



"Where East meets West"

Sixth Form Curriculum Booklet

(for Years 12 and 13)





















TABLE OF CONTENTS	
Welcome	3
Welcome to the Sixth Form	4
Key Information for The Sixth Form	5
Sixth Form Life	6
The Next Stage - University	7
Student Enrichment	8
English	9
Mathematics	10
Art and Design	11
Biology	12
Business	13
Chemistry	14
Computer Science	15
Geography	16
History	17
ICT	18
Mandarin	19
Music	20
Physics	21
Psychology	22



WELCOME

We take great pride in our Secondary School, fostering inclusivity and ambitious goals for our students. With a focus on academic excellence and understanding the unique needs of each student, we encourage intellectual growth, independent thinking, and the development of responsible young adults. Our mission, 'Leadership in the Making — to Create Tomorrow's Leaders Today,' guides us, ensuring students leave equipped to face 21st-century challenges.



Participation in our diverse extra-curricular program is expected, offering a range of activities to challenge students in sports, arts, and community engagement. Our school is not just about learning; it's a space for growth, discovery, and transformation. We urge students to explore, question, and embrace challenges, stepping beyond their comfort zones.

Catering to ages 11 to 18, our secondary school comprises three sections led by Year Group Managers. We support students of all abilities, including those with English as a second language, offering tailored lessons and individual assistance for specific learning requirements.

In Key Stage 5, students have freedom in choosing AS and A Level subjects, taught by native English-speaking specialists. Despite our non-selective approach, our examination results are highly competitive globally. Our students regularly earn national prizes and attend prestigious universities in Thailand and abroad.

We are a very open school, and I am very happy to meet prospective parents at any time.

Neil Hayward Head of Secondary

Our Sixth Form is an essential part of our school. We seek to prepare our students for their continuing lifelong educational journey. The Sixth Form seeks to develop transferable independent learning skills which distinguish our students from other international schools. At the heart of these skills is a focus on academic rigour and success following the Cambridge International AS and A Level syllabi for a wide range of subjects.

In addition, we develop the whole student through a broad range of extra-curricular activities designed to develop leadership and an understanding of the importance of playing a full part in the local and wider community. A broad focus on internationalism links to preparation and support for university applications where our alumni are represented in the UK, across Europe, Asia, Australia and the USA in a range of top class universities.

Our small class sizes and form tutoring system ensure that we are able to support and nurture our students and help them to fulfill their potential. We pride ourselves on a friendly environment in which we develop our students and prepare them for a diverse range of future careers in which they will become tomorrow's aspiring leaders.

With best wishes

Luke Turnill

Head Of Sixth Form



"Where East meets West"

WELCOME TO THE SIXTH FORM

The Sixth Form is a friendly and inclusive environment that focuses on achieving optimum academic results. All students are inspired, motivated, challenged and supported to reach their highly aspirational goals. They are also provided with increased levels of responsibility, leadership and independence.

The curriculum offer enables students to study beyond the requirements of public examinations because we know that those extra-curricular and co-curricular activities and programmes ensure continued success at university and in the workplace as well as helping students gain the very best grades.

Our aim is to develop young men and women who are:

- confident
- ambitious
- motivated
- · learn from failure
- digitally literate
- · articulate communicators
- · creative thinkers
- problem-solvers
- · able to take responsibility for their own learning

As a consequence of all we do, the Sixth Form is a vibrant community of intellectual, articulate, confident, socially-adept and dynamic young men and women that go on to study a wide range of courses at universities all around the world. In short, our graduates are well-placed to become leaders in their chosen field.

The curriculum offer

Year 12

- Four AS-levels chosen from (Art, Biology, Business Studies, Chemistry, Computer Science*, English Literature, Geography, History, ICT*, Mandarin**, Mathematics, Music, Physics or Psychology)
- Enrichment Programme PSHE, Careers advice, support for university application anywhere in the world, including a bespoke programme for those interested in applying to Oxbridge or an Ivy League University
- Physical Education
- Self-directed study time
- * Either ICT or Computer Science (demand will dictate which subject will run)
- ** Only offered as AS level, examined in November of Year 13

Year 13

- Continue with three out of their four chosen A-level subjects or continue with four
- Pick up Further Mathematics (only available for those who took the full A-level in Year 12 and are thinking of studying Mathematics, Theoretical Physics or Computing at university)
- Enrichment Programme as for Year 12
- Physical Education
- · Self-directed study time



"Where East meets West"

KEY INFORMATION FOR THE SIXTH FORM

Homework and Revision

- Personal Study made up of homework and self-directed study.
- Students usually respond positively to parental interest homework and self-directed study should form part of regular discussion and will be posted on Google Classroom
- At least 2 hours extra per subject per week for self-directed study
- Organisation is often the biggest challenge and their Form Tutor will help them get it right developing independent learning skills
- Students will be focusing on and continuing to develop their revision skills - revision timetables are a useful tool in supporting them with managing a heavier workload independently

The Pastoral System

- Students are divided into 2-3 form groups
- The Form Tutor is their first point of contact at the start of the day and also their last, at the end of the day
- For parents, the Form Tutor is the first person you speak to or email regarding matters about your son or daughter's school life

Contacting the School and Absences

- Please do not contact your son or daughter on their mobile phone
- If you need to contact your son or daughter, phone the School Office
- If your son or daughter is ill, please contact the office or the Form Tutor that day
- A good attendance rate is key to success –90% of young people with absence rates below 85% fail to achieve their potential at A level



EVISION TIMETABLE PLANNER: 2

THURSDAY

WEDNESDAY



SIXTH FORM LIFE

Student responsibility

As senior students we expect students to demonstrate leadership. They are given opportunities to do this in a number of ways. At the end of Term 1 prefects are chosen through a selection process and from this two Head students will be identified. These prefects perform a number of student leadership roles to support the whole school. The House system has House captains who are chosen from the sixth form who encourage and support their respective houses throughout the year in a variety of competitions.

Residential Trip

Upon completion of IGCSE, A level and AS level students are expected to attend a week's residential that develops research based skills in the field as well as undertaking a community based project to support a local charity. They will also be given the opportunity to partake in a range of outdoor educational activities to broaden their horizons.

The Sixth Form Centre

Students are able to use the Sixth Form Centre as a base for private study. All students are allocated a desk and working area. In addition there are a number of areas for collaborative working as well as a printer that all students are able to use with their own devices. Facilities are also available for hot and cold drinks. In addition students may use the on site coffee shop in their private study periods.







"Where East meets West"

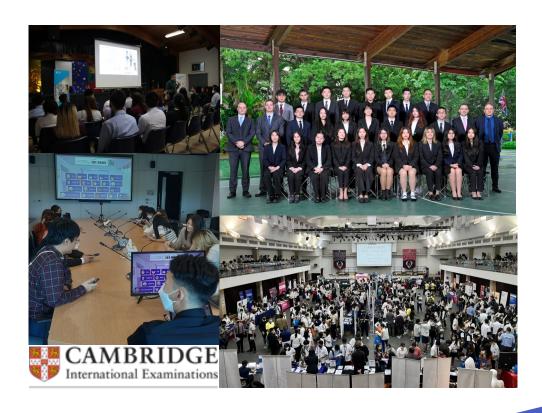
THE NEXT STAGE— UNIVERSITY

It is so important to make the right decision about which course to study and which university to attend. During Years 12 and 13 we will guide and support students every step of the way. Students regularly gain places at some of the most prestigious universities in Thailand and the rest of the world such as the UK Russell Group, (including Oxbridge), lvy League in USA, and Group of Eight in Australia.

Because students will be applying for places at universities in many different countries, and because each country has slightly different entrance requirements and procedures, our guidance is bespoke for each student.

Guidance will broadly follow:

- Information about different courses and universities
- Information about entrance requirements
- Support to complete application forms
- Help with the writing of personal statements
- Interview preparation and practice
- Coaching for specific university tests such as IELTs, SATs, BMAT, LNAT (and many more)
- Oxbridge/Ivy League/Group of Eight Programme



STUDENT ENRICHMENT

At St. Stephen's we have a learner profile of characteristics we want our students to possess before they graduate. Enrichment plays a big part in developing these skills and in creating a more well rounded individual. We split enrichment into three main areas:

Enrichment

Enrichment is our programme of after school clubs and activities. We encourage all students to participate in a minimum of two activities per week after school from 3.10-4.10pm. We offer a wide range of activities and categorise them as Creative, Action or Service focused. We also encourage students to complete at least 1 activity from each of these categories in order to help balance their interests and develop a wider skill set. Some examples of CAS clubs currently offered to Sixth Form are: International Award, Eco-Schools, Model United Nations, Asean Cooking, Football and Badminton.

Community Service

We have a wide programme of Community Service at St. Stephen's and every year group works with at least one of our community service partners. In Key Stage 5 PSHE lessons, our students complete community service by planning activities for the SIS communities. They can join Service CAS clubs, and also have the opportunity to contribute to the school community by becoming a Buddy, or a member of the Student Council.

House System

All students from Years 1 to 13 belong to one of our four School Houses. We believe that being part of a House gives a child a real sense of belonging and community, and gives them a chance to work as part of a team with students from different parts of the school. Our Houses are named after Western and Thai mythical creatures, reflecting our ethos of 'East meets West'. We believe that students should be recognised and rewarded for all of their efforts and achievements and consequently award House points for all events and competitions in which students participate as well as for their day to day school activities.

Skills and Assessment

Enrichment at St. Stephen's facilitates the development of a variety of skills such as Adaptability, Resilience Communication, Compassion, Confidence, Creativity, Reflection, Technology and Leadership.

Students build what is called a Student Profile Portfolio. This is a website that logs activities they participate in each academic year. For each activity, students are encouraged to identify which skills they have developed and provide evidence such as photos or written statements of them demonstrating these skills. Their Form Tutors review these sites once per half term and provide feedback on each student's strengths and possible areas for future development.













OUTLINE

Students will take Cambridge A and AS level courses in Literature in English.

Year 12

Cambridge International AS Level Literature in English requires candidates to answer two compulsory papers: Paper 1 Drama and Poetry, Paper 2 Prose and Unseen.

At AS Level, candidates are required to study three set texts. For examinations in summer 2025, the texts will be: Paper 1 Drama and Poetry: William Blake – *Selected Poems*, Tennessee Williams—Cat on a Hot Tin Roof. Paper 2 Prose and Unseen: Evelyn Waugh—A Handful of Dust.

Year 13

In addition to the components taken for AS Level in Year 12, Year 13 will study for two additional papers: Paper 3 Shakespeare and Drama and Paper 4 Pre—and Post—1900 Poetry and Prose.

For examinations in summer of 2026, the texts will be:

Paper 3 Shakespeare and Drama: William Shakespeare – Hamlet, Eusene O'Neill—Long Day's Journey Into Night. Paper 4 Pre—and Post—1900 Poetry and Prose: Walt Whitman—Selected Poems, Toni Morrison—Beloved.

ASSESSMENT

SKILLS

CAREER PATHS

Successful Literature learners develop a lifelong understanding and enjoyment of literary texts, and, importantly, gain a range of essential skills, including:

- the ability to write clearly and effectively
- skills in developing arguments
- skills in researching and managing information
- the ability to analyse complex texts in different forms and styles.

For AS Level:

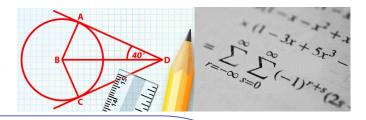
Paper 1 Drama and Poetry: twohour examination, worth 50% of the final AS Level grade and 25% of the final A Level grade. Paper 2 Pose and Unseen: twohour examination, worth 50% of the final AS Level grade and 25% of the final A Level grade.

For A Level:

Paper 3 Shakespeare and Drama: two-hour examination, worth 25% of the final A Level grade.

Paper 4 Pre—and Post. 1900 Poetry and Prose: two hour examination, worth 25% of the final A Level grade. Studying English Literature develops higher-level communication skills and the ability to apply critical thinking to literary texts. Additionally, it forms a sound basis for study in any arts-based area of study in combination with other subjects, such as: History, Philosophy, Law, Politics or Foreign Languages. As well as that, it can provide the foundation for further training in careers, such as: journalism, media or law. Furthermore, for many students, it can provide the necessary skills and lead to careers in the following areas: marketing, public relations, copywriting, speech and language therapy, publishing, advertising, editorial work and script-writing to name but a few.

MATHEMATICS





OUTLINE

 $ec{m{v}}$ e have two pathways for students to follow. This is dependent upon which Mathematics qualifications the individual student has completed previously.

If the student has taken IGCSE at the end of year 11 then they will follow the Standard pathway. They will complete the AS Level in Year 12 and complete the A Level in year 13. If the student has taken IGCSE mathematics at the end of year 10 and achieved a Grade A* or A and AS Level in Year 11 they will follow the accelerated pathway. They will complete the A Level in Year 12 and Further mathematics in Year 13.

Year 12

Standard: Pure mathematics 1. Topics include Algebra, Coordinate geometry, Sequences and Series, Functions, Differentiation, Integration and Trigonometry.

Statistics. Topics include Exploring and interpreting data, Probability, Discrete random variables, Permutations and combinations and the Normal distribution.

Accelerated: Pure mathematics 2/3. Topics include Further algebra, Logarithms and exponentials, Trigonometry, Further calculus, Numerical solutions of equations, Differential equations, Vectors and Complex numbers.

Mechanics. Topics include Motion in a straight line, Constant acceleration formulae, Forces and Newton's laws of motion, Vectors, Equilibrium, General motion in a straight line, Friction, Energy, Work and Power and Momentum.

Year 13

Standard: Pure mathematics 2/3. Topics include Further algebra, Logarithms and exponentials, Trigonometry, Further calculus, Numerical solutions of equations, Differential equations, Vectors and Complex numbers.

Mechanics. Topics include Motion in a straight line, Constant acceleration formulae, Forces and Newton's laws of motion, Vectors, Equilibrium, General motion in a straight line, Friction, Energy, Work and Power and Momentum.

Accelerated: Further Pure mathematics topics include Roots of polynomial equations, Rational functions and graphs, Summation of series, Matrices, Polar coordinates, Vectors, Proof by induction, Hyperbolic functions, Differentiation, Integration, Complex numbers and Differential equations.

Further mechanic topics include Motion of a projectile, Equilibrium of a rigid body, Circular motion, Hooke's law, Linear motion under a variable force and Momentum.

Further statistics topics include Continuous random variables, Inference using normal and t-distributions X²-tests, Non-parametric tests and Probability generating functions.

SKILLS

Cambridge International AS and A Level Mathematics is accepted by universities and **Standard:** employers as proof of mathematical knowledge and understanding. Successful candidates gain lifelong skills, including:

- a deeper understanding of mathematical principles
- the further development of mathematical skills including the use of applications of mathematics in the context of everyday situations and in other subjects that they may be studying
- the ability to analyse problems logically, recognising when and how a situation may be represented mathematically
- the use of mathematics as a means of communication
- a solid foundation for further study.

ASSESSMENT

Year 12

Pure Mathematics

Paper 1

Statistics Paper 1

Accelerated:

Pure Mathematics Paper 3 Mechanics Paper 1

Year 13

Standard:

Pure Mathematics Paper 3 Mechanics Paper 1

Accelerated:

Further Mathematics Pure Paper 1+2, Further Mechanics, Further Statistics

CAREER PATHS

Students with A-Level Mathematics qualifications can go into: accounting, medicine, engineering, forensic pathology, finance, business, consultancy, teaching, IT, games development, scientific research, programming,, design, construction and astrophysics to name a few.

However, the acquired skills from A-Level Mathematics are transferable and suitable for all career paths.

"If people like you, they'll listen to you, but if they trust you, they'll do business with you." Zip Ziglar







ART



OUTLINE

AS Level Art and Design follows a similar structure to IGCSE Art and Design, however the course requires a more independent and mature approach. Students will have the option of studying from broad areas such as painting and related media, printmaking, three-dimensional studies, lens-based media, and graphic communication in both AS and A2 Art and Design.

Year 12

AS Level Art and Design sets a stable foundation for A Level Art and Design. Students will have the freedom to experiment in their own A Level Art Studio with a range of techniques, processes. They will gain an awareness and appreciation of the interdependence of Art and Design and the individuals within cultural and historical contexts which will feed into the development of key skills for further Art education.

Year 13

A Level Art and Design requires a substantial amount of dedication and work. Students are expected to produce first-hand studies from primary sources to inform the development of their own ideas. The artwork must be selective and show research, recording, development and critical evaluation undertaken during the course. It should include evidence of the development of ideas into personal solutions, experiments with media and processes including trial samples, and examples of how the candidate's work is influenced by historical, contemporary and cultural factors. Students also complete a critical and visual appraisal of theoretical study undertaken in a written essay. For all projects, students will have the ability to access workshops, visit galleries and meet artists to further develop their artistic knowledge.

SKILLS

Students will master the ability to record from direct observation and personal experience, critique and analyse key artists and art theory, and acquire the ability to identify, research, and evaluate problems in a systematic way as well as demonstrate innovation and the use of intuition and imagination enhancing their confidence. Students will develop initiative and a sense of adventure and achievement through their own personal artwork; they will learn to perceive, understand and express concepts and feelings in a creative environment.

ASSESSMENT

CAREER PATHS

Coursework portfolio (10 A2 boards) Exam portfolio (6 A2 boards)

A Level

AS Level

Personal Investigation 16 A2 boards 1,500 word essay. A Level Art and Design is a reputable subject that shows a holistic approach to a student's Advanced Level education, and is greatly useful for any of the following career paths: Artist, Architect, Technical Drawer, Photographer, Film-maker, Advertising and Marketing, Designer; Graphic, Game, Set, Interior, Fashion, Product, Web, Costume, Special Effects, Jewelry, Artistic Director, Graphic Novelist, Printmaker, Concept Artist, Decorator, Illustrator, Animator, Ceramicist, Art Historian and Restorer, Art Teacher, Gallery Curator and Assistant, Art Critic and Journalist, Art Therapist, Art Researcher and Lecturer, Art Therapist, Gallery or Museum Curator, Art and Antique Auctioneer.

"Every child is an artist."

Pablo Picasso

BIOLOGY





OUTLINE

Cambridge International AS Level Biology constitutes the first half of the Cambridge International A Level course providing a suitable foundation for the study of Biology at Cambridge International A Level and then for related courses in higher education. It is also suitable for candidates intending to pursue careers in Biology.

Year 12

In year 12 students will study: cell structure; biological molecules; enzymes; cell membranes and transport; the mitotic cell cycle; nucleic acids and protein synthesis; transport in plants; transport in mammals; gas exchange and smoking; infectious disease and immunity.

Students are also taught the following practical skills:

- 1. To plan experiments and investigations.
- 2. To collect, record and present observations, measurements and estimates.
- 3. To analyse and interpret data to reach conclusions.
- 4. To evaluate methods and quality of data and suggest possible improvements.

Year 13

Cambridge International A Level Biology provides a suitable foundation for the study of Biology or related courses in higher education. It is suitable for candidates intending to pursue careers or further study in Biological sciences and is a requirement of a number of University courses throughout the world. Students study topics 1-11 of the AS course and complete the A-level by studying the following topics: energy and respiration; photosynthesis; homeostasis; control and co-ordination; inherited change; selection and evolution; biodiversity, classification and conservation; genetic technology

SKILLS

ASSESSMENT

CAREER PATHS

- Confidence in a technological world, with an informed interest in scientific matters.
- An understanding of the usefulness (and limitations) of scientific method, and its application in other subjects and in everyday life.
- An understanding of how scientific theories and methods have developed, and continue to develop, as a result of groups and individuals working together.
- An interest in, and care for, the local and global environment.

In Year 12 AS Biology students are assessed by three papers. Paper 1: A 40 question multiple choice paper lasting 1 hour. Paper 2: A 60 mark structured question paper requiring written responses lasting 1 hour 15 minutes.

Paper 3: A 40 mark advanced practical paper which lasts for 2 hours and takes place in the school laboratory.

In Year 13 A-Level Biology students are assessed by two papers: Paper 4: A 100 mark structured question paper lasting 2 hours. Paper 5: A 30 mark Planning, Analysis and Evaluation paper lasting 1 hour 15 minutes.

The study of A-Level Biology is needed or useful to study the following at University: Medicine, Veterinary Science, Dentistry, Biochemistry, Marine Biology, Nature Conservation, Pharmacy, Physiology, Nursing, Occupational Therapy, Sports Science, Physiotherapy, Medical and Research Laboratory Technician, Forensic Sciences, Dietician.

"Nothing in biology makes sense except in the light of evolution."





BUSINESS



OUTLINE

The Business syllabus enables learners to understand and appreciate the nature and scope of business, and the role it plays in society. The syllabus covers economic, environmental, ethical, governmental, legal, social and technological issues, and encourages a critical understanding of organisations, the markets they serve and the process of adding value. Learners examine the management of organisations and, in particular, the process of decision-making in a dynamic external environment.

Year 12

At AS level, students study five units:

- Business and the Environment
- People in Organisations
- Marketing
- Operations and Project Management
- Accounting and Finance

Year 13

In addition to the knowledge and understanding acquired at AS Level, students are introduced to a number of new concepts. The A Level extended syllabus covers, project management, organisational structures, sales forecasting and strategic models.

At A Level, students study six units: Business and the Environment; People in organisations Marketing; Operations and Project Management; Accounting and Finance; Strategic Management

SKILLS

ASSESSMENT

CAREER PATHS

Decision making and problem solving in the light of evaluation.

Developing critical thinking, the quantification and management of information

Effective communication

Developing Internationalism

AS level

Paper 1 - 1hour 15 minutes Short answer questions Essay Question Choice 1

from 3.

Paper 2 - 1 hour 45 minutes 2 x Data Response Questions. 50% of A Level

A Level

Paper 3 - 3 hours Case Study

Part A - Answer all questions Part B - Choice 1 from 2 A level Business Studies is undoubtedly an asset whether students decide to seek employment or decide to proceed to Higher Education. With reference to employment, Business Studies provides valuable background understanding to careers in the private or public sector such as Finance, Banking, Local Government, Travel, Charities, Media, Industry, Marketing and International Affairs.

CHEMISTRY





OUTLINE

Cambridge International AS Level Chemistry constitutes the first half of the Cambridge International A Level course providing a suitable foundation for the study of Chemistry at Cambridge International A Level and then for related courses in higher education. It is also suitable for candidates intending to pursue careers in Chemistry

Year 12

Physical Chemistry: Atoms, Molecules and stoichiometry; Atomic structure; Chemical bonding; States of matter; Chemical energetics; Equilibria; Reaction kinetics

Inorganic Chemistry: The Periodic Table; Chemical periodicity; Group 2; Group 17; Nitrogen and Sulfur **Organic Chemistry and analysis**: An introduction to Organic Chemistry; Hydrocarbons All candidates study practical skills.

Year 13

Physical Chemistry: Chemical energetics; Electrochemistry; Equilibria, Reaction Kinetics Inorganic Chemistry: An introduction to the chemistry of transition elements, Group 2 Organic Chemistry and analysis: Hydroxy compounds; Carbonyl compounds; Carboxylic acids and derivatives; Nitrogen compounds; Polymerisation; Analytical techniques; Organic synthesis All candidates study practical skills.

SKILLS

ASSESSMENT

CAREER PATHS

The syllabus includes the main theoretical concepts which are fundamental to the subject, a section on some current applications of chemistry, and a strong emphasis on advanced practical skills. Practical skills are assessed in a timetabled practical examination. The emphasis throughout is on the understanding of concepts and the application of chemistry ideas in novel contexts as well as on the acquisition of knowledge. The course encourages creative thinking and problem-solving.

AS Level

Paper 1 - Multiple Choice 1 hour (31% AS, 15% A Level)

Paper 2 - AS level Structured Questions, 1 hour 15 Min (46% AS 23 % A level)

Paper 3 - Advanced Practical Skills 2 hour (23% AS 12% A level)

A Level

Paper 4 - A level structured papers (38% A level)

Paper 5 - Planning Analysis and Evaluation

"Chemistry is necessarily an experimental science: its conclusions are drawn from data, and its principles supported by evidence from facts." The study of A level Chemistry is useful for the following careers:

- Analytical chemist.
- Chemical engineer.
- Healthcare scientist.
- Clinical biochemistry.
- Forensic scientist.
- Pharmacologist.
- Research scientist
- Toxicologist.
- Medicine.
- Environmental Scientist.
- Engineer
- Skincare
- Consumer Products Scientist
- Quality Assurance Chemist.
- Fragrance Chemist.
- Sports Scientist
- Biomedical materials Scientist



COMPUTER SCIENCE

SIS

OUTLINE

Computer Science provides students with a general understanding and perspective of the development of computer technology and systems, which will inform their decisions and support their participation in an increasingly technologically dependent society Computer Science at AS and A Level builds on the skills and knowledge gained at IGCSE. There is a great deal of detail on the architecture and design of the processor and other low-level computer components and on system software such as the Operating System and compilers and interpreters. Students continue to program in the high-level language Pascal looking at more complex data structure like linked lists, text files and pointers as well as recursion and object-oriented program structures.

Year 12

Areas od Study are as follows: 1.1 Information representation; 1.2 Communication and Internet technologies; 1.3 Hardware; 1.4 Processor fundamentals; 1.5 System software; 1.6 Security, privacy and data integrity; 1.7 Ethics and ownership; 1.8 Database and data modeling; 2.1 Algorithm design and problem-solving; 2.2 Data representation; 2.3 Programming; 2.4 Software development

Year 13

At A Level students build on the skills and knowledge gained at AS Level There is a much greater emphasis on problem-solving and application of skills than AS Level. Areas of Study are as follows: 3.1 Data representation; 3.2 Communication and Internet technologies; 3.3 Hardware and processor design; 3.4 System software; 3.5 Security and encryption; 3.6 Monitoring and control systems; 4.1 Computational thinking and problem-solving; 4.2 Algorithm design methods; 4.3 Further programming; 4.4 Project management

SKILLS

ASSESSMENT CA

CAREER PATHS

The course is designed to develop creative technological approaches to problemsolving with an emphasis on using an organised, systematic or algorithmic methodology. Design skills are accentuated throughout with students being asked to consider the look and functionality of their product along with the intended audience. Critical thinking and research skills are developed through evaluation tasks and projects.

At AS Level there are two papers each worth 50% of the final grade or 25% of the A Level grade.

Paper 1: Theory Fundamentals – a written paper of 1 hour 30 minutes including short and structured response questions.

Paper 2: Fundamental Problem-solving and Programming – a written examination of 2 hours based around a pre-released case study.

At A Level the papers are each worth 25% of the final grade.

Paper 3: Advanced Theory – a written paper of 1 hour 30 minutes including short and structured response questions.

Paper 4: Advanced Problem-solving and Programming – a written examination of 2 hours based, in part, around a pre-released case study.

Computer Science related jobs have expanded dramatically in the 21st century with significant growth in number as all industries take advantage of network technologies like the internet. Common fields for **Computer Science** graduates include: Software Development, Artificial Intelligence, Web Development, Systems Analysis, Computer Engineering, Network Administration, Database Development, Business Analyst and many other areas where logical and algorithmic thinking is required.

GEOGRAPHY





OUTLINE

The Geography A Level syllabus enables students to develop an understanding of physical and human geographical processes and the causes and effects of change on natural and human environments. We will look at a wide variety of places at local, regional, national and global scales.

Year 12

In Year 12, students develop a strong foundation of Physical and Human Geography.

In the Physical paper they will explore the following topics in depth: Hydrology and fluvial geomorphology; Atmosphere and weather; Rocks and weathering.

In the Human paper they will explore the following topics in depth: Population; Migration; Settlement dynamics.

Year 13

In Year 13, students are given the opportunity to study four topics in great depth. For the physical paper we study Hazardous Environments and Coastal Environments. Hazardous Environments explores the causes, effects and management of tectonic, atmospheric and geomorphological hazards. Coastal Environments explores the characteristics, features and landforms of coastal areas. We study coral reefs and mangroves which are both found in Thailand and around the world as well as coastlines in the UK. Finally we evaluate the sustainable management of these environments.

For the human paper we study Economic Transition and Global Interdependence. Economic transition explores how countries develop over time with particular focus on their industries, economic progress, and overall quality of life of their population. Global Interdependence covers trading patterns, international debt and aid, the development of international tourism and how this can be managed.

SKILLS

ASSESSMENT

CAREER PATHS

Our students will develop an awareness of the usefulness of geographical analysis to understand contemporary human and environmental problems. They will develop the ability to handle and evaluate different types and sources of information and the skills to think logically and present an ordered and coherent argument in a variety of ways. Communication, literacy, numeracy and technological skills are all developed.

The AS level is broken down into two 1.5 hours exams. These are worth 50% of the AS Level each, or 25% of the A Level. These papers include one essay question worth 15 marks.

The A Level is broken down into two 1.5 hours exams. These are worth 25% of the final A Level grade. These papers include two 20 mark essay questions.

The course provides an excellent foundation for the study of Geography at University, but can also support a number of other courses, such as Biology, Chemistry, Business, Economics, Architecture and Urban planning.

The transferable skills studied in Geography can open doors to a wide variety of careers such as Law, Business Management, Urban Planning, Environmental Management, Tourism, Politics and the increasing range of employment in the Green sector.

"Geography holds the key to our future"



HISTORY

OUTLINE



When you take AS or A level History, you are continuing to develop your understanding of Big Ideas. You will seek to explain key events and key individuals and their motivations. Through a combination of sources and texts and audio visual resources students will develop enquiring analytical skills through a diverse range of topics covering a range of periods and regions. Most importantly critical thinking will be encouraged as you seek to understand many key historical events of the recent past.

Year 12

The major topics will be the French Revolution and the Russian Revolution. Students will study the origins of these events, why the monarchs were killed in both France and Russia and how life changed for people afterwards. Other than Tsar Nicholas II and King Louis VXI, key figures from these periods such as Marie Antoinette, Napoleon Bonaparte, Vladimir Lenin and Leon Trotsky will be explored in depth. For the source paper, students will study the league of Nations, which will provide them with some useful content overlap from the IGCSE course. Overall, the AS history course is very varied and interesting, and examination results have been superb in recent years.

Year 13

The Year 13 course is also split into two sections. The majority of the time is spent on the 'Europe of the Dictators' section of the course. Students will have the opportunity to study three of the most infamous dictators if the twentieth century in great depth; Adolf Hitler, Joseph Stalin and Benito Mussolini. The focus is on their domestic policies and how totalitarian their regimes were. This is a fascinating course which allows students to develop their thinking, writing and research skills to a very high level. Students also study The Cold War through investigating both the early events and understanding why

SKILLS

Research skills and how to

select evidence; Problem

and writing skills; How to

handle and analyse data;

information to construct

assess the reliability of

information. Critical

thinking and inferring

an argument; The ability to

information from content.

How to organise

solving; communication

ASSESSMENT

historical interpretations have changed with regards to the causes of The Cold War.

CAREER PATHS

Students will regularly practise exam technique in lesson time and for homework. There will be timed papers set on a regular basis which will help us track student progress and support students in improving any areas for development. At the end of each year of the A Level course, students will have two exam papers to complete. One will be an essay based paper and the other will be source based.

History at A Level is a well-respected discipline that encourages students to think, argue, discuss communicate and challenge. It combines with many other subjects and can provide a contrast with others. A Level History is accepted by Higher Education institutions to be a challenging discipline. History acts as a platform for careers in law, politics, business, the media, management, and education, among many others.

"History isn't just the story of bad people doing bad things it is also the story of good people doing good things"

ICT







OUTLINE

In a world where information technology (IT) is constantly changing, individuals increasingly need technological and information literacy skills that include the ability to gather, process and manipulate data. The impact of IT on society is enormous and as the percentage of businesses and households connected to communication networks such as the internet grows, so does the need for individuals who understand these new technologies.

Year 12

Students study the structure and use of IT systems within a wide range of organisations, including the use of a variety of computer networks. As a result, students gain an understanding of IT system life cycles, and how these affect the workplace. They also learn about the wider impact of IT on society in general. Topics studied include: Data, information, knowledge and processing; Hardware and software; Monitoring and control; E-safety and health and safety; The digital divide; Using networks; Expert systems; Spreadsheets; Database and file concepts; Sound and video editing

Year 13

At A Level students will build on the skills and knowledge from AS Level and are introduced to new areas including programming to improve the interactivity of web sites. There is a much greater emphasis on using technology to solve real-world problems. Topics studied include: Emerging technologies; Role and impact of IT in society; Networks; Project management; System life cycle; Graphics creation; Animation; Mail merge; Programming for the web

SKILLS

ASSESSMENT

CAREER PATHS

Functional skills are developed in using Spreadsheets, Graphic Design, Web Design, Database Systems, Animation and Sound and Video Editing. Problem solving skills are developed in selecting and using applications to analyse, design, implement, test and evaluate solutions to real life challenges. Critical thinking and research skills are developed through evaluation tasks and projects.

At AS Level there are two papers each worth 50% of the final grade or 25% of the A Level grade.

Paper 1: Theory – a written paper of 1 hour 45 minutes

Paper 2: Practical – 2 hours and 30 minutes.

At A Level the papers are each worth 25% of the final grade.
Paper 3: Advanced Theory – a written paper of 1 hour 45 minutes
Paper 4: Advanced Practical – 2 hours and 30 minutes.

Most of the skills from Information Technology are highly transferable and would enable students to follow any career path.

The course is particularly suitable for those intending to study or work in IT, Web Design, Business, Accountancy, Finance, Software Development, Project Management, Systems Analysis, Multimedia, Graphic Design or any field where Applied Computing is required.

"Information technology and business are becoming inextricably interwoven. I don't think anybody can talk meaningfully about one without talking about the other."

Bill Gates



MANDARIN

OUTLINE



The study of AS Mandarin will develop the ability to understand a language from a variety of registers enable students to communicate confidently and clearly in Mandarin in addition it will form a sound base of skills, language and attitudes required for further study, work and leisure. It can develop insights into the culture and civilisation of the countries where the language is spoken. Also it will encourage positive attitudes to language learning and a sympathetic approach to other cultures and civilisations.

Year 12

The following Topics are taught: Family (Bridging Unit). Human relationships, generation gap, young people; Patterns of daily life, urban and rural life, the media, food and drink, law and order, philosophy and belief, health and fitness; Work and leisure, equality of opportunity, employment and unemployment, sport, free time activities, travel and tourism, education, cultural life and heritage.; War and peace, social and economic development; Scientific and medical advances, technological innovation; Environment, conservation, pollution.

Year 13

The Final AS exam is offered in October/November of Year 13

SKILLS

ASSESSMENT

CAREER PATHS

Students will continue to use a holistic approach to develop their listening, speaking, reading, and writing skills of the Chinese language with a special focus on the last two linguistic skills. They will continue to consolidate their language knowledge with more complex grammatical structures, phrases, and idioms. They will gain more writing skills with various forms in Chinese social and cultural contexts. By the end of the course, students will have achieved proficiency in both reading and writing, with more sophisticated skills and advanced usages

The examinations are designed to assess student's linguistic competence and their knowledge of contemporary society. In the exams, students will be expected to:

- understand and respond to texts written in the target language, drawn from a variety of sources such as magazines, newspapers, reports, books and other forms of extended writing.
- •manipulate the target language accurately in spoken and written forms, choosing appropriate examples of lexis and structures.
- •select information and present it in the target language
- •organise arguments and ideas logically.

Mandarin is one of the most popular languages in the world and has the largest number of people. Through the Mandarin AS level, you will have an opportunity to choose Chinese to enter the university. At Mandarin AS level, it is good for your job, travel or do business.

"To handle a language skillfully is to practice a kind of evocative sorcery."

Charles Baudelaire

MUSIC









OUTLINE

AS and A Level Music develops the skills of Listening and Appraising, Performing and Composing at an advanced level. The Listening component deepens the students' knowledge and critical response to music from both and western and world music traditions. Performing develops skills on one instrument or voice in both solo and ensemble to an advanced level. Composing is approached from a western tonal perspective and also introduces pop, jazz, and world music.

Year 12 (AS Level music)

The students listen to and study Five Western set works and engage in independent research, comparing and contrasting music from diverse traditions. They also complete coursework in both composition and performance. The exam comprises 50% of the marks and the coursework counts for the other 50% of the marks.

Year 13 (A Level Music)

There is no exam in Year 13! There is just coursework. The students can now specialize in two areas from a choice of three: Investigating Music (a 3000-word essay on a prior-agreed area of music Listening), Composition (A 6-8 minute composition plus a 1000–1500-word research report) and Performance (A 20 recital of 20 minutes duration plus a 1000–1500-word research report).

SKILLS

As well as developing the specifically musical skills of Listening, Composition and Performance, the students also develop cross-curricular skills such as collaboration, critical thinking and time-management.

ASSESSMENT

AS Level

Component 1: Listening Paper, a 2-hour paper taken in June Component 2 – Practical Musicianship (i.e. Performing and Composing) submitted at the end of term 2

A level

Candidates choose 2 of 3 coursework choices: Performing, Composing or Investigating Music.

CAREER PATHS

Musician in any genre or tradition (classical, world music, pop, jazz...), composer, conductor, teacher, radio and television broadcasting sound engineer, events manager, producer, DJ, music therapist, music journalist.

"Music is life. That's why our hearts have beats."

Cecily Morgan

PHYSICS









OUTLINE

Universities value learners who have a thorough understanding of key concepts in physics, an in-depth knowledge of the most important themes in physics and strong practical skills. AS and A Level Physics helps learners develop the knowledge and skills that will prepare them for successful university study. Our learners also develop lifelong skills of scientific enquiry, confidence in technology, and communication and teamwork skills.

Year 12

Students study the following at AS Physics: General Physics: Physical Quantities; Mechanics: Equations of Motion, Newton's Laws, Work and Energy, Linear Momentum; Electricity: Electronic Sensors, Current Electricity, DC Circuits; Matter: Young Modulus Deformation of Solids; Waves: Wave Theory, Superposition, Interference, Polorisation and Diffraction.; Nuclear Physics: The Nucleus, Isotopes, Ionising Radiation fundamental particles.

Year 13

Students study the following at A level Physics: Circular Motion & Gravitation: Motion in a Circle, Gravitational Fields; Electric Fields and Capacitors: Coulomb's Law, Electric Potential, Capacitance; Simple Harmonic Motion: Oscillations, Damping, Resonance; Thermodynamics: Ideal Gases, Temperature, Thermal Properties of Materials; Magnetic Effects and AC: Magnetic Fields, Electromagnetic Induction, Alternating Currents; Modern Physics: Charged Particles, Quantum Physics, E = mc², Radioactive Decay, Nuclear Energy, Astronomy and Cosmology. Medical Physics: CAT Scans, Ultrasound, X-rays.

SKILLS

ASSESSMENT

CAREER PATHS

The study of Physics will enable students to:

Develop an interest in, and care for, the environment in relation to the impact of Physics and its applications

Develop a sustained interest in Physics so that the study of the subject is exciting, enjoyable and satisfying

Develop an awareness of the relationship of Physics to everyday life and of the interaction of Physics with engineering and technology Develop an experimental approach to Physics and link this approach both with the theoretical and quantitative aspects of the subject

In Year 12 **AS Physics** students are assessed by three papers.

Paper 1: A 40 question multiple choice paper lasting 1 hour.

Paper 2: A 60 mark structured question paper requiring written responses lasting 1 hour 15 minutes.

Paper 3: A 40 mark advanced practical paper which lasts for 2 hours and takes place in the school laboratory.

In Year 13 A-Level Physics students are assessed by two papers:
Paper 4: A 100 mark structured question paper lasting 2 hours.
Knowledge of material from the AS Level syllabus content will be

Paper 5: A 30 mark Planning,

required.

Students with A-Level Physics qualifications can go into: accounting, medicine, engineering, forensic pathology, finance, business, consultancy, teaching, IT, games development, scientific research, programming, design, construction and astrophysics to name a few.

However, the acquired skills from A-Level Physics are transferable and suitable for all career paths.

Quantum physics thus reveals a basic oneness of the universe."

PSYCHOLOGY









OUTLINE

Psychology is the study of the mind and behaviour. It is intriguing, it is scientific and above all it is thought provoking. This course offers you the opportunity to learn about the science behind human behaviour, by understanding how psychological research is conducted and used to develop theories and laws about why we behave the way we do. You will uncover explanations from both classic and contemporary research, investigating some of the most interesting human behaviours such as obedience, memory and mental health.

Year 12

Psychology AS-Level is divided into two sections. The first is titled 'Approaches, Issues and Debates.' Psychological approaches are perspectives that involve certain beliefs about human behaviour and how differences individual can be explained. Students will study a wide range of approaches: Social, Learning, Cognitive and Biological. This will allow them to develop an ability to analyse and evaluate information from various perspectives. The issues and debates considered at AS-Level are: the application of psychology to everyday life, individual and situational explanations of behaviour, the use of animals and children in psychological research and the nature versus nurture debate. The second is titled 'Research methods', in which students will learn methods of investigating human behaviour, how to design + conduct their own investigations and analyse data collected.

Year 13

Psychology A-level focuses on the relevance of Psychology in contemporary society. Students will have the opportunity to study two topics; Clinical psychology, Consumer Psychology. Psychology underpins many aspects of our lives – it is used to understand our own selves better, diagnose and treat medical conditions and to improve how we learn. Every study is undertaken with a specific purpose in mind and students will learn how to apply such studies to everyday life.

SKILLS

ASSESSMENT

CAREER PATHS

Through studying Psychology, students will develop skills of analysis, interpretation, application and evaluation.
Students will develop research skills, knowledge of how to collect their own data, analyse it, and present it in a psychological report. Learning about human behaviour will also help build communication skills, improve teamwork and leadership skills.

The course is 100% written examination. There will be two 1.5 hour exam papers to be completed at the end of each year. Each will contain a combination of shortanswer questions and essay or planning question. Exam technique and practice will be a key focus in both homework and lessons, in order to ensure students are developing their essay writing skills and making progress.

Psychology is useful for any career which requires interaction or an understanding of human behaviour and development. People with skills in psychology are sought after in business, management, teaching, research, social work and careers in medicine and healthcare. Careers directly related to psychology are broad and include working in traditional roles as clinical, educational, forensic or occupational psychologists as well as the more progressive areas such as health and sports psychology.

"I am not what happened to me, I am what I chose to became"

- Carl Yung -