day. It looks back through history to see how these issues have arisen and then looks at contemporary philosophers to see how they have answered

THEOLOGY & PHILOSOPHY

these problems. At all times we will be asking you how you respond both to the issue examined and also to the views of these scholars. Have they convinced you? Can you think of a better answer?

The subject is largely essay based so you will need the ability to express your ideas coherently upon the page but any GCSE Humanities subject will have prepared you for this.

ENTRY REQUIREMENTS

Whilst a GCSE in Religious Studies is an advantage, as you will have already started to think about some of the ideas that we explore, it is not essential. If you have taken RS GCSE you will need a grade B or above. If you think you can hold your own views whilst being open to the views of others and have the ability to express a range of ideas in writing, then this subject is for you. You may come from a religious persuasion or have no religious belief at all but you must come with an open mind.

If you are still not sure if you would like the course, read 'The Philosophy Files' by Stephen Law or have a brief look at 'The Story of Philosophy' by Bryan Magee. If either interest you, then this is the subject for you,

COURSE OUTLINE

You will follow the Oxford, Cambridge and RSA Examinations (OCR) Philosophy of Religion and Religious Ethics course. This comprises of two modules at AS and should you continue into A2, a further two modules.

Below is a brief outline of the AS and A2 course:

THE AS COURSE

This comprises of two units:

Philosophy of Religion:

- Ancient Greek influences on religious philosophy – Plato, Aristotle
- The Judaeo-Christian concept of God
- Traditional arguments for the existence of God
- Challenges to religious belief posed by the existence of evil and science

Religious Ethics:

- The use of ethical language and the concepts of 'right' and 'wrong'
- Theories about how we decide between a right and a wrong action

- The application of ethical theories to various issues e.g. Abortion, euthanasia, genetic engineering, war and peace

There is no coursework. Each unit will be examined by a 1 hour 30 minute examination.

Students are expected to answer two structured questions in each exam.

THE A2 COURSE

This consists of two units:

Philosophy of Religion:

- Religious Language
- Religious Experience – miracles and revelation
- Beliefs about life after death
- The nature of God

Religious Ethics:

- Ethical theories.
- Freewill and determinism
- What we mean by 'conscience'
- The application of ethical theories to various issues e.g. Environment, business and sex

HIGHER EDUCATION AND CAREERS

The ability to think clearly and express your ideas upon the page coherently is valued by many. People who are interested in law, accountancy or business take this course as a way of demonstrating that they have the ability to think through an issue and reach an informed decision. Many potential Medics take this course at AS level as a way to start to think coherently about Ethical issues. It also serves as a good way to develop critical thinking skills in preparation for the BMAT. This course also demonstrates that you have an understanding and appreciation of other people's point of view – an important skill in almost every job.

An AS or A level in Religious Studies is well regarded by all universities and colleges.

SUBJECT COMBINATIONS

This course is good with most other subjects. Clarity of thought and coherence upon the page is our main aim and would compliment the ambitions of most other courses. Many Mathematicians appreciate the beauty and simplicity of the philosophy that we look at. Many Biologists are intrigued by the ethical dilemmas that we study. Many Humanities students find parallels between this course and the other courses they are following.

YOUNG ENTERPRISE

HEAD OF DEPARTMENT – MRS E G IRVINE

- A popular additional qualification in the Lower Sixth
- An opportunity to participate in running a business
- Valuable skills learnt in communication, managing time and working with others

INTRODUCTION

Young Enterprise is a national education charity founded in 1963 to forge links between schools and industry. Its mission is:

‘to inspire and equip young people to learn and succeed through enterprise’

Those of you who have been in the school for a number of years will be familiar with the scheme and may have purchased products such as College rugby balls, ‘hoodies’, play programmes, pashminas or attended events such as the Junior Dance. YE presents pupils with a unique opportunity to **set up and run a company** in the Lower Sixth year.

ENTRY REQUIREMENTS

Young Enterprise companies need individuals with ideas, enthusiasm, initiative and commitment.

THE SELECTION PROCESS

There are 24 places in the two companies that operate, but as the scheme has been very popular in the past it is necessary to adopt a selection process.

- The first stage involves completing an application form
- If your application is successful you are called for an interview and a reference will be taken up
- The interviews are held in the second week of the Michaelmas term and successful candidates will form the companies

Further information and an application form will be sent out to pupils in the summer term at the end of the GCSE exams.

COURSE OUTLINE

In the YE scheme pupils work together as a company and will have the power to make all the decisions associated with its running, including marketing, production and financial management.

Pupils will also be responsible for paying YE VAT and taxes and the company can decide on how any profits will be shared or allocated.

Staff from the Business & Economics Department will oversee the two companies. A YE Link Advisor from the commercial sector and a Link Teacher from Epsom College will assist each company. The activity takes up two teaching periods per week. YE is also included in the activity programme and one session will be included in a pupil’s activity programme. Work is also undertaken outside of these times.

There are regional and national competitions that pupils can enter.

HIGHER EDUCATION AND CAREERS

Pupils can discuss their experience on their UCAS application and employers recognise this qualification.

SUBJECT COMBINATIONS

Pupils in the past in the YE companies have studied a range of A levels. Pupils who undertake the Business A level will be able to bring their Finance, People, Marketing and Operations subject knowledge to the YE meetings.

CAREERS

There is an extensive programme of Careers Events during Lower Sixth in preparation for Upper Sixth and life beyond Epsom.

The careers office is located within the sixth form centre. The main emphasis of careers advice at Sixth Form is in selecting appropriate further education courses. Pupils are encouraged to drop-in to see the careers team informally or to make an appointment individually.

If they have not already taken it there is an opportunity to take the Independent Schools Careers Organisation (ISCO)/ Futurewise Careers Guidance Tests. All pupils are enrolled in this programme in the fifth form.

In the Lower Sixth there is a varied programme of events looking at life beyond Epsom. A large number of Lower Sixth pupils take part in Futurewise careers courses during the Easter and summer vacations. The careers programme looks closely at

the UCAS application procedure, gap year opportunities and the world of work. There are sessions dedicated to Higher Education with a variety of guest speakers, an evening focusing on the World of Work, as well as opportunities to visit University Open Days and specialised events for applications to Medical Schools and Oxbridge. There is an extensive programme of workshops in preparation for university application, covering the issues of decision making, UCAS registration and personal statements.

At the start of the Upper Sixth a day is given over to UCAS applications. Interview preparation is given on an individual basis as required. Support is readily available throughout the UCAS cycle.

Finally, when exam results are published in August, the Department is staffed to give help to any who need it. The vast majority of pupils make successful applications and achieve their first or second university of choice.

LIBRARY

The College Library is open from Period 1 to 6pm on Monday to Friday and 9.30am to 12.30pm on Saturday.

An introduction to Library Resources for the Sixth Form is given in the Michaelmas term and the Library is staffed by a Librarian and Library Assistants who can always help with enquiries. Information sheets on using our subscription databases and on how to prepare references are available.

The Library has approximately 50 study desks and there is a wireless network for laptop connection. Facilities provided include a DVD player, video player, CD listening post, scanner,

card-operated photocopier, catalogue terminals and five computers with access to the internet.

The collection of approximately 25,000 resources is indexed on a web-based catalogue giving immediate and easy access. Many resources have been linked by library staff to appropriate web sites enabling 24 hour professional guidance on information retrieval. Books can be borrowed, renewed and reserved as in a public or academic library. The ground floor houses a wide range of fiction and a large selection of daily newspapers and journals. There is a connecting door to the Careers Library.

WEDNESDAY AFTERNOONS

Members of the Fifth Form entering the Lower Sixth will already have arranged Wednesday afternoon activities during their Summer Term. New members of the Lower Sixth have an opportunity to opt for a number of activities. Some may wish to join the CCF, either the Service Sections, Life Saving, First Aid, Community Sports Leadership, or to take Duke of

Edinburgh awards. Other opportunities include Drama, Art, Music, IT, DT, Business Skills, Helping in the Library, French and Spanish Culture, Martial Arts or activity with the Community Service Group. At Upper Sixth level additions include Citizenship or assisting in a variety of Middle Fourth form option activities.



EPSOM

COLLEGE





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