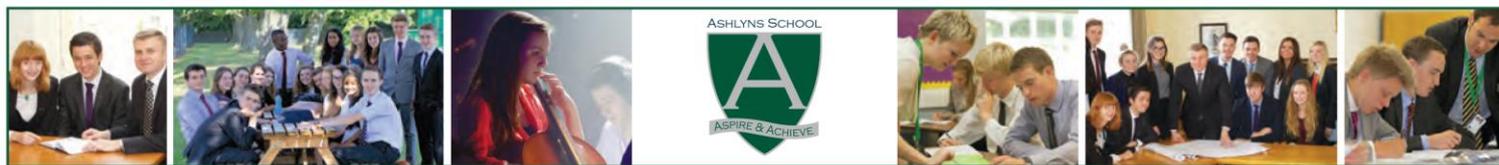




Ashlyns School Sixth Form

Course Information Booklet

2016-18



Course Information Booklet: Contents

Business and Economics (page 3)

Business
Economics

Creative and Physical Arts (pages 4-7)

Art
Drama
Music
Physical Education
Photography

English, Film and Sociology (pages 8-9)

Creative Writing
English Literature
Film Studies
Sociology

Design and Technology (pages 10-11)

Computer Science
Graphics
Textiles

Humanities (pages 12-13)

Geography
Government and Politics
History
Philosophy of Religion and Ethics

Mathematics (pages 14-15)

Further Mathematics
Mathematics

Modern Languages (pages 16-17)

French
Spanish

Science (pages 18-19)

Biology
Chemistry
Physics
Psychology

BUSINESS AND ECONOMICS

BUSINESS

Entry requirements: GCSE Grade C in English, Maths and Business Studies (if studied).

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 have active and successful Young Enterprise and Dragons' Den competitions teams; subject trips to global businesses such as Jaguar, and guest speakers.

Contact: Mrs D Skidmore – dskidmore@ashlyns.herts.sch.uk

ECONOMICS

Entry requirements: Grade C in English and Grade B Maths. GCSE Business Studies is not essential, although if taken, a Grade B is required. You will need to be comfortable working with data and developing written responses to questions.

Economics explores how markets work (and fail); the UK Economy; business behaviour and the Labour Market; and global issues such as the impact of emerging economies, poverty and inequality. We analyse economic problems and evaluate economic arguments and evidence.

It is suitable for anyone who wishes to use an enquiring, critical and thoughtful approach to the study of a wide range of economic and social issues. An interest in current business and economics affairs is vital!

A Level Economics can lead to careers in Business or General Management, Accountancy, Investment Banking and many other paths. (Please note: if you are considering studying Economics at university, many courses require Maths A Level, and some Russell Group Universities also require Further Maths A Level).

Opportunities: We have active and successful Young Enterprise and Dragons' Den competition teams; subject trips to institutions such as The Bank of England and Jaguar.

Contact: Miss D Skidmore – dskidmore@ashlyns.herts.sch.uk

CREATIVE AND PHYSICAL ARTS

ART

Entry requirements: GCSE Grade B in Art.

This is the course for anyone who has a keen interest in producing their own creative images, and who wants to develop 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, ceramics, interior design, 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: Mrs S Sambridge– ssambridge@ashlyns.herts.sch.uk

DRAMA

Entry requirements: Drama GCSE is useful 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 of units 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 and Theatre Studies complements a range of subjects and is useful in building confidence and improving presentation skills in a range of careers.

Opportunities: A wide range of theatre trips are provided and are essential in order to write a review.

Contact: Ms M Parks - mparks@ashlyns.herts.sch.uk

CREATIVE AND PHYSICAL ARTS

MUSIC

Entry Requirements: Minimum Grade B 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 high level study of music through the three key areas of performing, composing, and listening and analysing.

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 also compose original pieces using a combination of traditional and technological approaches.

The music of established composers is studied. Analysis of structure, melody and harmony will inform the students' understanding of the composers' artistic intentions.

Students will learn to perform with increased maturity and sensitivity to the composer's intentions. They will compose their own music using a combination of traditional and technological methods and develop their musical understanding by analysing the stylistic traits of a wide variety of musical genres through the study of set works. They will also acquire an increased understanding of music.

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 as a subsidiary to their 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

CREATIVE AND PHYSICAL ARTS

PHYSICAL EDUCATION

Entry requirements: Minimum Grade B at GCSE and a Grade B in the GCSE theory paper. Students should also have a high level of competency in at least two practical sports 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 anatomy of sports performers and the role of the elite performer. Study combines written analytical assessment, alongside areas such as independent research into sports provision locally and at elite levels, and evaluating development plans for improved 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 go into the world of work in many guises: Personal Trainers, Sport Management, Recreational Assistants, Teachers etc.

Opportunities: 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

CREATIVE AND PHYSICAL ARTS

PHOTOGRAPHY

Entry requirements: Study of 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. Students 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 need a 35mm Digital Single Lens Reflex (DSLR) camera and it is recommended to have a photographic editing programme on your 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: Miss C Niven – cniven@ashlyns.herts.sch.uk

ENGLISH, FILM AND SOCIOLOGY

CREATIVE WRITING

Entry requirements: At least five GCSE A-C grades, including English Language and English Literature at B grade or above.

This is a course for students who are talented in creative and imaginative writing, whether that be fiction, non-fiction, poetry or script. You will need to be keen readers who are willing to take on the level of reading required in this A Level – it is not possible to study creative writing without studying other writers! You will be reading and studying a wide variety of genres, including fiction, journalism in its many forms, online writing, persuasive writing, reviews, and creative non-fiction, supplemented with your own independent reading, to develop your ability to think clearly, discuss confidently, read perceptively, and write coherently. 60% of the course is assessed through coursework.

An A Level in Creative Writing is suitable for those intending to study English Literature, as well as journalism, media, film or art.

Opportunities: writing workshops with our author-in-residence, Rowan Coleman; workshops at the British Library; writing and editing *Ashlyns Matters*.

Contact: Mrs R Kingston – rkingston@ashlyns.herts.sch.uk

ENGLISH LITERATURE

Entry requirements: At least five GCSE A-C grades, including English Language and English Literature at B grade or above.

The English Literature course is for students who enjoy reading a wide range of literary material: novels, poetry and drama across periods and genres. They should be prepared to take on a reasonable weight of reading during the course! They will develop the 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 support their study with their own reading. Students will study four components for the A level course:

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 our author-in-residence, Rowan Coleman; workshops at the British Library; regular theatre trips.

Contact: Mrs R Kingston – rkingston@ashlyns.herts.sch.uk

ENGLISH, FILM AND SOCIOLOGY

FILM STUDIES

Entry requirements: GCSE Grade B in both English Language and English Literature. (There is no requirement in terms of having studied GCSE Film Studies, however students are required to work independently on projects therefore 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 Film Maker Competition; work experience in the industry through our contacts.

Contact: Mr N Goodchild – ngoodchild@ashlyns.herts.sch.uk

SOCIOLOGY

Entry requirements: Minimum GCSE Grade C 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 H Cowley - hcowley@ashlyns.herts.sch.uk

DESIGN AND TECHNOLOGY

Computer Science

Entry requirements: Minimum Grade B in GCSE Computer Science; Maths, Double Science and English Language.

The Computer Science course develops students' understanding of how technology is constructed and designed, as well as communication and decision-making skills. Students will build an e-portfolio as a showcase of their achievements. This course is suitable for anyone who wishes to gain a good underpinning of computing skills and it supports other courses such as Maths and Science. The A Level is relevant to careers in web design and development, software development and countless degree opportunities that require thinking and algorithmic skills.

Topics covered include: Computer systems, Programming and Algorithms and a Programming project enabling students to apply the programming skills they have gained during the course.

Contact: Mrs Ghalichi-Tabriz - sghalichitabriz@ashlyns.herts.sch.uk

Product Design: GRAPHICS

Entry requirements: Minimum Grade C in GCSE Graphic Products, Resistant Materials or Systems and Control.

This course enables students to develop their own creativity, capability and entrepreneurial skills, applying knowledge and understanding to a range of technological activities. Students will complete coursework on product design; manufacture and investigation; create a graphic product to a client specification; and explore designing for the future and D&T in practice.

The course tests students' ability to develop and sustain their own innovation, to recognise constraints, to produce high quality products and to apply essential knowledge, understanding and skills of design production processes to a range of technological activities. Students will develop an understanding of industrial practices as well as critical evaluation skills in technical, aesthetic, economic, environmental, social and cultural contexts.

Graphic Products 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

DESIGN AND TECHNOLOGY

TEXTILES

Entry requirements: Minimum GCSE Grade C in Textiles or Graphic Products.

The Textiles A Level links with many specialist design courses offered at degree level by universities, and tests your ability to design and create high-quality products and recognise constraints on production. Students will use ICT to enhance their design and technological capability. We also develop the skill of critically evaluating design from technical, aesthetic, economic, environmental, social and cultural perspectives.

Where students have used Textiles as the focus of their studies they have gone on to Design and Fashion related courses and Art Foundation courses at university.

Opportunities: Fashion and Textiles Industry related exhibitions and events.

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

HUMANITIES

GEOGRAPHY

Entry requirements: GCSE English Grade B; Geography Grade B.

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 at Swanage (Crowded Coasts) and optional international fieldwork (Rebranding Places). We also offer opportunities to attend Geographical Association lectures and Royal Geographical Society study days.

Contact: Head of Geography – Miss J Cross: jcross@ashlyns.herts.sch.uk

HISTORY

Entry requirements: Minimum Grade B in GCSE English Language; Grade B 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

HUMANITIES

GOVERNMENT AND POLITICS

Entry requirements: GCSE Grade B in English Language or History.

Few academic subjects are as central to our everyday lives as Government and Politics. Politics dominates domestic and foreign news and 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 also study the European Community, globalisation, human rights, international relations, 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, comparing the practices of the British and United States systems of government. Candidates will have the opportunity to study different political ideologies and theories; for example conservatism, environmentalism, liberalism and socialism.

Opportunities: We attend Sixth Form conferences and events of special interest, as well as benefiting from a range of high-profile visiting politicians and speakers to Ashlyns School.

Contact: Mr P Harland – pharland@ashlyns.herts.sch.uk

PHILOSOPHY OF RELIGION AND ETHICS

Entry requirements: Minimum GCSE Grade B in English Language or Religious Studies.

This course will develop an interest and understanding of some of the fundamental questions of human life. You will gain an insight into how human beings try to answer them, something which might shape how you see society and yourself. You will begin to explore what it means to be a human being. We explore religious teachings on the nature and value of human life; the Philosophy of Religion, including atheism, postmodernism and the relationship between reason and faith, as well as questions of life, death and beyond and the problem of evil. The course is tested through examination only.

This is a traditional essay based subject, which is valued by universities because it develops the ability to understand logical arguments, and encourages you to express and defend your opinions. These skills are helpful in any degree course at university and are especially relevant to Humanities subjects and Law.

Opportunities: Students attend Philosophy lectures and exam board workshops.

Contact: Ms S Fox – sfox@ashlyns.herts.sch.uk

MATHEMATICS

FURTHER MATHEMATICS

Entry requirements: GCSE Grade A in Mathematics, and also choosing 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 Mathematics 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 pure mathematics. You will develop a repertoire of numerical techniques to apply to mathematical problems and learn to appreciate the limited accuracy of the techniques and ways to control errors. You will also learn to implement these numerical techniques on computers and develop awareness as to the potential difficulties.

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.

Opportunities: UK Senior Maths Challenge competition; study seminars with FMSP.

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

MATHEMATICS

MATHEMATICS

Entry requirements: Minimum Grade B at GCSE Mathematics

If you enjoyed the challenge of problem solving at GCSE, you'll 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.

Opportunities: UK Senior Maths Challenge competition; study seminars with FMSP.

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

MODERN LANGUAGES

FRENCH

Entry requirements: GCSE Grade B 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 four 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 Media, Popular Culture, the Environment, Multicultural Society and Contemporary Social Issues.

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: Students can participate in a French study visit to Normandy. It is recommended that students spend as much time as possible in France. We are aiming to organise an exchange programme with a school in Nice.

Contact: Mrs S Manns - smanns@ashlyns.herts.sch.uk

MODERN LANGUAGES

SPANISH

Entry requirements: Minimum GCSE Grade B 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 four 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 Media, Popular Culture, the Environment, Multicultural Society and Contemporary Social Issues.

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 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: An exchange programme with our partner school in Cordoba.

Contact: Mrs S Manns – smanns@ashlyns.herts.sch.uk

SCIENCE

BIOLOGY

Entry requirements: Minimum of 2 Grade Bs in Science and a B 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 cells (division, structure, stem cells), and biodiversity. We explore the implications of scientific discovery in stem cells, embryo research and cloning. If you're excited by discussing forensic pathology, the working of the brain and nervous system, viruses and the effects of climate change, 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 takes place during the Summer term of Year 12.

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

CHEMISTRY

Entry requirements: Minimum of 2 Grade Bs in Science and a B in Mathematics.

Understanding Chemistry is essential to the understanding of many other scientific disciplines, from Agrosience 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; but 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 Lowe – clowe@ashlyns.herts.sch.uk

SCIENCE

PHYSICS

Entry requirements: Minimum of 2 Grade Bs in Science and a B 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, Material Sciences, Medicine and Engineering and Radiography to employment in the Scientific or Financial Sectors.

Opportunities: Links with Cambridge University Department of Physics and local businesses.

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

PSYCHOLOGY

Entry requirements: Minimum GCSE Grade B in English Language, Maths and 2 Sciences.

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 are degree level, pursuing Sociology, Law, Biology, English or 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 are currently part of a Psychology Research project with University College, London and also taking part in the AQA exam revision day in London.

Contact: Ms H Izamis – hizamis@ashlyns.herts.sch.uk