



**SIXTH FORM
PROSPECTUS
for entry
September 2012**

FOREWORD

This booklet is designed to do two things:

Its first aim is to give you the flavour of the Sixth Form at JAGS. It is, I hope, a place where people learn to be confident enough to risk being wrong, to be tolerant enough to listen to new ideas and to maintain a healthy balance between serious study, extra-curricular activities and service to the community.

Its second aim is to help you to consider what you have achieved and enjoyed so far, to find out more about the subjects you might study at AS and A2, and to see how far your choice of subject matches up with possible university and career options.

I hope that you find this informative and that we will see you in the Sixth Form next year.

Marion Gibbs
Headmistress

INTRODUCTION

The present A level Curriculum was introduced by the Government to encourage you to study a broader range of subjects than before in the Sixth Form. It therefore combines the traditional A level training in intensive study with the wider and more flexible approach found in most other countries. A careful choice of subjects should equip you very well for both future study and future careers. This handbook is designed to help you make that choice, and you should read it with care, as well as consulting with your teachers, parents and the reference information available online and in the library.

ENTRY TO THE SIXTH FORM

All girls entering the Sixth Form will have at least 5 GCSE passes at grade A*-A with a minimum of B grade in English Language and Mathematics. For most subjects grade A, in the GCSE is required before continuing with the subject to A level. (Please see individual subject entries for precise details.) If a girl wishes to take up a new subject at A level it is recommended that she should have obtained at least a grade A in the appropriate related subject at GCSE.

Additional scholarships are available for girls entering the Sixth Form. Scholarships are mainly awarded on academic merit based on mock results and actual GCSE results, but may also be given for artistic and musical distinction and for aptitude to study Economics. Means-tested bursaries are available to help when necessary.

THE SIXTH FORM CURRICULUM AT JAGS

You will choose 5 subjects to study at AS level in Year 12, usually including Critical Thinking and will generally continue with 4 subjects to A2 - the full A level - in Year 13. **It should be noted that progression from AS to A2 is dependent on scoring a minimum of 66% (C grade) at AS because it is very hard to progress to a worthwhile grade at full A level with anything less.** All courses (except Pre-U English) are modular, and examinations in 2 or 3 modules per subject will be taken at the end of Year 12. In addition, there will be a compulsory sports afternoon in Year 12, and a programme of general studies and lectures in both years. Most girls take a **Critical Thinking** course to support their independent learning and sit the AS examination in this subject. The main purpose of changing the A level system was to encourage greater breadth of study, and universities have welcomed this development; you should therefore try to choose a combination of contrasting as well as complementary subjects.

A LEVEL COURSES

The following subjects are available, providing that there are sufficient girls choosing them to make a viable group:

Art	Further Mathematics	Music
Biology	Geography	Philosophy
Chemistry	German	Physical Education (AS only)
Classical Civilisation	Greek	Physics
Computer Studies	History	Politics
Critical Thinking (AS only)	History of Art	Religious Studies
Design Technology	Italian	Russian
Economics	Japanese	Spanish
English (Pre-U)	Latin	Theatre Studies
French	Mathematics	

You should choose your combination of AS subjects by reading the course descriptions in this handbook, listening to the advice given by Heads of Department, consulting your subject teachers, form tutor, parents and reference materials recommended to you on the internet, on the basis of your interests, abilities and likely career plans. You should note the GCSE requirements for each subject, and should aim for a combination of subjects which will engage your interest, develop your skills in a variety of ways and prepare you for future study and employment, even though you may well be unsure at this stage as to where your eventual career may lie.

There will be an opportunity for girls to take the Extended Project, which requires them to research and complete an essay of 5-6,000 words. This is equivalent to an AS level, and further details will be given to girls in the Spring Term of Year 12, so that they can decide if they wish to opt for it. The extended project allows students to develop the skills of independent research and presentation, both oral and written, which are highly valued by universities. Students choose a research area, which may be within or outside their main A level subjects, and complete the research over the summer holiday of Year 12, so that they can complete their written work and deliver their oral presentation in the Autumn Term of Year 13.

PE IN THE SIXTH FORM

All Year 12 girls have a compulsory afternoon of Physical Education. An exciting and extensive options programme is offered including both on and off site activities. Our aim is to educate girls for “leisure” and to encourage an active lifestyle and life-long sporting participation.

Girls are asked to select from a wide range of sports, which vary annually according to popular demand and availability.

Some of the sports offered include:

Badminton	RLSS Pool Lifeguard
Fitness	Pilates
Ballroom Dancing	Tennis
Rounders	Trampolining
Community Sports Leader Award	Tai Chi
Kick Boxing	

THE LIBRARY

The library is open for study from 8.15am to 5.30pm (apart from Fridays when it shuts at 4.30pm) and holds about 26,000 books, all of which are available for the Sixth Form to borrow or use in the library. We offer 70 silent study spaces reserved for the Sixth Form, plus a separate supervised area.

Girls can find out what is available, check their loans and reserve items on the library software. There are always at least two librarians on duty in the library to offer help and to issue books, DVDs, or laptops. There are six PCs available exclusively for Sixth Form girls, plus fifteen laptops which can be borrowed and used within the library. Printing in colour and black & white is available in the library. Through the pupil server girls can access NewsBank - international, national and local newspapers online - Heinemann World Book and Encyclopedia Britannica too.

Apart from the daily broadsheets, and weekly copies of European newspapers, the library takes around fifty magazines on a regular basis, ranging from Astronomy Now to Which? There is an up-to-date reference collection including multiple copies of dictionaries, new textbooks and statistical information.

Disposable credit cards for the photocopier in the library are sold at the issue desk for £1 and £2 values.

There is a separate quiet study room in the Sixth Form block fully equipped with PCs.

CAREERS AND HIGHER EDUCATION ADVICE IN THE SIXTH FORM

We aim to equip all girls with the confidence, skills, experience and qualifications which will enable them to be life long learners, and to be flexible in their approach to the world of work. All girls, in the course of their school career, will be encouraged to acquire relevant work experience, and then to reflect on this effectively, to help them decide on the best course for them at each stage of their school lives and beyond. In the Sixth Form, tutors will discuss this with girls and help them to plan and make the most of work placements, volunteering, temporary jobs and any other experiences which will help them to set challenging and realistic goals for themselves.

We recommend that all girls participate in the Course Finder Programme (run by the Morrisby Organisation) which is endorsed by UCAS. This links their interests and ability to specific courses and career areas. Each girl receives a comprehensive and detailed report together with an 'Action Plan Booklet'. The report is used for discussion with tutors and teachers and as a basis for further research. Suggestions are included in the Action Plan.

Resources are based in the Sixth Form block which has most UK University and College Prospectuses, Degree Course Guides and Degree Course Offers. Other useful student guides are here too, such as 'Life on Campus', 'Student Finance' and 'Working Abroad'. Increasingly girls find the Internet and CD ROMs invaluable: especially when deciding what and where to study. University web-sites are a source of up-to-date information and are often more current than printed prospectuses, and the UCAS website - www.ucas.com is especially useful.

Some girls wish to do a GAP year after A level and there are information files, which focus on such opportunities. Girls wishing to apply post A level are welcome to use the facilities after leaving JAGS.

Many girls benefit from attending short courses, conventions, lectures offered by a variety of bodies such as The Royal College of Surgeons, The Workshop (run by Nottingham University) and individual university departments. These are advertised in the Sixth Form and discussed in tutorial time.

In addition some girls wish to go on work placements, with which we may help. Girls also have the opportunity to attend lectures in school as we invite representatives from a selection of professions, many of them JAGS alumnae, to come to talk about their work, their university courses and gap year opportunities including voluntary work.

During Year 12 and 13 girls also participate in sessions on careers related areas, such as CV writing. Practice interviews are arranged for all who request them.

LIFE IN THE SIXTH FORM AT JAGS

You are almost an independent student and no longer a pupil; the Sixth Form at JAGS will help you to prepare for the challenges of adult life from a secure base. You will be able to continue your existing interests, both in your academic work and in the wider school life, where you will be able to lead and inspire younger girls. You will also face new challenges, inside and beyond the classroom. As always, you will be able to rely on support and advice from staff, many of whom you will already have known for several years, and this expert knowledge will be vital in helping you to make the most of your opportunities at school and for your future.

In many ways life in the Sixth Form is different from your earlier years in the school. Some of the differences are obvious; you will not be wearing uniform and much of your time will be spent in the Sixth Form block, which is separate from the main school building. You will have chosen and be studying fewer subjects, some of which, such as Politics or Philosophy, may be totally new to you. Your classes will be smaller, and you will be expected to study in greater depth and to participate more actively, in a less formal atmosphere. You will be helped to take far greater responsibility for your own learning. You will have the freedom to organise your time and to make individual choices, while at the same time you will have more responsibility for yourself and others. Apart from your academic work, you will have the opportunity to take part in a huge range of activities, including visits, societies, lectures, conferences, theatre trips, voluntary work and so on.

The organization of tutor groups is designed to help you meet these challenges. You will be in a group made up of about sixteen girls from both Year 12 and Year 13; all the others in your group will be studying in the same subject area as you, although combinations of subjects will vary. You will find that the Year 13 girls will offer advice and encouragement, and you will get to know the pattern of the two years and the kind of choices that lie ahead. Your tutor will usually teach one of your subjects, and will be able to offer academic guidance as well as personal support. You and your tutor will get to know one another well over the two years; your tutor, in the first instance, will help you with decisions about your future and guide you through applications. The tutors work with the Head of Sixth Form as a close-knit team; you will be able to approach a wide range of people for detailed advice and guidance.

Of course, you will not spend all your time at school on your academic subjects. You will have the opportunity to learn new skills and to broaden your horizons. There is an enormously varied choice of Liberal Studies in Year 13. This is run in conjunction with Dulwich College. Subjects range from Creative Writing to Yoga, via Music Technology, Myth, Film and a variety of Community Action projects - just a few from the 30 activities available. Lectures on a wide variety of subjects can be heard in school time and in Society meetings after school. Many girls are actively involved in sport, Community Action, music, poetry and drama, in all of which the opportunity is there to lead and inspire younger girls.

Community Action has long been a central part of Sixth Form life, with most girls taking part and many giving significant amounts of their time throughout the Sixth Form and beyond. Girls work in the Saturday Literacy Scheme, as volunteers in hospitals, special schools, primary schools, after school clubs. Drama and Art projects with the very young and the elderly, Kids Company, and, each summer, in a unique project for children with special needs in Eastern Europe.

As a Sixth Former, your experience and knowledge of all areas of school life mean that you will be valued and respected; you may help to organise House Activities, to look after younger girls and enable the school to run more smoothly; most Sixth Formers enjoy this responsibility and see it as a useful preparation for adult life. All of this activity and responsibility needs to be balanced by time and space to relax. The two large Sixth Form Common Rooms, with their shared kitchen, allow you to sit with your friends, have coffee, read the paper and chat. You will also have access to the new Deep End Café and, for your academic study time, will be able to choose between the school library and the Sixth Form study area.

Your time in the Sixth Form is very soon over. Alumnae who come back to visit us will tell you this, and often how much they wish they had realised this at the time! Many girls keep in active contact with the school after they have left. Each year we welcome some ex-pupils who come to give talks to the Sixth Form about their GAP year or their careers.

At the end of Year 13, the girls, their parents, the governors and the staff attend a Leavers' Ceremony, which is combined with a presentation of prizes. Each girl is presented with a certificate, which records how she has participated and what she has achieved. For every single girl the list is impressive. It is obvious that our Sixth Formers have the energy, imagination and concern for others, which will serve them well in the future. In the Sixth Form at JAGS you will have the chance to fulfil your potential and make the most of your opportunities.

Mrs V Askew Head of Sixth Form

REQUIREMENTS FOR UNIVERSITY ENTRANCE

You will be discussing your choice of subject and universities with us and have plenty of opportunity to talk about what you might like to do in the future. You may not be aware of it, but there is a whole team of staff who have a great deal of experience in advising girls about University and Higher Education applications. They are all ready to help you and will make sure that you are fully informed about all the choices you have to make.

Some courses require particular A level subjects. For example, if you want to read medicine, then Chemistry is essential. If you are applying for a mainstream academic subject then you would be expected to have studied it for A level; if you want to read History at University then A level History would be required. If you want to study Law you should have an A level in an "essay-writing" subject.

However, although many courses do not specify what A level subjects you should have, they will expect good grades in whatever A levels you are studying. Remember that you are more likely to be successful if you choose subjects that you enjoy and in which feel you can do well.

With the present A levels you have a great opportunity to study a wide range of subjects. You will probably be taking at least one AS apart from the subjects which you will take on to the full A level. Universities encourage you to choose an AS subject which will give you a broad foundation, so you can choose something which is quite different from your intended A level subjects. You will be able to study something which you have enjoyed or which interests you - perhaps even a completely new subject.

Preparation for University goes well beyond the subjects you are taking at A level. Universities are looking for qualities such as initiative, independent learning and wider experience of the practical application of the subject. This is particularly but not only true for vocationally oriented subjects such as Architecture, Drama, Law, Medicine and Psychology. Above all, Universities are looking for evidence of your enthusiasm for your chosen subject and your willingness to pursue it for yourself. Life in the Sixth Form offers many opportunities, through lectures, societies, outings, workshops and wider reading, to help you prepare for Higher Education, and for a lifetime of learning.

Finally, if you have any worries about how your choice of subjects affects your application to a University course, we are here to talk to you or to your parents at any time.

AS / A2 Subjects (in alphabetical order)

The following outlines of the A level courses have been drawn up by Heads of Departments to help you decide which subjects are best suited to your abilities and interests. They will answer your questions on the content and structure of the course, the difference between AS and A2, the balance between examinations and coursework requirements and, most importantly, the interest and relevance of the subject itself. Some subjects require pupils to achieve a minimum standard at GCSE before they can be accepted onto the course, others require no previous knowledge. These requirements are stated in the following sections. Very occasionally, in very exceptional cases, such as serious illness, or interrupted previous schooling, these requirements may be waived.

ART



Studying Art in the Sixth Form is both challenging and exciting. The course will aim to develop intellectual, imaginative and creative powers whilst evolving individual and personal interests. It will increase visual awareness and the appreciation of art, artists and cultures. There is a great emphasis placed upon personal investigation, analysis and experimentation.

The Art department is an exciting place to work and all the staff are teachers and practising artists.

The course includes the submission of Coursework 60% and an Externally Set Assignment 40%. The course will provide the opportunity to work in all areas of the department: painting, drawing, textiles, printmaking, sculpture, photography, ICT and life drawing. Another important element is critical and contextual studies; this involves the keeping of a work journal where you make direct cultural, historical and comparative evaluations of art and artists, around a personal theme. There will be working visits to the rich and diverse collections of London's galleries and museums.

The course will provide the opportunity to build a wide-ranging portfolio in both two and three dimensions, in a variety of media. This is vital if one wishes to apply to a Foundation or Degree Course at an Art School or University. However, pupils who are not intending to undertake further studies but simply have an interest and aptitude for the subject are welcome.

To enjoy the course and to complete it satisfactorily there are several essential prerequisites. It is assumed that the pupil has successfully completed a GCSE Art course and that she is able to draw to a high standard and is hard working. From the outset the pupil will be required to spend time increasing her competence in all areas of the course and be eager to develop her ideas and abilities. A level pupils should be open minded, determined and adventurous. There is a separate and well-equipped Sixth Form Art Studio that is reserved for A level pupils. For work using ICT there is a computer Art studio and both these studios can be used at any time.



There is a four unit structure over the two year course, two units for both the AS and A2 years. The A2 coursework includes a written and visual presentation of a personal study between 1000-3000 words related to the pupils' studio work. For the AS and A2 examinations we offer two fine art areas: painting and textiles. There will be an externally set paper given to candidates at the end of the first and second years.

The minimum requirement to study this subject at A level is an A grade at GCSE.

BIOLOGY

This course aims to encourage understanding of basic biological principles. The student learns how organisms are made, how they function, how they interrelate with each other and their environment, and how they pass on their characteristics to their offspring. She learns about the biology of a wide range of different organisms including humans.

Apart from knowledge and understanding of biological concepts, a thorough understanding of scientific methods is developed. Pupils will acquire skills which are of value in any discipline; careful observation and recording, rigorous interpretation based on evidence and applying what has been learned to unfamiliar problems.

In both AS and A level Biology, the concept of the responsibility of humans as guardians of living things and their environment underpins all teaching and learning. As an outcome of the course pupils will have increased their awareness of the moral, ethical and social implications of the application of Biology and technology.

At AS level three modules are taken:

- 1) Cells, Exchange and Transport
1 hour written exam, 30% of AS
- 2) Molecules, Biodiversity and Human Interaction
1 hour 45 min written exam, 50% of AS
- 3) Practical skills in Biology 1
Internal assessment of practical skills, 20% of AS

At A2 level three modules are taken:

AS marks make up 50% of the A2.

- 1) Communications, Homeostasis and Energy
1 hour written exam, 15% of A level
- 2) Control, Genomes and Environment
1 hour 45 min written exam, 25% of A level
- 3) Practical skills in Biology 2
Internal assessment of practical skills, 10% of A level

AS and A level Biology is for anyone with an interest in the living world. The Biology Curriculum contains elements in common with both Geography and Chemistry, making either of those subjects a good combination. However, it can equally be studied without either and many girls choose Biology in order to add a science theme to their other choices. Many girls go on to study Biology at University, and for those, as well as for girls who might eventually study Medicine, or related fields, it is an important A level (many medical courses require A level Biology for admission).

The minimum requirement to study this subject at A level is an A in Biology or an A* in Additional Science GCSE.



Year 13 practical work

CHEMISTRY

Chemistry is concerned with how and why substances form in the way they do and what determines their properties such as reactivity and shape at a molecular level. This kind of understanding sheds light on other aspects of the physical and biological sciences and advanced study emphasizes this interdependence of the sciences. Chemists use this understanding to help them design and synthesise new molecules with specific properties.

AS Chemistry has three units. The first is a foundation unit, building upon GCSE concepts in the following areas: atomic structure, moles and equations, structure and bonding, the Periodic Table and some Group Chemistry. The second unit extends ideas on energy, equilibrium and rates, organic, inorganic and industrial chemistry. Unit three tests practical techniques.

A2 Chemistry (also three units) is much more quantitative than AS and extends the latter, hence introducing ideas, which are conceptually demanding and often mathematically based. Organic chemistry is extended at A2 and introduces mechanisms in order to explain the behaviour of functional groups. There is also a large factual content. Unit six tests practical techniques.

Both AS and A2 aim to stimulate enjoyment by demonstrating patterns in the subject and the links with economic, environmental and technological areas. A firm foundation of factual knowledge is acquired, which can be used in links with other scientific disciplines. Practical skills are developed; manipulation, powers of observation and interpretation are tested at AS and A2 via practical tasks set by the Examining Board throughout the course.

The aims of AS and A2 are essentially similar in both theory and experimental aspects. However, although there is a significant mathematical content in AS, there is noticeably more in A2. In addition, the synoptic paper for A2 develops the ability to see patterns and links in Chemistry to a greater extent than the synoptic element in AS. AS is quite factual, whereas A2 demands higher skills of application and interpretation as well.

Assessment of both AS and A2 is mainly by written examinations, which contribute 80% of the final marks for both courses. The other 20% are obtained from assessment of practical skills.

It is likely that A2 Chemistry will continue to be required for entry to medical or paramedical courses and also those with a high chemistry content such as biochemistry. AS offers support to less specialised courses but would be unlikely to lead to chemistry-based degrees. Both AS and A2 are valued more generally for their conceptual demands and the mathematical and practical skills which are developed, as well as the body of knowledge acquired. Chemistry combines well with other sciences, also with Geography and Economics. It can be usefully combined with the arts and humanities, but is then less likely to lead to a scientific career.

Students intending to study Chemistry at this level should have an interest in how materials behave and its relevance in industry and everyday life. It is essential to have an open mind, which is willing to apply some difficult ideas in unfamiliar situations. Commitment to learning the factual base is important, as is confidence in quantitative areas. The importance of experimental work should be appreciated together with an awareness of safety issues. Some ability to write extended answers is needed for the synoptic questions.

The minimum requirement to study this subject at A level is an A in Chemistry at GCSE.



CLASSICAL SUBJECTS

The Classics Department offers a range of subjects in the Sixth Form: Classical Civilisation, Latin and Greek. For Classical Civilisation you need not have any prior knowledge of the classical world, though if you have studied GCSE Classical Civilisation you will find it helpful. In all these subjects there will be opportunities for you to add to your enjoyment and appreciation of the ancient world through a variety of activities, including museum, theatre and site visits, dedicated Sixth Form Study Days and specialist journals, in addition to the normal course of study.

CLASSICAL CIVILISATION

This subject offers you the opportunity to study elements of the archaeology, architecture, art, history, literature, philosophy, politics, social history and religion of the Classical Greek and Roman worlds. It encourages the development of a range of analytic, interpretative and communication skills, which would prepare you for work in a wide variety of areas.

All the literature you study is in translation: you will not be expected to know any Latin or Greek. Other subjects that would go well with Classical Civilisation are History, English Literature, Art and Languages: if you are taking science or mathematical subjects, this course will add breadth to your studies and develop your essay writing skills.

For the AS course (Year 12) you will study two units:

- CIVIC Aristophanes and Athens: a critical study of three plays by Aristophanes in their theatrical, religious, social and political context. This topic involves study in the areas of literature, history and politics
- CIV2B Homer *Odyssey*: a critical study of selected books of the *Odyssey* and the religious, cultural and social values implicit in the text. This topic requires study in the areas of literature, society and values.



You may build on this in Year 13 by following a further two units:

- CIV3C Greek Tragedy: a critical study of four tragedies in their religious, cultural and social context. This topic involves study in the areas of literature, society and values, philosophy, science and religion
- CIV4C Roman Epic: a critical study of selected books of the Aeneid in its religious, political, cultural and social context. The topic requires study in the areas of literature, society and values, philosophy, science and religion.

All units are assessed through a timetabled written examination at the end of each year. For further details see www.aqa.org.uk.

You do not need to have taken this subject at GCSE to follow this course, but you will need a grade A at GCSE in English Literature or a Humanities subject to take AS Classical Civilisation.

CLASSICS: LATIN / CLASSICAL GREEK

Both these courses aim to enable you to

- develop an appropriate level of competence in the language studied and a sensitive and analytical approach to language generally;
- develop an awareness of the influence of classical languages on the languages of today and of their distinctive modes of expression;
- read, understand and make an informed personal response to literature in the original language and within its cultural context; make an informed response based on evidence from the material studied.

For the AS course (Year 12) you will study two units selected from:
Latin/Greek Language; Latin/Greek Verse and Prose Literature.

You may build on this in Year 13 by following a further two units selected from:
Latin/Greek Verse and Latin/Greek Prose.

The subject is examined in written papers taken at the end of each year. There is no coursework element in either subject at AS or at A2 level.

Prescribed authors include some of the greatest writers in classical literature, including Virgil and Horace, Cicero and Livy (Latin) and Sophocles and Euripides, Herodotus and Thucydides (Greek).

If you are currently enjoying studying either subject at GCSE, you should certainly consider taking it to AS level and beyond. Study of an ancient culture through its language and literature is recognised by universities and employers as a valuable training, and there is a huge range of professions open to anyone who has studied either subject. If you are considering taking Classics at Oxford or Cambridge, although you need not have studied both languages to apply, you will find it very helpful to have taken at least one of the languages to A2 level.

For further details see www.ocr.org.uk.

The minimum requirement to study this subject at A level is an A in Latin/Greek at GCSE.



Virgil

COMPUTING

Computing is an academic subject that follows logically from GCSE ICT. However, you do not need to have any previous ICT qualification to do the course, so it is ideal for those who wanted to do the GCSE course but could not, or anyone who wants to know more about computers and how they work or those who are interested in following a course with more detail and substance than the ECDL. It is a very practical and diverse course. With small classes there is plenty of opportunity to look in detail at how programs really work.

There are few aspects of life where computer skills and understanding are not useful, and this course is a good complement to most other subjects, art, humanities and sciences. As well as increasing your understanding of how computers work, it teaches you how to work in a methodical and logical manner and how to solve problems. There is a strong element of programming, but you do not need to have done any before.

The course gives you good skills on the computer, so that you can work with confidence and adapt to new situations. It is possibly the only course that covers all these key skills: ICT, communication, application of number, working with others and improving your own learning and performance.

It should appeal to those who want to learn more about computers and especially programming, or people who enjoy solving problems.

Course structure

The course comprises four units, two in Year 12 and two in Year 13. The marks for two units give you an AS grade and the total marks for all four units give you your A2 grade.

In Year 12 there is *no coursework*. Although there is a good deal of practical work in Year 12, the final assessment is by two examinations only. All the coursework element is in Year 13 and forms 20% of the final mark for the A level.

Here is a brief summary of the unit contents:

AS Units *Computer Fundamentals*

This introduces the parts of a computer system, software and hardware (uses and selection), types of processing, the user interface, data and information, data structures and types, data transmission, networks and protocols, binary, social effects of computers (including the Internet). There is a lot of hands on experience using software.

Programming techniques and logical methods

This unit focuses on the systems lifecycle, software selection, systems software, knowledge based systems, procedural languages, problem solving techniques, use of diagrams and other techniques, standard programming structures, debugging, use of variables. The majority of this is learning to write programs in Visual Basic.

A2 units *Advanced Computer Theory*

Operating systems and the CPU, computer architecture, memory management, language translators, data representation, advanced binary, BNF, features of high and low level languages and database theory are covered.

Computing Project

To find, research, design, implement, test, document and evaluate a solution to a real problem for a real user in conjunction with the user. This could take the form of a program, Web site, spreadsheet or something else.

Further information can be found on the OCR Web site, but make sure that you look at the specification for September 2008 onwards: <http://www.ocr.org.uk/>

You do not need to have taken this subject at GCSE to follow this course.



Above: one Year 13 on a Computing trip to the Science Museum

CRITICAL THINKING

Critical Thinking is taught in schools and universities in Europe and the U.S.A., and has been an AS subject from the start of the new AS curriculum in 2000. It is widely recognised as an excellent means to enable students of all subjects to think more clearly for themselves, as well as to assess the thinking of others; it was announced recently that 8 university Law departments have set a joint National Admissions Test for Law, which is entirely based on Critical Thinking, while Cambridge University now sets Thinking Skills tests for applicants in a number of subjects. This, of course, is not the only reason to take the course, but it does offer some recognition of the fact that the skills of Critical Thinking, which can be taught, are considered a valid measure of intelligence and suitability for university study. In a study carried out by Cambridge Assessment Authority, it was found that those who did Critical Thinking at AS scored 1 grade higher at A2 than those that did not.

This course brings together the skills involved in thinking and arguing in a critical and logical way. The aim is to provide students with a framework which can be applied in a practical manner to a range of materials, situations, problems and issues. There is not an obvious major body of content to deliver, but rather a range of skills which students should be enabled to acquire.



In doing this course you should learn to:

- understand and apply the language of reasoning;
- analyse key points within arguments;
- recognise and evaluate reasoning;
- judge the credibility of sources;
- assess arguments;
- plan and structure arguments;
- present clear and cogent arguments of your own.

The course is taught through practical examples drawn from a very wide and varied pool of resources, including the other academic subjects you have chosen, as well as newspaper articles, excerpts from TV and radio programmes and other writing of general interest. By the end of the course you will be able to identify the main structures of an argument and assess these according to established criteria; you should also be able to create structured and valid arguments of your own. You should have developed habits of critical reading, enabling you quickly to grasp the central points of any argument, and to respond to it in a valid way, even when it concerns a subject of which you have no expert knowledge. You should also have developed an appreciation of precision in the use of words.

Whether or not you choose to take the AS level examination, this course will be giving you a worthwhile training in thinking skills. It is expected that all girls who are not doing 5 full AS subjects will take the AS course in Year 12. This will consist of a timetabled double lesson and a homework every week.

DESIGN AND TECHNOLOGY

This A level course is concerned with Design as a creative and practical activity. It involves a combination of problem solving and decision making activities relating to how products look and how they are to be used and also how they can be made to the best quality and be cost effective.



The course content includes learning to use design skills and management methodologies, materials and their uses and also about the industrial and commercial practice of design. Issues such as sustainability and ethics, economics and ergonomics are also covered. There are many cross curricula links between DT and other subjects, such as: Physics and Mathematics.

The course will be taught through a series of short projects, each structured to develop your design skills and your knowledge of different materials and processes. It offers a diverse, practical and challenging but enjoyable experience which encourages design innovation and creativity.

There will be plenty of opportunities to improve designing skills under our guidance and all the regular and more advanced DT equipment and resources will be available for you to use.

There will be opportunities to attend seminars from professional designers and makers and to visit interesting workshops and factories and trade design shows such as 100%Design. You will also visit the Royal College of Art Design degree shows and your work, if good enough, may be entered into competitions.

AS Units

1. **The Advanced Innovation Challenge:** This challenge assesses your ability to design, model, evaluate and market an innovative and original product based on a set theme. The challenge is set in the DT workshop over a morning and afternoon session and lasts a total of 6 hours. There is a 1 hour written exam set at a later date. The innovation Challenge is worth 40% of the AS.

Product Study: The Product Study is a coursework unit. It consists of analysing an aspect of a product that needs updating or replacement and developing a prototype modelling and then testing an improvement to it. This is done over 30 hours and is worth 60% of the total AS.

A2 Units

2. **Design, Make and Evaluate:** This extended coursework consists of designing, making, and evaluating a product, giving a marketing presentation to a client, and producing a review and reflection on the work you have done. It should display creativity, flair and innovation. This unit takes 40 hours: and is worth 30% total A level.
3. **Product Design: exam paper:**
Component 1: - this question tests candidates on their knowledge and understanding of a range of materials and components as used in the manufacture of commonly available products, and their ability to make critical comparisons between them.
Component 2: - this design question assesses the abilities of candidates to make immediate drawn and annotated design responses to a given situation. This paper is 2.5 hours long and is worth 20% of the total A level)

Design and Technology would appeal directly to pupils who are interested in careers in product design, architecture, and engineering or in management. To do well at Design and Technology A level, you need an enquiring mind, a desire and ability to produce practical outcomes to problems, an eye for detail and to dream up new ideas. Design and Technology is challenging, purposeful and a lot of fun.

To take Design and Technology, you should have achieved at least an A grade at GCSE. However, if you have not taken GCSE and would like to take the subject at A level, you will be expected to complete and pass a Design Technology test paper which will test both your designing skills and your knowledge and understanding of the subject.

ECONOMICS

Economics equips pupils to understand what is going on in the outside world and to become good citizens, making informed choices between competing economic policies. The increase in understanding about how people earn their living should also help pupils later on with decision making in their own careers and lives.

As an academic subject, Economics has a clear theoretical structure. We proceed logically from assumptions to conclusions. In order to develop powerful insights about the economy, we make simplified assumptions about human motivation to arrive at definite conclusions. We assume that (a) firms wish to maximise their profits and (b) consumers who buy from them wish to maximise their satisfaction from the goods and services they buy. We then trace out the interaction between firms and consumers in the framework known as Supply and Demand analysis.

The branch of Economics that concerns firms and consumers is known as “microeconomics”. It is the classic part of the subject, first set out by Adam Smith in 1776. It concerns itself with questions such as how Supply and Demand determine market prices and how firms proceed to maximise profits. Its method is to conduct “thought experiments”, asking questions like “What would happen to the Demand for British seaside holidays if consumers’ income went down?” The answer to this question may not be straight-forward.

By contrast, “macroeconomics” concerns itself with what is happening at the international and national level. We focus on the conditions for the steady economic growth that has led to our prosperity. We examine also problems such as high unemployment and inflation. We ask fundamental questions such as “Why do prices generally tend to rise over time with a consequent loss of the purchasing power of money?” We also study how the U.K. fits both into the economy of the E.U. and the global economy. Macroeconomics is also about what “macroeconomic” policies the government should apply to achieve the goals of economic stability and steady growth in incomes. The courses in macroeconomics take account of current developments in the news, for instance, the origins of the Credit Crunch and the reasons for the economic downturn in 2008.

The AS and A2 Examinations

We sit the AQA Examination and there are two modules in AS and two in A2. THERE IS NO COURSEWORK. Assessment is based on different methods including structured essays, data response questions and multiple choice questions.

The units in the AS are:

- Unit 1 Markets and Market Failure
- Unit 2 The National Economy.

The AS course concentrates on fundamental theories and explores the major areas of economic policy.

The units in the A2 are:

- Unit 3 Business Economics and the Distribution of Income
- Unit 4 The National and International Economy.

The A2 course looks further at the theory of the profit-maximising firm and has a more pronounced international perspective.

Skills Required

Girls must be numerate and able to calculate percentages and percentage changes. Economics is easier for girls who find understanding graphs and tables reasonably straight-forward. At least a B in GCSE Maths is all that is required to study Economics.

University Courses

Girls who might be interested in reading an Economics course at university need to know that there are many different courses on offer. On the one hand, there are many courses which treat Economics as a humanity, as we do at JAGS; and, on the other hand, there are courses that are heavily mathematical and statistical. For such courses Maths at A level is essential.



LITERATURE IN ENGLISH (Cambridge Pre-U)

'When I am reading a book, whether wise or silly,
it seemeth to me to be alive and talking to me.'

Jonathan Swift

Reading - closely, widely and independently - is at the heart of the study of English Literature.

This course will therefore appeal most to those who take delight in:

- **experiencing** a wide range of literature;
- **attending** closely to the voices of great writers;
- **thinking** critically about what a text sets out to do;
- **analysing** and **discussing** how the written word makes a reader think, feel and imagine.



There are four elements of the Literature in English Pre-U Course:

1) Poetry and Prose (two hour examination)

This paper is based on set texts studied during the course, one pre- and one post-1900. The list of authors includes Chaucer, Marvell, Pope, Elizabeth Barrett Browning, T. S. Eliot, Sylvia Plath, Elizabeth Bishop and Derek Walcott for poetry; the prose texts include *Moll Flanders*, *Persuasion*, *The Mill on the Floss*, *The Return of the Native*, *The Age of Innocence*, *The Rainbow*, *Mrs Dalloway* and *Disgrace*.

2) Drama (two hour examination)

This paper is based on set texts studied during the course. At least one answer must be on a Shakespeare play; candidates must write one passage-based question and one essay. Set texts for this paper are *Coriolanus*, *King Lear*, *As You Like It*, *The Tempest*, *The White Devil*, *The Country Wife*, *The Room*, *The Dumb Waiter* and *Dancing at Lughnasa*.

3) Comment and Analysis (unseen; two hour fifteen minute examination)

Candidates answer any two questions from a choice of four. Each question requires a response to a previously unseen passage. The paper will include at least one example from each of the three forms (poetry, prose and drama), one piece of non-fiction, one piece of writing from before 1900 and one comparative task. The questions will require close study of the language and style of the passages.

4) Personal investigation (internally set project, externally marked)

One essay of 3,000 to 3,500 words will be required. Exploration may be by theme, genre, period or other appropriate concept. It is hoped that this will allow the deepening of individual interests and enthusiasms, and that it will also be a preparation for more advanced academic work.

Each of these elements of the course is worth 25% of the overall grade.

The final assessment of *all* units takes place at the end of the second year of study. There are no external examinations at the end of Year 12. Instead, there will be an internal examination (Comment & Analysis); the scripts will be reviewed by the Cambridge International Examination Board so that a predicted grade can then be made.

The linear nature of the Pre-U is particularly suited to the study of English. Appreciation of a text deepens over time as the reader matures and reads more. So it is that when we return to texts we think we know well, on another reading, we realise them afresh. Since the course is two years, girls have the opportunity to build up an armoury of literary skills, and also to develop substantial ideas. Individual progress will be monitored carefully along the way. At the end of Year 12, candidates will sit an unseen paper (marked by the school and looked over by the Examination Board), which will be used to predict final grades.

As no AS in English Literature is being offered, any student who does not wish to complete the Pre-U course in Year 13 may convert their study to an Extended Project at AS.

The minimum needed to study the subject at this level is an A grade at GCSE.

GEOGRAPHY

Our aim is to teach Geography in a relevant, engaging and challenging way that stimulates an interest in, understanding of and respect for the world around us.

Both AS and A2 courses are a natural progression from the GCSE syllabus and extend knowledge and skills developed at KS4 though with a different approach.

We currently follow the AQA Specification and the whole course leading to the A level qualification consists of four modules, two studied in Year 12 and two in Year 13. AS topics include Rivers, Floods and Management, Cold Environments, Hot Deserts, Population Change and Health Issues. There is an opportunity for pupils to select from a wide range of topics in Year 13 including Weather, Climate and Associated Hazards, Globalization and Development and Contemporary Conflicts and Challenges. Students also carry out field work and are tested on related skills for both AS and A2.

Fieldwork is a vital part of Geography. We offer one residential trip in Year 12, usually to South Wales, as well as day trips to, for example, the London Docklands. Every second year we try to offer an overseas trip to Iceland or Morocco. Field trips are fun, hard work and, for many, the best part of the course. They provide first hand case studies, a practical understanding of physical and human landscapes as well as exercise and fresh air!

Based as we are in London, girls have the opportunity to attend conferences and lectures organised by, for example, the Royal Geographical Society.

The study of AS/A2 level Geography combines well with a wide range of other A level subjects, including Economics, Chemistry, Biology, History, Mathematics and Design. It is an appropriate qualification for a wide range of university courses in addition to Geography itself: Earth Sciences, Environmental Science, Economics, Architecture, Medicine for example. Some universities offer Language courses in combination with Geography. Post university there are many careers that relate directly to Geography but in addition it is widely recognised that Geography degrees equip graduates with knowledge and skills highly valued in a variety of professions.

Geographers have a real contribution to make in the 21st Century.

The minimum needed to study the subject at this level is an A grade at GCSE.



A level Geographers in Morocco



Investigating sand dunes in Oxwich Bay



Experiencing urban regenerations along the River Thames

HISTORY

History at A level is challenging, exciting and fascinating. It appeals to those with lively and enquiring minds, the capacity for original thought, and a genuine interest in, and enthusiasm for, the study of the past. Although it has had a reputation for being one of the most difficult subjects to study at A level, partly because of the large syllabus content, this has been significantly reduced.



Year 13 on the study trip to Rome, February 2010.



The A level syllabus changed in 2008. The number of units studied has been reduced to 2 in Year 12 and 2 in Year 13. In Year 12 you will be studying a completely different period in one of the units: 16th Century Europe at the time of the Reformation and then either i The Catholic Reformation 1540 - 1600
or ii The European Witchcraze 1580 - 1650.

You will also be studying Indian History from 1900 - 1947.

In Year 13 you will study another 2 units. One of them will be a coursework unit covering The Making of Modern China, c1900 - 2000. The remaining unit is a source based unit and this is on Protest, Crisis and Rebellion in England, 1536 - 88.

The A level consists of three examined units and one piece of coursework. There will be some evidence work which will be a natural progression from the source work which you will have done at GCSE (although it must be stressed that it is NOT necessary to have done GCSE History to study it in the Sixth Form). You will be expected to read more widely at A2 than at AS but reading around the subject is an essential part of any History A level.

Whether you choose to study History at AS or A2 level, you will be choosing a subject that teaches you to think in a combination of ways not found in many other subjects. You will have to consider various attitudes, feelings and points of view which may be alien to your own; you will have to try to identify reasons why particular events happened as they did; you will have to study the role of groups as well as the individual and you will have to deal with all the problems of evidence as well as opinion. It is a good job that history is also so interesting!

There are very rarely clear-cut or simple answers to the questions which historians ask, as any attempt to reconstruct the past is always open to interpretation. This means you will be encouraged to develop skills of analysis, evaluation and interpretation and, at the end of either AS or A2, you should be able to communicate clear, concise and logical arguments substantiated by relevant evidence and make judgements. Clearly, these are valuable skills, whether you go on to read for a degree in History or not.

The vast majority of people who study History in the Sixth Form do so because they enjoy it and that is certainly as good a reason as any.

The minimum requirement to study this subject at A level is an A grade at GCSE. You do not need to have taken this subject at GCSE to follow this course, but you will need an A grade in either English or a Humanities subject.

HISTORY OF ART

The AS course provides a broad introduction to the History of Art covering painting, sculpture and architecture from Ancient Greece and Rome to the present day. It is divided into two modules which include an introduction to the methodology and terminology of the History of Art, the western tradition from Greek and Roman antiquity to the High Renaissance and modern art, architecture and design from mid-nineteenth century to the present day.

A2 provides an opportunity for more in-depth study and is also divided into two modules - comprising two historical studies (e.g. Art and Architecture of the fifteenth century Europe and Art and Architecture of the early twentieth century 1900-1945).



History of Art involves observation and appreciation of painting, sculpture and architecture and an understanding of the historical, social and political contexts in which they were produced. The course aims to develop the ability to communicate effectively this understanding and knowledge of the History of Art, including an awareness of art historical terms, concepts and issues. Learning how to explore and respond to the significance of art works, gaining an understanding of methods of investigating and researching, analysing History of Art source material, and understanding how art works have been and are interpreted are all important elements of the course.

The aims of the course and skills taught are common to both AS and A2. AS provides a broad introduction to Western Art and the major movements, artists and issues involved and gives a sound basis in the methodology of History of Art. A2 allows for more focused and detailed study and a chance to explore an area of particular interest.

Assessment for AS is by written examination at the end of the course. A short paper is set on each module and questions are photograph and text based as well as essay. Assessment for A2 is by two written examination papers at the end of the year.

History of Art by its nature is far reaching and touches on other subjects: History, Politics, Society, Religion, Literature and Mythology, as well as the subject's specific disciplines explained above. Therefore perhaps History of Art's greatest value is intrinsic. It is a recognised and respected academic subject and combines well with most subjects at A level especially the Arts and Languages.

To study History of Art a practical ability is not needed - GCSE Art is not a requirement. Enthusiasm, interest and enjoyment in looking at, discussing and analysing works of art are the important criteria.

MATHEMATICS AND FURTHER MATHEMATICS

It is worth remembering that many of the greatest minds in history were mathematicians, making groundbreaking discoveries that we now take for granted. Mathematics is not only a beautiful and exciting subject in its own right but also one that underpins many other branches of learning. It is consequently fundamental to the success of a modern economy. A level mathematicians are usually labelled as people with clear thinking skills and good reasoning abilities - skills appreciated by universities for a wide range of courses. The course will enable students to develop their understanding of mathematical principles and their interest in the subject. They will also learn to apply their knowledge to other subjects and in unfamiliar circumstances. Confidence and enthusiasm for the subject will be developed.

Mathematics has traditionally been seen essentially as a science subject, but it is able to take many forms. It is a prominent feature in music, dance, painting and other arts making it as creative and innovative as it is scientific. However Mathematics remains the basis for most science and technology courses and it is strongly recommended that anyone contemplating such a career should study it at A level. In addition most courses in Biology, Business Management, Economics and Geography increasingly demand knowledge of statistical techniques. Many 'old girls' who have gone on to study medicine have reported back that the statistics they learnt during the 6th Form proved invaluable at university.



The modules for the course currently studied at JAGS, broadly fall into three groups: - Pure Maths (C), Mechanics (M), and Statistics (S).

A level Mathematics is awarded to pupils who have successfully completed modules C1, C2, C3, C4 plus two more. At JAGS these are likely to be M1 and S1. Girls opting for Mathematics and Further Mathematics A levels will study a total of twelve modules which will be a mixture of the three main branches of Mathematics and will include differential equations.

In Year 12 all girls will take modules C1, C2 and M1. These modules will give a taste of higher Mathematics and a good understanding of calculus. The further mathematicians will study C1, C2, C3, C4, M1 and S1.

In Year 13 all single mathematicians will take modules C3, C4 and S1.

The further mathematicians will study six more modules, which will cover work on statistics, mechanics, pure mathematics and differential equations.

Girls opting for the single A level can expect to complete one piece of coursework in Year 12. The further mathematicians will complete one piece in the first year of the course and one in Year 13. The coursework is not something to be concerned about. In both cases the task is clearly defined and you know exactly what is required for full marks. The work covers particular skills or topics that are by their nature, unsuitable for assessment within a timed examination but nonetheless important aspects of the module.

Mathematics in the Sixth Form requires accurate manipulation, the ability to present a logical argument and to recognise the implications of the results that are found.

AS Further Mathematics and A level Further Mathematics are also offered at JAGS. Either of these courses should only be attempted by someone who really enjoys the subject and finds it fairly easy to understand, [requirements for the course are GCSE grade A* and grade A in the C1 module taken in Year 11]. The problems and topics encountered are more searching and demand a higher level of careful thought and originality from the student. Further Mathematics is advantageous (but not essential) for anyone wishing to study Mathematics, Engineering, Physics or related subjects and some Economics courses at university.

It should be noted that due to the sequential arrangement for teaching the modules, anyone wishing to do Further Mathematics has to start the course in Year 12. It is not possible to begin Further Mathematics in Year 13 if you have been in an AS Mathematics group in Year 12.

The minimum requirement to take AS Mathematics is a grade A at GCSE and you must have been in a group that has completed the full GCSE course. Girls wishing to study AS Further Mathematics must have a grade A* at GCSE plus grade A in the C1 module taken in Year 11.

MODERN LANGUAGES FRENCH, GERMAN, ITALIAN, JAPANESE, RUSSIAN & SPANISH



This is an exciting course which places emphasis on strong communication skills whilst also giving you much freedom of choice in various units. The course aims to enable you to respond readily to articles about the latest news as well as to leading writers and modern films. The object is fluency, both spoken and written, with an accurate command of the more complex language necessary to put across with conviction your ideas on current issues. The issues we study depend largely on their relevance to the latest developments in the countries concerned; these can cover politics, social issues, the environment, advertising, business, young people, the media, leisure and world-wide questions. You will also read a selection of poems, novels, short stories and plays which call for an imaginative response coupled with critical judgement. You are expected to develop your own independent opinions and to argue them persuasively in your chosen language.

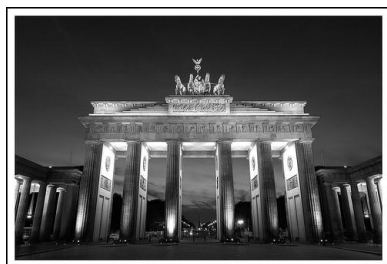
Every advantage is taken of the London cultural scene and the different language institutes in our city. An array of cultural events are organised throughout the year to expose students to the culture of the language they are learning. The Department also has an exciting programme of residential study trips abroad and every year our modern linguists have the chance to go to the country where their chosen language is spoken. There are exchange programmes with Italy and Germany as well. The Department also encourages students to consider work experience abroad and each individual department offers help and advice to students willing to work abroad.

For most languages the course is divided into 4 units, two at AS and two A2; the AS is designed as a stepping-stone between GCSE and A2. Listening, reading, writing and speaking are tested to varying degrees at each level. French, German and Spanish follow AQA specifications whilst Italian, Japanese and Russian follow Edexcel ones. All examinations take place between May (oral unit) and June.

Most high-level jobs involve an international dimension and language skills are increasingly sought after in a surprising wide range of fields including law, banking, finance, media and marketing. Because of the rising role of international organisations, jobs in scientific, pharmaceutical and engineering domains often value fluency in one or two additional languages. Most universities now incorporate a term or year studying abroad into their undergraduate degree courses in subjects ranging from law and history to engineering and business studies and an AS/A2 in the language can make this year all the more enjoyable and worthwhile.

Languages can be studied on their own at university (modules now cover a huge variety of aspects of the language and country, ranging from history and politics to film and media studies). Increasingly universities prefer students to offer two languages but many languages can now be studied ab initio at university. Languages also lend themselves well to combinations and you will find that they can be combined with many other subjects.

The minimum requirement to study languages at A level is an A grade at GCSE. You also need to be interested in the aspects outlined above and willing to travel abroad.



MUSIC

AS and A2 music offers a Sixth Form student the chance to develop their performing, creative and analytical skills. Performance and original composition can be in any style and are examined through coursework and supervised sessions. There is scope for modern technology based composition as well as a more traditional approach. Analytical work involves studying music from different eras and developing an understanding of how a composer makes the music come to life. This is further developed in the aural questions where music is considered by listening with a critical and analytical ear. Some lessons are dedicated to composition and are practical whereas others are more formally taught. All lessons emphasise the creative side of the subject and although A level music is an academic subject it can provide a welcome contrast to other more essay based subjects.

Patterns and structures of work and their assessment are similar to those at GCSE. AS contains three modules:

1. **Performing (30%)** - requiring recorded 5 to 6 minutes solo and/or small ensemble performance of up to five players.
2. **Composing (30%)** - a three minute composition written over the first two terms in response to a brief set by the examination board. You will also need to produce CD 'sleeve notes' about your piece.
3. **Developing Musical Understanding (40%)** - a two-hour exam where knowledge of set works, harmony and listening skills will be tested.

A2 extends the skills gained in the first three modules:

4. **Extended Performance (30%)** - a 12 - 15 minute solo or small ensemble performance will be recorded.
5. **Composition and Technical Study (30%)** - students submit one three minute composition and one technical exercise. Both are completed under supervised conditions. Some students may prefer to produce two compositions or technical exercises.
6. **Further Musical Understanding (40%)** - more advanced aural skills and different set works are tested in a two hour exam.

Music candidates gain much from participating in music making in school, as well as in performing outside school. Music combines well with all subjects, in particular science, maths, history and languages. Music-making enhances social skills and the transferable skills gained make music a very desirable A level qualification for both university admission and job applications.

The minimum requirement to study this subject at A level is an A grade at GCSE and performance skills of Grade 5 or above. Girls must have an instrumental or singing teacher to aid preparation for performance elements.



Children's Trust Concert

PHILOSOPHY

“The unexamined life is not worth living” (Plato). This course aims to develop your capacity for independent thinking, and to give you an insight into the work of great thinkers of the past and present. Specifically, the course will enable you to:

- Gain knowledge and understanding of Philosophy through consideration of some important issues;
- Develop a set of transferable intellectual skills, applicable to the study of other academic subjects as well as other aspects of your experience;
- Develop your ability to construct and maintain a clear, coherent argument.

Philosophy is taught through a mixture of discussion, reading and note taking, ‘thought experiments’ (these involve imagining a specific situation and working out its logical consequences), logic games and essay writing. You need to be prepared to discuss ideas with an open mind. Don’t worry if you do not feel entirely confident about writing a long essay yet - this is part of what we aim to teach you. However, you will need to submit written pieces on a regular basis, and you should also be prepared to read extensively.

The AS course provides an introduction to Philosophy through the following themes:

- Reason and experience
- Persons
- The value of art
- The debate about free will and determinism

The A2 course builds on this through a selection of the following themes and texts:

- Philosophy of mind
- Epistemology and metaphysics
- Plato, *The Republic*
- Descartes, *Meditations*

Philosophy is an intrinsically rewarding and interesting subject, and one that combines equally well with Arts or Science options. It also enhances your ability to think logically, to analyse and present arguments, and to study texts critically transferable skills much valued by universities and employers. This course introduces you to some of the greatest minds in the history of western thought, but the course is not just about the history of philosophy; you will be engaging with these issues yourself.

You do not need to have studied this subject before. However, you should have grade A at GCSE in a humanities subject, such as English or History, to be accepted for this course.



Descartes



Aristotle

PHYSICAL EDUCATION



This subject is offered at AS level only.

There are two units in this examination. Unit 1 is the 'Opportunities for and the effects of leading a healthy and active lifestyle'. Unit 2 is the 'Analysis and evaluation of physical activity as a performer and/or in an adopted roles/s.'

Unit 1 focuses on how understanding the body and its systems can help lead to a healthy and active lifestyle. The following topics are covered;

- Health, exercise and fitness.
- Nutrition and exercise.
- Pulmonary function.
- Transport of blood gases.
- Cardiac function.
- Analysis of movement in sporting actions.
- Levers and their relationship to performance.
- Principles of training.
- Skill acquisition.
- Information processing.
- The benefits of physical activity to the individual and society.
- The historical development of physical education and how it has influenced current initiatives.

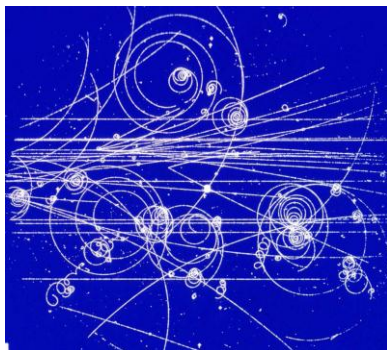
This unit is assessed in a two hour written paper which forms 60% of the AS.

Unit 2 focuses on the practical element of this subject giving candidates the opportunity to acquire and apply knowledge and understanding in the evaluation of physical performance. Each candidate will be assessed on their ability to perform effectively in two of the following roles in a chosen activity: practical performer, official and coach. Information gained in Unit 1 is applied to Exercise Physiology in practical situations.

This unit is internally assessed with external moderation and it forms 40% of the AS.

You do not need to have studied this subject at GCSE to follow this course.

PHYSICS



Tracks providing evidence for the nature of sub-atomic particles

The AS and A level Physics course will appeal to those who are curious about the physical world and the way it works.

Many university courses that are based in the scientific, technological or engineering fields will list AS or A level Physics as a preferred subject for entry. However, there are numerous other courses where the skills developed while studying Physics are seen as highly valuable. For example, students develop a high level of mathematical ability, a logical approach to problems, and an appreciation of links with philosophy and other disciplines. A student of physics has the desire to understand the world around us not only through experimentation, but also by modelling it through imaginative thought.

At JAGS, we follow the AQA (Specification A) AS and A level course. The course reflects modern developments in Physics and its applications. As well as providing an interesting and challenging subject option for those who do not intend to pursue the subject beyond school, the course gives an excellent foundation for further Physics study at university. Those intending to pursue Physics, Engineering or certain other courses at university should be aware that A level Mathematics will also be an entry requirement.

AS areas of study

Unit 1 covers:

- The nucleus including particles, antiparticles and photons; hadrons and leptons; the quark model
- Quantum phenomena including photoelectricity, energy levels and photon emission.
- Electricity including electrical quantities, resistivity, circuits and components, alternating current.

Unit 2 covers:

- Mechanics, including motion along a straight line, projectile motion, Newton's laws of motion.
- Properties of materials, including density and the Young modulus
- Waves, including longitudinal and transverse waves, progressive and stationary waves, refraction,

Unit 3 will cover the practical skills:

- Selection and use of various equipment
- Processing of data
- Making observations and measurements
- Analysing and evaluation of results.

A2 areas of study

Unit 4 covers:

- Further mechanics, including momentum, circular motion and simple harmonic motion
- Fields, including fields, capacitors, magnetic fields, electromagnetic induction.

Unit 5 is in two parts:

Section A covers probing the nucleus, radioactivity, nuclear instability and nuclear energy as well as the thermal properties of materials, ideal gases and the kinetic theory of gases.

Section B covers Astrophysics: lenses and telescopes, non-optical telescopes, classification of stars, cosmology.

Unit 6 will cover the practical skills:

- Selection and use of various equipment
- Processing of data
- Making observations and measurements
- Analysing and evaluation of results.

Written examination - 80% of final A-level

Centre-assessed units - 20% of final A-level

The minimum requirement to study this subject at A level is an A grade in Physics at GCSE. A minimum grade A at GCSE Mathematics would also be expected and, while it is not a requirement, those studying Mathematics alongside Physics in the Sixth Form will see many useful links between the subjects.

POLITICS



In its broadest sense, Politics concerns the way in which people interact - how they make decisions and settle disputes. It is concerned with power and the way in which power is distributed in society. Whilst it is possible to argue that the government has most power, it does not have complete power. Decisions are made at many different levels: politics operates at many different levels.

If you choose to study Politics at AS level you will be studying 2 units which are concerned with the way Britain is governed. The units will look at central ideas of citizenship, democracy, electoral systems, parties and pressure groups. They will also examine the governing of the UK, including Parliament, Prime Minister and Cabinet, the civil service and the Judiciary. The AS is examined in two units, including a data response element. There is no coursework at AS level.

If you choose to study Politics at A2 level, you will add to the AS units with 2 units on Political Ideologies and Concepts. These units will introduce the core ideologies of Liberalism, Conservatism and Socialism as well as developments in Nationalism, Feminism, Ecologism, Multi-culturalism and Anarchism. Political concepts covered will include the power of the state, the nature of freedom and different forms of equality.

Study of Politics at A-level is complemented by visits to the Houses of Parliament and political conferences, where students are addressed by MPs and commentators. Politics Society holds talks by speakers each term, with past speakers including the Rt. Hon. Tessa Jowell, Dominic Grieve MP and Jeremy Bowen. There are many opportunities for our students to widen their experience of Politics, through events such as The European Atlantic Movement conferences and attendance at public lectures by figures including Gordon Brown, as well as bringing Politics into school by holding our own Mock Election and mini referendum.

It is important to have achieved at least an A grade in a comparable subject at GCSE, such as History, Religious Studies or English, in order to succeed at this level. In short, it is of interest to anyone with a lively and enquiring mind whether you know anything about Politics or not.

RELIGIOUS STUDIES



The Religious Studies A level course divides into four units, two at AS and the other two at A2.

At AS level, the first unit is the Philosophy of Religion in which we tackle exciting big issues, including different arguments for the existence of God, the challenges to religious belief offered by Freud and Jung and challenges to claims of religious experience from philosophy and science.

The second unit is the fascinating world of the Old Testament of the Bible (as the textual basis of the world's three major monotheistic religions, - Judaism, Christianity and Islam). We become critics of Biblical literature and immerse ourselves in the wide sweep of Old Testament history and theology.

A2 RS allows us the choice either to extend candidates' Philosophical or Biblical understanding. For their third unit, the current Year 13 groups are studying the Fourth Gospel.

The last unit focuses on the Sociology of Religion and is a brand new course entitled Religious Fundamentalism. This entails a detailed understanding of the Christian origins of this term, its history, adaptations and misuse. The beliefs, practices and social attitudes of a range of specific movements are then investigated, how they differ from the religious mainstream and how they affect society as a whole. The movements might include the Taliban, Plymouth Brethren, Chassidic Jews, the Southern Baptist Convention in the USA and even the Amish!

The course as a whole is designed to enable girls to develop further their interest in and enthusiasm for a rigorous study of religion, and to use an enquiring and critical approach to its study. Girls will be challenged to build on and develop the understanding of religion on which they embarked at GCSE.

The two modules in each of the two years of the course are assessed entirely by examination.

This is a very flexible qualification. It is a recognised and highly respected academic Humanities subject and many girls proceed to excellent universities, reading for a wide range of subject related degrees. In addition, positive research has demonstrated the esteem in which employers hold the subject. Religious Studies is profitably studied in tandem with related Humanities, with Sciences, and with Creative Arts.

The minimum entry requirement to study this subject at A level is an A grade at RS GCSE. If you have not taken this subject at GCSE, you will need an A grade in both English and one other Humanities subject.



THEATRE STUDIES



For success in Theatre Studies, what matters is that you have shown considerable interest in this subject and relish the opportunity to go to the theatre. At both AS and A2 students show knowledge and understanding of how performers, designers and directors communicate meaning to an audience, using specialist terminology. At AS you study one set text, exploring how style, form, dramatic structure and characterisation can be interpreted in performance. We might be working practically on *Antigone* or *Playhouse Creatures*, or *Oh What a Lovely War!* for example where you appreciate the historical, social and cultural context of each: Greek Drama and the great debate about justice, the launch of women actresses in Restoration England, or political satire based on First World War material. Going to the theatre allows you to make a personal response to often challenging material. The practical unit is a group performance of a scripted play, underpinned by research of the work of an influential director, designer, theatre company and practitioner and you can take an option in acting, directing or design. We introduce you to the work of cutting edge theatre practitioners who are shaping contemporary theatre including *Complicite*, *Berkoff*, *Kneehigh*, *Shared Experience*, *Felix Barrett* and *Punchdrunk*, *Katie Mitchell* as well as those who have shaped theatre in the 20th century including *Stanislavski*, *Brecht*, *Artaud*, *Joan Littlewood*, *Grotowski* and *Peter Brook*.

AS Examination

Unit 1 (DRAM1) (60%) Written - Live theatre production seen and prescribed play.

Unit 2 (DRAM2) (40%) Practical - Performance by a group of an extract from a published play. Acting, directing, design and technical design skills can be offered, together with a supporting portfolio.

At A2 the work follows on naturally from AS but becomes more sophisticated; connections are made between theory and practice, demonstrated through a range of forms, genres and performance styles. Studying two further published plays such as Chekhov's, *The Seagull* or Wertebaker's *Our Country's Good*, and Berkoff's *the Trial* you interpret them from a performance perspective. You take a directorial overview, responding imaginatively and coherently. Wider experience of professional theatre gives you more to draw on. We look for a more advanced level of performance and production skills, the ability to think independently, make judgements and refine your work in the light of research. The practical unit at this level allows the candidates to craft and structure an original piece of theatre.

A2 Examination

Unit 3 (DRAM3) (60%) Written - Further prescribed plays and a synoptic question.

Unit 4 (DRAM4) (40%) Practical - Presentation of Devised Drama. Range of skills as before.

Some of our students go on to further their drama skills at university, often combined with the study of other subjects. We see the skills we develop in this subject as complementary to many others. Commitment, responsiveness, powers of analysis, independence of thought, group awareness, like in any other Arts degree, together with the more specific skills of creative inventiveness and technical accomplishments, could be developed in careers such as broadcasting, media, public relations, advertising and arts administration as well as professional theatre. This is a dynamic and exciting course for girls who are interested in theatre in the broadest sense.

You do not need to have taken GCSE Drama to follow this course.