

Ashlyns School Sixth Form:

Subject Information

2024 - 2026



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BUSINESS

Entry requirements: GCSE Grade 5 in English, Maths and GCSE Grade 5 in Business Studies.

This is a course that is aimed at students who are confident with manipulating data and are genuinely interested in business and current affairs; it explores the theory and practice behind the real world of business both in the UK and internationally, considering real-life business case studies and applying practical business concepts to students' own ideas.

Areas of study include Marketing and People, Managing Business Activities, Business Decisions & Strategy and Global Business. The course explores the strategic and operational decisions that are needed to ensure a business is successful.

The course also enables students to gain crucial management skills, as well as explore the opportunities presented by globalisation.

Opportunities: We offer trips to businesses such as Jaguar.

Contact: Mr A Bull - abull@ashlyns.herts.sch.uk

ECONOMICS

Entry requirements: Grade 5 in English Language GCSE and Grade 6 in Mathematics. You will need to be comfortable working with data and developing written responses to questions.

There are many reasons to study A Level Economics including its relevance to everyday life and the range of skills that you develop.

Economics is about the world around us. We study issues such as the power of Tesco over customers and suppliers, the proposed sugar tax which targets the obesity crisis, and why and how the banking sector is controlled. We consider how consumers, firms and governments behave.

Economics teaches you how to analyse situations and make choices, and develops an awareness of financial issues.

A Level Economics can lead to careers in Business or General Management, Accountancy, Investment Banking and many other paths.

Opportunities: We offer trips to the Bank of England and Jaguar.

Contact: Mr A Bull - abull@ashlyns.herts.sch.uk

ART

Entry requirements: GCSE Grade 5 in Art.

This is the course for anyone who has a keen interest in producing their own creative images, whilst developing further knowledge and understanding of processes used to create images in a range of materials and techniques. You will engage in research, evaluation and analysis of historical and contemporary art in relation to your own practical work; consider the importance of different materials in the development of your ideas; and focus on your practical ability to solve problems, employ critical analysis and document your work.

The A Level Art course can lead to study at university and colleges of higher education. In the past, students have gone on to study fine art, graphics, photography, architecture, civic design, fashion design, digital graphics, ceramics, interior design, illustration, furniture design and jewellery design at degree level.

Opportunities: You will be expected to travel independently to galleries and museums to study work from first-hand observation.

Contact: Ms K Gaches – kgaches@ashlyns.herts.sch.uk

DRAMA

Entry requirements: GCSE average points score of at least 4 across the best 8 subjects taken at GCSE, including grade 4 in English and Mathematics. Drama at GCSE is desirable but not essential.

The course demands practical, creative and communication skills in almost equal measure. You will extend your ability to create drama and theatre. You will also be required to write about drama and to develop your powers of analysis to become an informed critic. It is important that you are interested in gaining a greater understanding of how theatre and plays work and that you are keen to be involved with performances.

You will be required to be involved in drama productions, as well as studying plays and playwrights. You need to be curious about issues and ideas and have a creative instinct for communicating your ideas through drama. You may be keen on acting, writing or on the visual and technical side of theatre and wish to develop your skills in some or all of these areas. Equally, you should be interested in going to the theatre to see plays performed by different theatre companies.

The course comprises components, which are both theoretical and practical and involve research, independent learning and team work. You will be expected to rehearse outside of guided learning hours and make independent visits to the theatre.

This A Level can lead to further study in Drama, Theatre Studies and Performing Arts in Higher Education at degree or HND level. It can be used as part of your course to broaden your studies and may lead on to a career in the performing arts industries. Drama complements a range of subjects and is useful in building confidence and improving presentation skills for a range of careers.

Opportunities: A wide range of theatre trips are provided and are essential.

Contact: Miss O Mansfield - omansfield@ashlyns.herts.sch.uk

HEALTH AND SOCIAL CARE - BTEC

Entry Requirements: GCSE average points score of at least 4 across the best 8 subjects taken at GCSE, including grade 4 in English and Mathematics.

BTEC Nationals offer the right blend of technical and academic skills to support students on the first steps to their chosen career. The course allows students to develop the skills and confidence they will need for a prosperous future. Students will apply their learning through practical assessments in the form of internally assessed assignments, externally assessed tasks and written examinations.

Students should have a love and passion for the Health and Social Care sector, including looking after the elderly, less advantaged, less able, infants and young children. You should have an avid interest in human lifespan development and individual care and support needs. Topics will include working in health and social care, meeting individual care and support needs, and the theoretical underpinnings of human development. Students should be able to learn independently and research actively and methodically, and be able to give presentations. You should have effective writing skills and an ability to read technical texts, whilst being analytical.

Contact: Mr J Preston - jpreston@ashlyns.herts.sch.uk

MUSIC

Entry Requirements: Minimum Grade 6 in GCSE Music. It is recommended that students are Grade Five standard in performance and in music theory.

This is an academic course suitable for students who have an interest in the advanced study of music through the key areas of performing, composing, and listening and analysing. For this course we follow the Edugas (WJEC) syllabus.

Students will take their performing skills to a more sophisticated level. Performances can be on any instrument (including voice) and in any style. Students will learn to perform with increased maturity and sensitivity to the composers' intentions. Performances will be assessed through a recital given to a visiting examiner in the spring term of Year 13.

Students will also compose original pieces using a combination of traditional and technological approaches. Each student will produce a portfolio of compositions one of which will be in response to a brief set by the exam board.

The music of established composers is studied. Four set works are studied:

- Symphony No. 104 in D major 'London': Haydn
- Symphony No. 4 in A major 'Italian': Mendelssohn
- Trio for Oboe, Bassoon and Piano, Movement II: Poulence
- Three Nocturnes, Number 1, Nuages: Debussy

Analysis of structure, melody and harmony, as well as the historical context of the music will inform the students' understanding of the composers' artistic intentions.

An A Level in Music can lead to further study in Music or Performing Arts in Higher Education and at degree level. Students have in the past progressed to Music or Performing Arts College, and others have studied music for music degrees, or have studied music as a subsidiary to their main degree at university.

Opportunities: There will be opportunities to attend seminars and various events. Every student studying music at A Level is entitled to one thirty-minute instrumental or vocal lesson per week, free of charge.

Contact: Mr Q Hutchinson - qhutchinson@ashlyns.herts.sch.uk

PHOTOGRAPHY

Entry requirements: GCSE average points score of at least 4 across the best 8 subjects taken at GCSE, including grade 4 in English and Mathematics. Art and Design at GCSE is desirable but not essential.

This course is perfect for creative people and those who are interested in using Photography to convey ideas. The course equips students with photographic techniques and skills, encourages experimentation and creative thinking and aims to give students a sense of the world and what is happening around them. You will develop skills in both digital and traditional film and chemical processes, and gain a full understanding of the development of photography and moving image. Students learn what makes an excellent and powerful photograph and how to achieve that.

Students will benefit from owning/having access to a DSLR or mirrorless camera and it is recommended to have a photographic editing programme (preferably Adobe Photoshop and Lightroom) on a laptop or home computer; further details can be obtained from staff.

The A Level allows students to gain entry to a Foundation or degree course, and to pursue careers in Fine Art; Wildlife, Travel and Photojournalism; Social Photography – for example – weddings and portraits; and commercial photography.

Opportunities: Students are expected to travel independently to galleries and museums to study work from first-hand observation.

Contact: Mr A Grant - agrant@ashlyns.herts.sch.uk

PHYSICAL EDUCATION

Entry requirements: Grade 5 in GCSE PE and PE theory, or a Level 2 Distinction in Cambridge Nationals Sport Studies, and 2 Grade 5s in Science. Students should also have a high level of competency in at least one practical sport and participate regularly in competitive activities associated with that sport outside of school.

The PE course is ideal for students who display an interest in the history of Physical Education, the science behind how the body responds to exercise, the anatomy of sports performers and the role of the elite performer. Study combines written analytical assessment, alongside areas such as independent research into analysing performances, making comparisons to elite level athletes and creating a development plan to improve your own performance. Students should be able to write longer prose answers to analytical questions.

Students can progress from A Level to any university-based course that relates to the world of sport. Students can enter the world of work in many guises: Personal Trainers, Sport Management, Recreational Assistants and Teachers.

Opportunities: To represent the school in numerous disciplines at a high level. A commitment to your own physical education and playing in regular competitions is essential, as there are no structured practical lessons during the school day.

Contact: Mr J Preston - jpreston@ashlyns.herts.sch.uk

ENGLISH LANGUAGE / LITERATURE

Entry requirements: Grade 5 in English Language & Literature GCSEs

The English Language and Literature course is for students who enjoy reading a very wide range of literary material: novels, poetry and drama across periods and genres. You should be prepared to take on a reasonable weight of reading during the course, and develop the ability to think clearly, discuss confidently, read perceptively, and write coherently, both in your own writing and in your response to texts.

Students should be prepared to read widely and independently to inform their responses to text and their own writing. Students will study three units for the A Level course, including both reading and writing about society, reading a range of literary heritage and modern texts, and choosing a particular literary theme or technique of personal interest to study.

English A Level is highly regarded by many university courses and employers ranging across fields as varied as Accountancy, Business, Advertising, Journalism, Languages, Management and Law.

Opportunities: Writing workshops with established authors.

Contact: Mrs S Crawford - scrawford@ashlyns.herts.sch.uk

ENGLISH LITERATURE

Entry requirements: Grade 6 in English Language and grade 6 in English Literature GCSEs.

The English Literature course is for students who have a keen interest in quality literature and are prepared to take on a reasonable weight of reading during the course. The course will develop your ability to think clearly, discuss confidently, read perceptively and write coherently.

The A Level course provides an extremely broad range of literature. Students should be prepared to read widely and independently, and support their study with their own reading.

Students will study four components for the A Level course: poetry, drama, unseen texts and prose.

English Literature A Level is highly regarded by many university courses and employers ranging across fields as varied as Accountancy, Business, Advertising, Journalism, Languages, Management and Law.

Opportunities: Writing workshops with established authors.

Contact: Mrs S Harvey – sharvey@ashlyns.herts.sch.uk

FILM STUDIES

Entry requirements: Grade 5 in GCSE English Language; and either a Grade 5 in GCSE Film Studies if studied, or a Grade 5 in GCSE English Literature (There is no requirement in terms of having studied GCSE Film Studies; however, because students are required to work independently on projects, organisation and motivation are key requirements).

Film Studies is an exciting course which is most suitable for students who already have an interest in cinema. You will also need to be prepared to watch and analyse a variety of films, including foreign films. The course will provide opportunities to broaden your cinematic horizons, work on independent creative projects, explore the conventions of different film genres and explore the contextual factors that may influence film production such as companies, budgets and individual star performances. Students with the creative ability to plan storyboards, make their own films and carry out research tend to be the most successful.

Successful students often progress to studying theoretical film and music degrees; others pursue technical courses related to the film or music industry, or theatrical studies.

Opportunities: Berkhamsted Young Person's Filmmaker Competition; work experience in the industry through our contacts.

Contact: Miss C Grant - cgrant@ashlyns.herts.sch.uk

SOCIOLOGY

Entry requirements: GCSE Grade 5 in English Language.

Why do more people live on their own? Is the family in decline? What is happening to the divorce rate and why? Are men and women more equal than they used to be? The study of Sociology is the study of people in society – their lives, opportunities, beliefs and so on. It looks especially at how people's lives are often influenced by such factors as their age, gender, ethnicity and/or class background. You should have an interest in the world around you: observing people, keeping up with the news (or some of it) and watching relevant documentaries on TV all help.

Units studied include: Families and Households (exploring the changes in the way people live); Education (how class, gender and ethnicity influence educational achievement rates); Crime and Deviance (debates about the changing rate of crime, why the typical offender is young and male, how the mass media report crime); and Beliefs in Society explores the role of religion and other belief systems in society, including the way religion can exert a positive influence as well as causing social conflict.

Sociology is well–regarded by universities and recommended for those wishing, later, to study science in some medical or environmental context. It links well with issues in Politics, History, Geography and Philosophy. Students often progress to careers in Law, Management, Market Research, Journalism, Public Relations, Medicine, Education and Public Policy research.

Contact: Mr S Burton - sburton@ashlyns.herts.sch.uk

COMPUTER SCIENCE

Entry requirements: Minimum Grade 6 in GCSE Computer Science; Grade 5 or above in GCSE Maths and English Language.

The qualification is delivered over two years.

Computer Science A Level is a challenging and rewarding course designed for students who wish to gain an understanding of how technology is constructed and designed. The skills required for computing underpin other courses such as Mathematics and Science.

The course is designed to give students a secure grounding in the subject and develop critical thinking skills which assist in higher levels of scientific study. The course comprises three modules, which are compulsory and assessed at the end of the two-year course: Computer Systems (40%), Algorithms & Programming (40%) and a Programming Project (20%).

Contact: Mr B Marks - bmarks@ashlyns.herts.sch.uk

PRODUCT DESIGN

Entry requirements: Grade 5 in GCSE Design & Technology

Students will be expected to have some further background understanding of issues related to the subject.

This creative and thought-provoking qualification gives students the practical skills, theoretical knowledge and confidence to succeed in a number of careers, especially those in the creative industries. They will investigate historical, social, cultural, environmental and economic influences on design and technology, whilst enjoying opportunities to put their learning into practice by producing products of their choice.

Students will gain a real understanding of what it means to be a designer, alongside the knowledge and skills sought by higher education and employers.

Product Design students have gone on to study Product Design, Graphic Design and Engineering at university.

Opportunities: A range of individual visits across the course to relevant manufacturing companies.

Contact: Mr M Nicholson - mnicholson@ashlyns.herts.sch.uk

TEXTILES

Entry requirements: Grade 5 in GCSE Textiles or Design & Technology.

In addition, students will be expected to have some further background understanding and interest of issues related to the subject.

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

They will investigate historical, social, cultural, environmental and economic influences on design, whilst enjoying opportunities to put their learning into practice by investigating, designing and making textile products.

Students will gain a real understanding of what it means to be a designer, alongside the knowledge and skills sought by higher education and employers.

Opportunities: Fashion and Textiles Industry related exhibitions and events. Creating a portfolio of work for university, apprenticeships or higher education.

Contact: Mr M Nicholson - mnicholson@ashlyns.herts.sch.uk

GEOGRAPHY

Entry requirements: GCSE English Language Grade 5; GCSE Geography Grade 6; GCSE Maths 5

Do you have a passionate interest in the wider world, be it curiosity about how a landscape has formed, or an interest in how a community might be affected by trans national corporations? Geography (human and physical) is at the core of understanding how and why the modern world is so complex and ever changing. We explore how to interpret our changing world in a wide range of circumstances; the complex connections between societies, economies, cultures and environments, both locally and on a wider scale, and why sustainable development is so important in a broader context.

A Level Geography can open doors to both BA and BSc degree courses; students have progressed on to degrees in Geography, Economics, Geology, Sociology, Ecology, Marine Biology, Law, Oceanography, Business, Media and many more; you can also pursue more vocational routes such as Land Management Diplomas, Advanced GNVQs in Health and Social Care and Travel & Tourism.

Opportunities: Current fieldwork opportunities include Residential Fieldwork and optional international fieldwork.

Contact: Miss A Hirst - ahirst@ashlyns.herts.sch.uk

HISTORY

Entry requirements: Minimum Grade 5 in GCSE English Language; Grade 6 in History.

In Year 12 you will have the opportunity to study some of the most colourful characters in our history, from the Tudor period. There is no shortage of events: wars; rebellions, martyrdoms and burning desires are commonplace features on this course. The second unit on The Cold War in Asia will encourage learners to develop and ask significant questions about important issues arising from US policy up to the present day.

In Year 13, students will be required to consider developments in Russia over at least a hundred years. There is an in-depth interpretation element where students evaluate ways in which the past has been interpreted by historians, using their knowledge of specific individuals, events or developments prominent during the period. Unit four requires students to use a wide range of sources and interpretations, both primary and secondary, in order to carry out their own independent historical enquiry. This will develop both students' understanding of how historians work and the skills required at degree level.

The course provides an excellent foundation for a number of popular careers including International Relations, Journalism, Law, Civil Service and Business and has an important contribution to make to lifelong learning.

Opportunities: We attend Sixth Form conferences and events of special interest.

Contact: Mr D Church - dchurch@ashlyns.herts.sch.uk

POLITICS

Entry requirements: GCSE Grade 5 in English Language and a GCSE Grade 5 in any Humanities subject.

Few academic subjects are as central to our everyday lives as Politics. Politics dominates domestic and foreign news whilst political decisions help to determine how we are educated, housed, cared for in hospital and kept secure from crime and violence.

The study of Politics is concerned primarily with analysing how and why Governments interact with society. We explore why people vote the way they do; why Governments and regimes rise and fall; how political decisions are made, centrally and locally; how people can pursue their own political aims; and why international questions are central to us all.

Students will study how our political institutions actually work, how and why the political agenda emerges and how laws are made. We also develop an understanding of different political systems and different levels of government. Global politics gives students an opportunity to develop an understanding of the local, national, international and global dimensions of political activity. It also gives them the opportunity to explore the political issues that affect all of us. Students will gain understanding of abstract political concepts through grounding them in contemporary real-world examples and case studies that will develop an international awareness and knowledge of multiple perspectives. Global politics encourages discussion and debate and requires students to study and present different global perspectives, as well as interpreting competing and contestable claims. The key mainstream perspectives on global politics are liberalism and realism, and students will be expected to understand how these perspectives are applied throughout all elements of the global politics content. Candidates will have the opportunity to study different political ideologies and theories; for example, conservatism, liberalism, socialism and feminism.

Opportunities: We attend events of special interest, plus a visit to the Houses of Parliament, as well as benefiting from a range of high-profile visiting politicians and speakers to Ashlyns School.

Contact: Miss R Murray - rmurray@ashlyns.herts.sch.uk

PHILOSOPHY AND ETHICS

Entry requirements: GCSE Grade 5 in English Language and a GCSE Grade 5 in any Humanities subject.

This course provides a coherent and thought-provoking programme of study, developing transferable skills of research, in-depth discussion and analysis which are of great value and are highly regarded by universities and employers in a wide variety of diverse sectors.

Assessed by 100% examination, it is an academic, essay-based course which will help you develop the ability to understand and analyse logical, abstract and ethical arguments, equipping you to express and justify your opinions of complex and engaging concepts and ideas.

Students will develop knowledge and understanding of some of the fundamental questions of human existence, gaining valuable insight into historical attempts to answer them and how they shape our view of society and ourselves.

In doing so, they will nurture an appreciation of religious, cultural and social beliefs and teachings, debate complex and fascinating issues concerning theoretical and practical ethics and examine the fundamental nature of what it means to be a human being.

Opportunities: Students attend Philosophy lectures and exam board workshops, participate in external essay competitions and engage in collaborative conferences and webinars.

MATHEMATICS

Entry requirements: Minimum Grade 7 at GCSE Mathematics

If you enjoyed the challenge of problem solving at GCSE, you will love this course! We extend your knowledge of algebra and trigonometry as well as learning some brand new concepts such as calculus. When you study mechanics, you will learn to describe mathematically the motion of objects and how they respond to forces acting upon them. You will learn the technique of mathematical modelling, turning a complicated physical problem into a simpler one that can be analysed and solved using mathematical methods. Statistics involves learning techniques to summarise and analyse numerical data in order to arrive at conclusions about it.

Many of the ideas you will meet in the course form an almost essential introduction to such important modern fields of study as cybernetics, robotics, biomechanics and sports science, as well as the more traditional areas of engineering and physics. You will understand the relevance of mathematics, from understanding the principles behind Formula 1 cars, to how likely the earth is going to be hit by a comet in the next few years.

The course is challenging and interesting. It builds on work you will have met at GCSE, but also involves new ideas that some of the greatest minds of the millennium have produced. It serves as a very useful support for many other qualifications as well as being a sought-after qualification for the workplace and courses in higher education.

A Level Mathematics is a highly respected qualification for entry to a wide variety of full-time courses in higher education, and employment: it develops clarity and logical thinking. Higher education courses or careers that either require Advanced GCE Mathematics or are strongly related include Economics, Medicine, Architecture, Engineering, Accountancy, Teaching, Psychology, Environmental Studies, Computing and Information/Communication Technology.

Contact: Mrs H Burton - hburton@ashlyns.herts.sch.uk

FURTHER MATHEMATICS

Entry requirements: Grade 7 in Mathematics GCSE. If you achieve a Grade 7 you will need to attend an advice and guidance meeting with Mrs Burton. You must also be studying A Level Mathematics

Students with a high aptitude and a genuine interest in Mathematics would benefit from the challenges and diversity of the course. It is strongly recommended for students considering studying Mathematics in higher education. We study topics such as decision maths (using mathematical modelling to solve real world problems). You will study the structure, use and efficiency of algorithms, the use of networks to represent real situations together with critical path analysis, linear programming and simulation. These are all areas of maths that are used in managing commercial and industrial concerns.

You will extend your algebra skills and curve sketching beyond those acquired at Advanced Level GCE, together with new areas of mathematics such as matrices, complex numbers and mathematical proof by induction.

We also develop further your understanding of Mechanics. You will see how your mathematical knowledge applies to the real world. The area's you will study include Momentum and Impulse, Work, Power and Energy and Elastic Collisions in both one and two dimensions.

Further Mathematics A Level can be useful when following degree courses as wide ranging as Economics, Medicine, Architecture, Engineering, Accountancy, Teaching Psychology, Environmental Studies, Computing and Information and Communication Technology.

Contact: Mrs H Burton - hburton@ashlyns.herts.sch.uk

FRENCH

Entry requirements: GCSE Grade 6 in French

This course is suitable for students who have a real passion and aptitude for languages and who are proactively searching opportunities to develop their knowledge of French. The course provides opportunities to enjoy studying authentic written and multimedia materials, developing further the skills acquired at GCSE: listening, speaking, reading and writing. Students will explore a range of topics with the emphasis very much on the culture of French-speaking countries, including units on family structures and changes, political and artistic culture of French speaking countries, immigration and multicultural society and occupation and resistance.

We encourage students to immerse themselves in the language and culture of the country/countries where the language is spoken. Outside the classroom, students are encouraged to read widely in the target language, to listen to radio broadcasts of foreign language stations and to watch TV programmes and films in French. Each student will spend a minimum of thirty minutes per week with a French assistant to develop his/her listening and speaking skills.

The ability to communicate in a foreign language is a valuable skill sought by employers. In recent surveys, nine out of ten employers have indicated that they prefer students who have foreign language skills, covering careers in Banking, Civil Service, Commerce/Industry, Communications, ICT, Interpreting/Translation, Journalism, Law, Librarianship, Manufacturing and Service Industries, Politics, Broadcasting, Teaching and Tourism/Travel.

Opportunities: We are aiming to offer a trip to France for Year 12 and 13 students.

Contact:

Mrs S Manns - smanns@ashlyns.herts.sch.uk Mr I Jabbie - ijabbie@ashlyns.herts.sch.uk

SPANISH

Entry requirements: Minimum GCSE Grade 6 in Spanish

This course is suitable for students who have a real passion and aptitude for languages and who are proactively searching opportunities to develop their knowledge of Spanish. The course provides opportunities to enjoy studying authentic written and multimedia materials, developing further the skills acquired at GCSE: listening, speaking, reading and writing. Students will explore a range of topics with the emphasis very much on the culture of Spanish-speaking countries, including units on the evolution of Spanish society; political and artistic culture of Hispanic countries; immigration and the multicultural society; and Franco's dictatorship and the transition into democracy.

We encourage students to immerse themselves in the language and culture of the country/countries where the language is spoken. Outside the classroom, students are encouraged to read widely in the target language, to listen to radio broadcasts of foreign language stations and to watch TV programmes and films in Spanish. Each student will spend a minimum of thirty minutes per week with a Spanish assistant to develop his/her listening and speaking skills.

The ability to communicate in a foreign language is a valuable skill sought by employers. In recent surveys, nine out of ten employers have indicated that they prefer students who have foreign language skills, covering careers in Banking, Civil Service, Commerce/Industry, Communications, ICT, Interpreting/Translation, Journalism, Law, Librarianship, Manufacturing and Service Industries, Politics, Broadcasting, Teaching and Tourism/Travel.

Opportunities: We are aiming to offer a trip to Spain for Year 12 and 13 students.

Contact:

Mrs S Yoxall - syoxall@ashlyns.herts.sch.uk
Mrs S Manns - syoxall@ashlyns.herts.sch.uk

BIOLOGY

Entry requirements: Minimum of 2 Grade 6s in Science and a Grade 6 in Mathematics.

Students will learn about the fundamental ways in which living things are organised. The course covers topics such as lifestyle factors affecting heart, circulation and cardiovascular disease; genes, genetic diseases, DNA, protein synthesis, and ethical issues relating to genetic screening; the genome, cell division and cell structure. We explore the implications of scientific discovery in stem cells, embryo research and cloning. If you are excited by discussing forensic pathology, the working of the brain and the nervous system, viruses, immunology and the effects of climate change and biodiversity, this is the course for you!

This course can lead to a degree course in Biology, Environmental Sciences, Medicine, Nursing, Dentistry, Psychology or Pharmacy, and employment in areas such as Pharmacy, Catering, Biotechnology and Land Management.

Opportunities: Fieldwork may take place during the Summer term of Year 12.

Contact: Mrs N Gunton - ngunton@ashlyns.herts.sch.uk

CHEMISTRY

Entry requirements: Minimum of 2 Grade 6s in Science and a Grade 6 in Mathematics.

Understanding Chemistry is essential to the understanding of many other scientific disciplines, from Agroscience to Zoology. Chemistry plays a vital role in everyday life. The course provides excellent preparation for further study at university and is required for most medical and veterinary science courses; it also opens doors to a wide range of non-scientific courses and career paths. Chemistry is a challenging and well-respected qualification, and many of our students have used their A Level Chemistry as a platform to obtain excellent degrees from the country's top universities.

The Chemistry course involves exploration of physical, organic and inorganic chemistry. Students will develop further their skills of investigation through practical experiments, problem-solving, calculations and discussion.

Opportunities: Links with Oxford University Department of Materials Science and Chemistry.

Contact: Mrs N Gunton - ngunton@ashlyns.herts.sch.uk

PHYSICS

Entry requirements: Minimum of 2 Grade 6s in Science and a Grade 6 in Mathematics.

Physicists aim to gain a deeper understanding of the natural world, ranging from identifying the smallest fundamental particles right up to explaining how the universe has evolved. Over the course, you will study how to work scientifically and apply Physics principles to applications and practicals; we study topics such as materials, gravitational and magnetic fields, mechanics, electrical circuits, waves and the particle nature of light, nuclear radiation, nuclear and particle physics and space.

Physicists are systematic, clear thinkers who can solve complex problems; these skills are highly valued, and students might typically pursue degrees in courses ranging from Physics, Natural Sciences, Material Sciences, Medicine, Engineering and Radiography and/or go straight into employment in the Scientific or Financial Sectors.

Opportunities: Students attend a Particle Physics Masterclass where this is available. There are strong links with Oxford and Cambridge University who offer a range of online and face to face tutorials, lectures and visits.

Contact: Mrs C Lowe - clowe@ashlyns.herts.sch.uk

PSYCHOLOGY

Entry requirements: Grade 5 in GCSE English Language and Mathematics and one Grade 6 in a GCSE Science.

Why is it that some people suffer from stress and mental illness? Why do we remember things? Why do some people fear snakes yet a few think they are cuddly?

Psychology is the science of human behaviour and experience; it aims to study objectively the human mind and behaviour through conducting research. It also has real world applications to issues in everyday life, ranging from things like artificial intelligence to social change. We explore key psychological theories, develop your skills of analysis and interpretation of research, and explore the ethical issues involved in conducting Psychology experiments.

Students who take Psychology need a combination of curiosity and scepticism, and need to enjoy research. Students often take their studies further at degree level, pursuing Psychology, Sociology, Health & Social Care, Law, Biology, English and Sports Studies. Students who wish to pursue a career in any of the caring services, or in marketing or business, will find an understanding of Psychology useful.

Opportunities: We regularly attend the AQA exam revision day in London, as well as attend A-Level focused Psychology conferences, as part of our Summer Project.

Contact: Mr G Monks - gmonks@ashlyns.herts.sch.uk