

EMBLEY

SIXTH FORM



**SIXTH FORM
COURSE GUIDE
2027-2029**



WHY EMBLEY?

The opportunities that await you go beyond achieving A*s. Whatever your next step, the experiences, knowledge and confidence you will gain at Embley will prepare you for a successful future.

Embley's reputation is built on three pillars: ambition, self-belief and compassion towards others. The foundation of these lie in our belief that the personal development and formation of individuals is the most important experience a school can bestow upon its students.

As part of your study programme, you will be encouraged to challenge yourself, take on positions of leadership that influence the way the school is managed and try new pursuits you

may not have dreamed of before now. Risk taking is the norm as students understand the benefit of feeling purposefully uncomfortable to become great thinkers and leaders of the next generation.

With so many exciting career paths to follow, you can choose from over 20 A Level subjects. They can be studied in any combination and complemented with the Extended Project Qualification, creating a two year tailored programme that reflects your academic

strengths and interests and paves the way to achieving your aspirations.

Everyone's focus at Embley is on helping you thrive. You will be guided, supported, challenged and encouraged to seize every opportunity to help you be the best person you can be.

Embley is in the top 1% of schools nationally for student progress at A Level.



UNLOCK YOUR POTENTIAL

In providing an academic, all-round education, we are mindful of empowering our students to make informed choices about their education with us and about life after Embley.

Your tutor will be your coach and mentor and help guide you through your Sixth Form experience. This is holistic and tailored support. Your tutor will be there to provide guidance on anything from university choices and UCAS applications, how you stretch yourself or refine your study skills, to helping you maintain a healthy body and mind.

You will benefit from a careers programme that is designed to explore everything that is possible and to challenge the expectations you have of yourself.

This includes a programme of lectures and workshops delivered by universities and careers events, insights into business and access to successful adults who will share their career experiences and personal development.

We'll help you achieve a competitive advantage when applying to the top universities and degree apprenticeships by ensuring you showcase your ambitions, abilities and aspirations in applications and at interview. Our students benefit from

interview practice with industry specialists.

Our Nightingale Lectures introduce you to a formal dining experience and enable you to start building your professional network.

All students take part in our Elevate enrichment programme because being analytical, reasoned, investigative, forward thinking and solution-orientated are core skills that benefit all successful university and job applicants.

FOLLOW YOUR PASSIONS

Our extensive co-curricular programme enables you to grow and succeed beyond your studies, providing an opportunity to balance academic ambition with wider aspirational goals. There are extensive co-curricular opportunities that will challenge your capacity to work with others, lead through service and develop skills you will benefit from in the future.

This may be your chance to learn to fly, climb aboard our sailing race fleet, take to the slopes as part of the school's ski race team, ascend mountains with our CCF Army or Navy Corps, spend a wild weekend in Snowdonia for your Gold Duke of Edinburgh, take to the stage in one of the school's theatrical performances or

musical events, or learn to rock climb, scuba dive or hone your equestrian skills.

You could be part of our Global Community Project, as we continue to build our links with Little Roses School in Ghana and prepare for one of our 10-day volunteering expeditions to the school, or lead a workshop with care

home residents as part of our Classroom in the Community programme.

The importance of being able to work as part of a team, to adapt to change and to be resilient are all essential skills that are becoming increasingly important.





LEAD AND INSPIRE

Student leadership is central to the success of Embley. As well as taking leadership of your own learning, you can apply for a range of positions to lead school-wide initiatives, committees and inspire our younger students.

Formal roles of responsibility include our Heads of School and Heads of House; ambassadorial roles for the Arts, STEM, global affairs and sport which are connected to subject departments; and boarding, Inclusion, Service & Enrichment and pastoral prefect roles.

Our Student Council meetings are modelled on House of Commons Select Committees, with the Heads of School as chair.

Other leadership roles include mentoring younger students, organising and running school events and supporting the roll out of our co-curricular activities, such as our sailing and skiing programmes.

With the support of your tutor and teachers, you will be encouraged to set personal growth targets and develop an entrepreneurial mindset, to think critically and decisively, network with

confidence and build positive relationships.

You will gain real-world skills and experiences that will give you the knowledge, ability and confidence to become an emerging leader, take on new challenges and influence others to make change happen.

BE MORE INDEPENDENT

Moving into Embley Sixth Form is a transition to independence. You will have a blend of A Level classes with our specialist teaching staff, more independent study and time to develop your personal interests. Small class sizes enable students build close working relationship with their teachers and receive dedicated individual support with their studies.

Independent study periods are timetabled to make the best use of your time. Additional support is also always on hand with subject specific drop-in sessions, and our Directors of Sixth Form operate an open-door policy so you can drop and chat about life in the Sixth Form, careers or anything else that's on your mind.

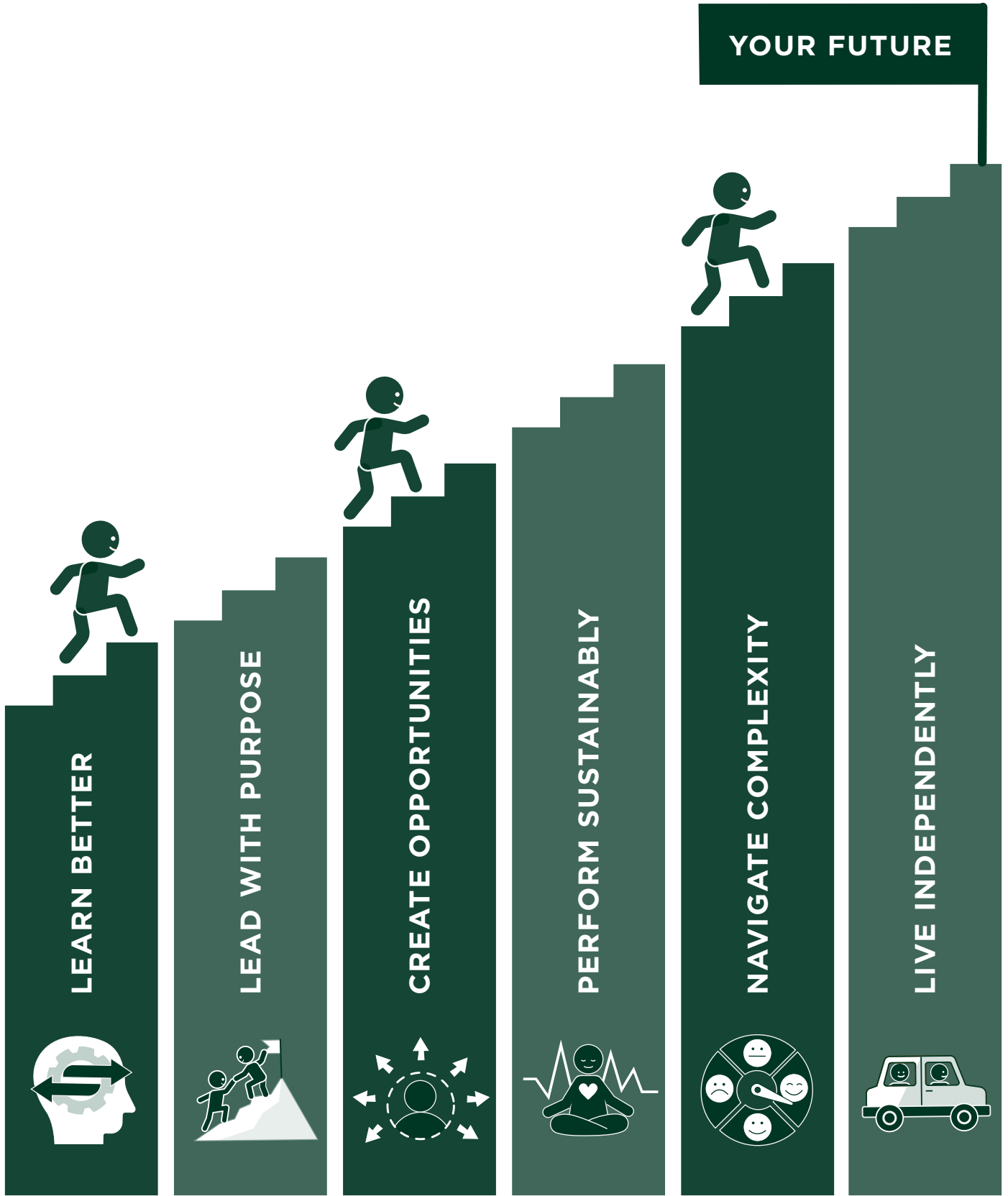
We also offer additional onsite pastoral support with our school counsellor

Our sixth formers enjoy two separate and exclusive areas in the school. Our Sixth Form Study with private pods provides a quiet, dedicated space for you to study and conduct your research outside of lessons.

Our Sixth Form Centre offers a contemporary social space to collaborate with friends and consolidate your academic thoughts.

Having a boarding house on site also offers an exciting opportunity and a step towards more independent living. You will benefit from having everything under one roof including an excellent 'out of hours' support system for learning, your peers around you to bounce ideas off and revise together, more opportunities for extra curricular activities during the evenings and at weekends, and access to our huge range of sports and study facilities.





ELEVATE

SHAPE YOUR FUTURE

Through our Sixth Form Elevate Enrichment Programme, students develop the confidence, character and capabilities needed to be successful in an increasingly complex and rapidly changing world.

We know that universities and employers are looking for much more than academic qualifications. As we prepare students for their futures, we believe that outstanding academic achievement and personal development go hand in hand.

Designed to complement academic study, Elevate equips students with the skills, mindset and experiences that universities and employers value most.

From advanced study skills through the VESPA Academy and leadership development to university and apprenticeship preparation, work experience, public speaking, financial literacy and exploring topics such as artificial intelligence, students develop learning agility, leadership capability, digital intelligence, resilience and self-awareness.

The result is a generation of young people who leave Embley Sixth Form accomplished, confident and future-ready, equipped with ambition, belief and compassion to make a positive difference in the world.

LIFE BEYOND EMBLEY

Our aim is to ensure that every student leaves Embley with the skills, knowledge, confidence and qualifications to secure their success.

Through expert career guidance, tailored UCAS preparation, university admissions support, interview coaching and degree apprenticeship mentoring, we'll help you identify and achieve the pathway that is right for you.

Degree apprenticeships

This has been an increasingly popular option with our students in recent years. Students have secured highly competitive degree apprenticeships with multinational organisations including IBM, Diamond Lightsource Oxford and J.P. Morgan.

University destinations

Year-on-year our students secure places at their chosen universities, with over half progressing to Russell Group institutions. Chosen courses reflect the breadth of ambitions and interests developed during their time at Embley, from medicine and engineering to humanities, business, the sciences and creative arts.

Examples of recent courses and destinations include:



UNIVERSITY OF ABERDEEN

Biology



KING'S COLLEGE LONDON

Mathematics with Management & Finance



UNIVERSITY OF BATH

Computer Science, Mechanical Engineering



UNIVERSITY OF NOTTINGHAM

Aerospace Engineering, International Relations & Politics, Veterinary Science



BATH SPA UNIVERSITY

English Literature



NOTTINGHAM TRENT UNIVERSITY

Fashion



UNIVERSITY OF BIRMINGHAM

Chemical Engineering



UNIVERSITY OF OXFORD

Biochemistry



UNIVERSITY OF BRISTOL

Veterinary Science



OXFORD BROOKES UNIVERSITY

Building Surveying, Computer Science, Psychology



BOURNEMOUTH UNIVERSITY

Sport & Exercise Science



UNIVERSITY OF PORTSMOUTH

Mechanical Engineering



CARDIFF UNIVERSITY

English Literature with Creative Writing, Business Economics, Mathematics, Medicine, History & Politics



UNIVERSITY OF READING

Accounting & Management, Biomedical Science, Real Estate, Psychology



UNIVERSITY OF CHICHESTER

Musical Theatre



UNIVERSITY OF SOUTHAMPTON

Aeronautics & Astronautics, Civil Engineering, Fine Art, Marine Biology with Oceanography, Physics



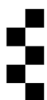
DIAMOND LIGHTSOURCE

Degree apprenticeship



UNIVERSITY OF SURREY

Biomedical Science, Computer Science, Mathematics with Finance



UNIVERSITY OF ESSEX

Business & Management



UNIVERSITY OF SUSSEX

Liberal Arts, Politics & International Relations



UNIVERSITY OF EXETER

History & International Relations, Investment Banking, Law, Mechanical Engineering



UNIVERSITY COLLEGE LONDON

History & Anthropology



IBM

Degree apprenticeship



UWE BRISTOL

International Relations & Politics, Professional Policing



J.P. MORGAN

Degree apprenticeship



OCR AS and A Level Computer Science

The aim of this book is to provide detailed coverage of the topics in the new OCR AS and A Level Computer Science specifications (3040 and 3041). It is designed to be a complete resource for students, providing all the knowledge and understanding they need to succeed in their studies and to develop their ability to apply it.

About the authors
Paul Hirst is a well-known and successful author of Computer Science textbooks. He has been many years as a teacher of A Level Computer Science and has also worked as a programmer and systems analyst, and was Managing Director of Alpha Gateway Ltd from 2000.

Cover picture
Reep Day
www.reepday.com
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CHOOSE YOUR A LEVELS

The choices you make will influence what you do later, so if you have a particular degree in mind it's worth doing your research to see which courses look for specific A Levels.

If you're not sure what you want to do, you can still make some smart choices that will leave you in the best position at the end of your studies.

Most students follow three A Level subjects and an EPQ because this is aligned to the entry requirement for most universities. However, it is possible to take four A Levels.

Business & Commerce	18	Science & Technology	31
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BUSINESS

Examination board: Edexcel

OVERVIEW

Studying Business will enable you to develop your commercial awareness and learn how management, leadership and decision-making can improve performance in marketing, operations, financial management and human resources. You will learn through business case studies, field trips to multinational organisations, guest lectures from a wide range of leading professionals and business news and trends as we bring to life the complexities of UK and global business.

We foster a spirit of enquiry and a critical approach to thinking about business problems. You will learn how to evaluate alternative solutions to challenges in the face of uncertainty, and the importance of evaluating outcomes and learning from mistakes. Students have the option to take part in the national Tycoon in Schools competition: in previous years our students have been awarded start-up loans from the Peter Jones Foundation on the strength of their business plans.

For further information or to discuss in more detail, please contact:

Mr Simon King

Head of Mathematics
simon.king@embley.org.uk

Assessment

Three written exams at the end of the course.

Future Pathways

This qualification lays the foundations for careers in business across any sector or industry. Higher education and career options are therefore varied and include areas such as management, marketing, human resources, accounting and finance.

ECONOMICS

Examination board: Edexcel

OVERVIEW

The Edexcel A Level Economics course provides students with a thorough understanding of how individuals, businesses and governments make decisions about the allocation of scarce resources. Students explore both microeconomics and macroeconomics, examining topics such as markets, competition, market failure, government intervention, economic growth, inflation, unemployment and international trade. Through the analysis of current economic issues and real-world data, students develop the ability to evaluate complex arguments, interpret evidence and apply economic theory to contemporary global challenges.

Throughout the course, students cultivate a wide range of transferable skills, including critical thinking, analytical reasoning, data interpretation and effective communication. These skills are highly valued by universities and employers alike.

For further information or to discuss in more detail, please contact:

Mr Simon King

Head of Mathematics
simon.king@embley.org.uk

Assessment

Three written exams at the end of the course on markets and market failure, the national and international economy and economic principles and issues.

Future Pathways

A Level Economics provides an excellent foundation for degrees in Economics, Finance, Business, Politics, Accounting and International Relations, while also supporting progression into careers in banking, investment, consultancy, public policy, economic analysis, accountancy, management and many other sectors where strong analytical and decision-making skills are essential.

ART AND DESIGN COURSES

Examination board: AQA

OVERVIEW

We will help you develop into an emerging artist or designer with the support of our expert teachers and in our contemporary, open plan art studio. Similar to facilities offered at some of the top universities, you will have a personalised 'pod' space for the duration of your A Level course in which to base yourself and grow your creative ideas.

During the first term of our A Level courses, you will participate in a series of workshops and small projects to allow you to build a broad portfolio of work, explore our wide range of facilities and broaden your technical skills. Our teaching staff will spend time discussing your personal ambitions and tailor the subject matter of your work towards your own interests.

Art, Craft & Design

This course is a fantastic opportunity to become an independent artist. You will enhance your drawing and painting skills and refine your practical skills by working in two or more of the following areas: painting (fine art), photography, graphics, textile design, mixed media and/or 3D design.

You will have access to specialist printmaking and textiles facilities, a digital photography studio, Mac suite and a 3D design studio (fully equipped for wood, ceramics metal and plastics). You will visit galleries and museums to expand and enhance your knowledge and understanding of artists and art sources.

Assessment

Component 1: A Personal Investigation (60%) completed between January in Year 12 and Christmas in Year 13.
Component 2: An externally set assignment (40%) completed between January and Easter in Year 13.

Future Pathways

This subject can lead to a wide range of degrees and careers including fine art, illustration, fashion and costume, architecture, graphics, theatre design, interior design and animation.

Photography

You will use DSLR cameras on manual settings as well as exploring various forms of digital and cameraless photography using light sensitive media.

You will experiment with different styles and genres of photography as well as video, film and animation. You will have the opportunity to use a green screen in our photography studio and explore the boundless world of editing with Adobe Creative Cloud in our bespoke Mac suite. You will be encouraged to become expert at framing and composition, harnessing light on location in our photography studio.

3D Design

Develop your understanding of the design and manufacture of objects and artefacts including traditional and modern products, architecture and furniture. You will explore different material areas, investigate manufacturing methods and broaden your skills in manipulating a wide variety of tools and equipment within the workshop. This will include developing cutting, shaping and finishing skills using a range of materials including timbers, polymers and metals.

You will also develop your digital technical drawing skills and use of CAD/CAM to become a competitor within the global design and technology environment.

For further information or to discuss in more detail,
please contact:

Mrs Frances Henville

Head of Art & 3D Design

frances.henville@embley.org.uk

Future Pathways

This subject can lead to a wide range of degrees and careers including photography, animation, games design, product design and photojournalism.

Future Pathways

This course is ideal for students wishing to pursue degree courses and careers in architecture, engineering, landscape design, product design, car design, model making, set and prop design.

DRAMA & THEATRE

Examination board: Pearson Edexcel

OVERVIEW

This course will challenge you to become a contemporary theatre maker in your own right. The vast range of transferable skills developed throughout the course will prepare you for undergraduate study and beyond. Students enjoy both the practical and theoretical components of this course. You will benefit from workshops with professional theatre companies in order to deepen your study of key practitioners and theatrical styles. We also offer a wide range of theatre trips as part of the Live Theatre review component of the course and to inspire the development of practical work. You will study a range of set texts and explore these practically and theoretically before developing your production concepts for the written paper.

There are opportunities to develop design and technical skills, with support from our visiting theatre technician, as part of our numerous theatre productions. Students can also offer design as their skill for the practical components in the course.

Our co-curriculum offers a huge range of opportunities to perform each year, with firm favourites being the school musical, the senior play and showcases. You can also take an active role in facilitating co-curricular drama activities for younger pupils, including directing productions and leading clubs and workshops.

For further information or to discuss in more detail, please contact:

Mrs Elaine Morgan

Head of Drama

elaine.morgan@embley.org.uk

Assessment

Component 1: (40%) A devised performance and an accompanying portfolio completed in Year 12.

Component 2: Text in performance (20%) – two performances from two different texts completed in the Spring term of Year 13.

Component 3: Theatre makers in practice (40%) – the study of two set texts and live theatre performances assessed in a written exam at the end of the course.

Future Pathways

This course can lead to a range of exciting career paths in the performing arts and combines well with most other subjects, either as a complementary or contrasting option. It is also a useful subject to study if preparing for careers which require interpersonal and communication skills. Former students are working in a wide range of industries, from theatre, TV and film to law, marketing and public relations.

MUSIC

Examination board: Eduqas

OVERVIEW

Expand your musical repertoire, develop a deeper appreciation of what you hear and discover how elements of music work together as you compose and perform your own work.

You will explore a variety of musical genres and discover what inspires musicians and how they develop techniques for practice and performance. You will use our professional recording studio, which has specialist music software including Cubase and Logic Pro for producing studio-based compositions, and Sibelius to score creations.

Directing and organising your own ensembles, you will prepare performances for the many musical events that occur throughout the school. These include live performances in Romsey Abbey, our music and performing arts showcase events, recitals and concerts. In addition, there are many varied groups and ensembles for you to take part in, including orchestra, jazz band, flute choir, rock band and choir.

For further information or to discuss in more detail, please contact:

Mr Ciaran Yeo
Director of Music
ciaran.yeo@embley.org.uk

Assessment

At the end of the course, the assessment comprises three parts: performing, composing and listening/appraising.

Future Pathways

Studying music at university can lead to varied pathways, such as performance, composition, musicology, ethnomusicology, sound engineering, conducting and teaching. It is also common to find music graduates in consultancy, finance, banking, music therapy and the legal profession because of the valuable skills that music graduates have.

ENGLISH LITERATURE

Examination board: Pearson Edexcel

OVERVIEW

Students will enjoy a range of prose, poetry and drama and learn to read critically, analyse, evaluate and undertake independent research; all valuable skills for higher education and life beyond education. Regular theatre trips and a range of TV and film interpretations will support set texts.

There are three examinations entitled drama, prose and poetry, alongside a non-exam assessment. For the drama paper, students study one Shakespeare play, such as 'Hamlet' or 'Othello' and another drama text 'A Streetcar Named Desire'. For the prose paper, they will study two novels which are linked, by titles such as science and society. These novels will include one pre-1900 novel, such as 'Frankenstein' and one post-1900 novel, such as 'The Handmaid's Tale'. For the poetry paper, there is a wide range of choices. Again, two texts will be studied, allowing the class to explore a diverse modern anthology; a movement or an individual poet, such as Christina Rossetti.

For the non-exam assessment module, students will have a free choice of two texts to study and compare. They will then produce a 2,500 to 3,000 word comparative essay.

For further information or to discuss in more detail,
please contact:

Mrs Natalie Kellie
Head of English
natalie.kellie@embley.org.uk

Assessment

Three written papers at the end of the course plus a coursework module.

Future Pathways

English Literature is defined as a 'facilitating' subject by the Russell Group of universities and can lead to a wide range of career opportunities including journalism, advertising, creative writing, teaching, law, broadcasting, public relations and politics. More broadly, an enthusiasm for literature, added to an understanding of communication and human behaviour, will be invaluable, whichever path you choose to follow.

FOREIGN LANGUAGE – FRENCH OR SPANISH

Examination board: Edexcel

OVERVIEW

Languages at A Level can open a wealth of opportunities. They build on the core skills of listening, reading, writing and speaking gained through GCSE. During this course, you will develop a deeper understanding of French or Spanish in a variety of contexts and genres, and learn to communicate confidently, clearly and effectively for a range of purposes.

Our lessons are largely taught in the foreign language you are studying and our small class sizes mean that you will quickly develop your oral fluency and confidence, with individual guidance given in every lesson and plenty of opportunities for pair work, group discussions and lively debates.

As part of the course, you will study a wide range of topics including social issues and trends; political, intellectual and artistic culture; immigration and multicultural societies; and the arts, literature and history - such as the study of a French film and novel or the Spanish Civil War and magic realism in Latin American literature.

We use a range of mediums to support learning and study trips provide plenty of opportunities to immerse yourself in the language.

For further information or to discuss in more detail, please contact:

Mrs Catalina Petre

Head of Modern Foreign Languages
catalina.petre@embley.org.uk

Assessment

Three exams at the end of the course: two written assessments and an internally conducted and externally assessed speaking paper.

Future Pathways

Our students have gone on to study languages at a number of Russell Group universities including UCL, the University of Cardiff and King's College London. The skills and qualifications that are gained from studying a language at A Level are incredibly important tools. A language can be combined with and complement many courses at university.

GEOGRAPHY

Examination board: Cambridge International

OVERVIEW

This is an opportunity to study a fascinating and ever changing subject. Geography is a multidisciplinary subject that stands astride the arts and sciences and will provide you with the ability to gain invaluable skills that employers are increasingly looking for.

You will study a diverse range of physical and human geography topics that are intrinsically interesting and relevant in today's changing world. You will study physical geography issues such as atmospheric processes and climate change, coastal erosion, and hazard management including rivers, volcanoes, earthquakes and wildfires. Topic areas in human geography include population change and migration, and the management of water resources and urban areas. You will gain essential transferable skills such as being able to interpret maps, figures and analyse data, articulate well-informed opinions, suggest new ideas and provide evidenced arguments on a range of issues. The geography you study will be brought to life through fieldwork excursions.

You will be encouraged to develop an enquiring mind, to investigate and be proactive in your learning. At the same time, the detailed subject knowledge and essay writing skills that we teach you will enable you to reach the top grades. Many students choose to continue their enjoyment of geography at university level and beyond.

For further information or to discuss in more detail, please contact:

Mrs Rebecca Clayton

Head of Geography

rebecca.clayton@embley.org.uk

Assessment

Four written exams with the option of taking two exams on Year 12 content in the autumn of Year 13 and the final two exams at the end of the course.

Future Pathways

Our students have gone on to lead successful careers in the field of meteorology, chasing tornadoes in Tornado Alley, Oklahoma; working for the Environment Agency as a hydrologist, a flood risk and drainage engineer; and developing sustainable energy for a key energy company. Geography therefore provides many different pathways.

HISTORY

Examination board: OCR

OVERVIEW

Ignite a passion for the past as you study complicated historical questions in great depth across a fantastic range of areas covering British and world history. Topics focus on a mix of political, social, economic and cultural history, which will help you see patterns and trends in history and recognise the impact of past events on today's complex societies.

You will study three topics: the early Stuarts and the origins of the Civil War (1603 – 1646); the USA in the 19th century: westward expansion and Civil War (1803 – c.1890); and China and its rulers (1839 – 1989). These three units are assessed in three exams at the end of Year 13.

In Year 13 you will complete an extended essay on an area of your own interest. Our most recent student essay topics have been wide ranging, including the reasons for the French Revolution, the role of the Suffragettes in women winning the vote, an analysis of the Civil Rights movement in America, and the reasons for Allied victory in the Second World War.

You will develop a wide range of essential skills that will be indispensable in your future studies. You will become an analytical, critical thinker and well-informed decision maker, as well as a highly literate, persuasive communicator.

For further information or to discuss in more detail,
please contact:

Mr David Chinnock

Head of History & Politics

david.chinnock@embley.org.uk

Assessment

An extended essay in Year 13 and three exams at the end of the course.

Future Pathways

Students will find all areas of study and all career avenues open to them. Previous students have gone on to study degrees in history, law, journalism, philosophy, politics and economics, languages and science. History qualifications are highly regarded and graduates work in a variety of industries including the media, law, education, politics, international development and charity work.

POLITICS

Examination board: AQA

OVERVIEW

Politics is the study of power. Who gets what, why and how? There is no better time to be thinking about this, with all the changes taking place in the way we are governed nationally and internationally.

Who really holds the power to make policy? Does our electoral system create the strongest governments? Are referendums the most democratic way to make decisions? You will cover a broad range of topics and develop skills including critical analysis, problem solving and debate. You will analyse the politics of the UK and USA and explore the foundations of political thought, looking at liberalism, conservatism, socialism and anarchism.

In addition to independent study and group discussions, you will have opportunities to join co-curricular groups and lead events. This includes our Politics Society, annual human rights conference and regular visiting speakers. Rt Hon Caroline Nokes MP and Rt Hon Dr Vince Cable have led workshops with students.

We will help equip you with a political literacy and confidence to question and shape your perspective on the challenges that are facing the world.

For further information or to discuss in more detail, please contact:

Mr David Chinnock

Head of History & Politics

david.chinnock@embley.org.uk

Assessment

Three exams at the end of the course containing short answer, source based and essay questions.

Future Pathways

Politics can be taken as a joint degree with subjects like history, philosophy, economics or business, or as part of a combined social science degree. In addition, politics is a good A Level for those wanting to follow international relations, public policy, American studies or international development.

PSYCHOLOGY

Examination board: AQA

OVERVIEW

Have you ever wondered how the brain works, or why we behave the way we do? Psychology is your chance to find out! Explore questions such as, how does brain damage affect memory? Can schizophrenia be inherited? What makes someone a criminal? And is 'just obeying orders' enough reason to kill?

In the first year, you'll look at a range of psychological approaches including cognitive, biological, psychodynamic, humanistic and behaviourist. You'll study the topics of social influence, memory, infant attachment and psychopathology. You'll examine methods used in psychological research, take part in mini experiments, gather data and analyse the results to see if they support or challenge existing theories. You'll also learn about the ethical principles guiding psychological research (and how these have often been broken).

In your second year, you'll study biopsychology, cognitive development, schizophrenia and forensic psychology. You'll compare classic psychology studies with the latest psychological research. You'll learn to evaluate studies and to consider whether theories should be believed or not, based on scientific evidence.

You'll have the opportunity to visit psychological exhibitions such as the Freud Museum in London and will benefit from targeted support sessions to ensure you get the very most from your A Level course.

For further information or to discuss in more detail, please contact:

Miss Emma Moran

Head of Psychology

emma.moran@embley.org.uk

Assessment

Three exams at the end of the course.

Future Pathways

Psychology is a science and is recognised as such by many academic institutions. It has links with many academic areas such as psychology of business, sport, education and criminal (forensic) psychology. It is useful for any career that involves working with people such as the Police, medical professions and in any profession where knowledge of the workings of the brain would be useful, for example, performance related careers, teaching or sport.

RELIGIOUS STUDIES

Examination board: OCR

OVERVIEW

This subject is about so much more than the history of religion. You will consider philosophical and ethical ideas and study the theories of Plato, Descartes, Nietzsche and their colleagues. You will be encouraged to re-evaluate conventional norms and conceptions, as you study key texts and scholars, shaping and forming your own opinions.

You will benefit from our experienced teachers, small class sizes, highly engaging and interactive lessons, and outstanding levels of support, which lead to excellent outcomes for our students.

Over the years we have run trips to Prague, Krakow and Auschwitz, and Berlin, to bring the subject further to life, and you will be invited to lectures and seminars at leading universities. At school, you will be encouraged to join the Debating Society.

You will study three key components in the course: the philosophy of religion, religion and ethics and the study of key concepts within the development of Christian thought. Knowledge and understanding of these areas are externally assessed at the end of the course.

For further information or to discuss in more detail, please contact:

Mr Rob Barber

Head of Philosophy & Religion
rob.barber@embley.org.uk

Assessment

Three written exams at the end of the course.

Future Pathways

Philosophy, theology and religious studies are excellent degrees on their own and a superb complement to a wide range of other subjects. The qualification links well with the arts, humanities or social sciences.

In recent years, students have gone to university to study philosophy, psychology, theology and philosophy and PPE (philosophy, politics and economics). Others have found the study of philosophy useful in progressing to law, linguistics, mathematics, natural sciences, business and economics and medicine.

BIOLOGY

Examination board: AQA

OVERVIEW

Biology has expanded enormously in the last four decades, from the study of molecules and DNA to ecosystems and artificial intelligence. Biologists around the world are trying to solve significant challenges including disease and antibiotic resistance, climate change, food production and genetic technologies.

You will work in small groups or independently with all the necessary resources to develop your biological knowledge. You will cover topics including biological molecules, cells, organisms and their environment, genetic information and variation, energy transfer, organisms responding to change, genetics, populations and ecosystems, and the control of gene expression. There are also lots of opportunities for you to get involved in a wide range of national competitions, field trips, science events and university visits as part of your studies.

We set high expectations that allow our students to achieve their full potential in a friendly and supportive environment, and we will challenge you every step of the way. We will guide you through the University Clinical Aptitude Test (UCAT) and the Biology Olympiad to ensure that you have every opportunity to fulfil your ambitions.

For further information or to discuss in more detail,
please contact:

Mrs Abigail White

Head of Biology
abigail.white@embley.org.uk

Assessment

Three written exams at the end of the course.

Future Pathways

Biology holds academic weight in university applications and it opens exciting opportunities in both science and non-science careers due to the wide-ranging knowledge and transferable skills it provides. Many of our students go on to read biology-based subjects at university such as medicine, dentistry and veterinary science.

CHEMISTRY

Examination board: OCR Chemistry A

OVERVIEW

Chemical principles are becoming increasingly vital to helping us understand, explain and improve the world we live in. Chemists and biochemists play a crucial role in areas such as medicine, materials science, energy and environmental protection, as well as in the development of new treatments and vaccines.

Throughout the course, you will study chemistry through a balance of theoretical learning and practical investigation, developing a deep understanding of the fundamental principles that underpin the subject. Topics are taught in a clear, logical sequence and include atomic structure, bonding, periodic trends, energetics, kinetics, equilibria, organic chemistry, analysis and redox chemistry. These core ideas are revisited and extended over the two years to build confidence and mastery.

The course follows the OCR A specification, a well-established and widely recognised qualification that is highly regarded by universities. Its strong emphasis on fundamental chemical principles and rigorous assessment ensures students are well prepared for chemistry and chemistry-related degree courses.

Practical work is fully integrated into the course and plays a key role in developing problem-solving skills, analytical thinking and experimental techniques. There is a strong emphasis on planning investigations, analysing data and evaluating results, helping students to think and work like chemists.

For further information or to discuss in more detail, please contact:

Miss Brianna Thorpe

Head of Science
brianna.thorpe@embley.org.uk

Assessment

The course is assessed through three written examinations taken at the end of Year 13.

Students will also complete a wide range of practical experiments across the course. Practical competence is assessed separately through the Practical Endorsement, which is reported alongside the A Level grade.

Future Pathways

A thorough understanding of chemistry provides an excellent foundation for a wide range of university courses, including chemistry, engineering, medicine, dentistry, veterinary science and pharmacy. Chemistry is also highly regarded by law degree providers and other competitive courses, as it develops precision, logical reasoning and strong analytical skills valued by employers and higher education institutions.

COMPUTER SCIENCE

Examination board: OCR

OVERVIEW

Computerisation is governing increasing parts of our daily lives. Through this practical subject, you will apply the academic principles learned in the classroom to real-world systems. It is an intensely creative subject that combines invention and excitement, problem solving and programming, and it will encourage you to look at the natural world through a digital prism.

You will start by learning the fundamentals of computer science: the internal working of the central processing unit, how data is exchanged, software development, different data types and legal, moral, cultural and ethical issues associated with the subject. In the second year, you will study computational thinking, how computers and programs can be used to solve problems and how to produce algorithms in order to describe and solve problems.

We use a variety of teaching methods including practical programming activities, presentations, field and university trips and - through scaffolded tasks - you will develop a mastery of the subject which will culminate in a software project that you will define, design, develop and test.

For further information or to discuss in more detail, please contact:

Mrs Lesley Johnson

Head of Computer Science

lesley.johnson@embley.org.uk

Assessment

Two written exams at the end of the course plus a programming assignment in Year 13, where you will apply the principles of computational thinking to a practical coding programming task of your choice.

Future Pathways

The skills of A Level graduates are highly prized by a range of industries and sectors and students benefit from a high level of employment. This subject could also lead to careers in defence, engineering, technology, medicine, multimedia and IT.

MATHEMATICS

Examination board: Edexcel

OVERVIEW

This subject is held in very high regard by universities and employers. It is a comprehensive course designed to equip students with a solid foundation in mathematics, enabling them to pursue further studies or careers in various scientific, technological and mathematical fields. Throughout this course, you will delve into diverse mathematical concepts, develop problem solving skills and enhance your analytical thinking abilities.

A Level Mathematics is divided into three main modules studied over two years, covering essential areas of mathematical theory and application. These modules include pure mathematics, mechanics and statistics.

You will be stretched with content beyond the classroom including lectures by inspiring individuals through our links with some of the UK's leading universities, and designing and delivering Royal Institution Mathematics lectures. There are opportunities for you to explore an area of interest through the Extended Project Qualification and we will provide additional support for entrance exams such as STEP (Cambridge) and MAT (Oxford).

Through engaging lessons, comprehensive past exam practice and assessment, we aim to foster a deep understanding and appreciation of mathematics, empowering our students to excel in their chosen paths.

For further information or to discuss in more detail,
please contact:

Mr Simon King

Head of Mathematics
simon.king@embley.org.uk

Assessment

Three written examinations, two in pure mathematics and the third in statistics and mechanics, each assessing the content of the different modules. The examinations are held at the end of the two-year programme. The overall grade is determined by the cumulative marks obtained in these examinations.

Future Pathways

Successful completion of A Level Mathematics opens a wide range of academic and career opportunities. Students can pursue higher education in fields such as mathematics, physics, engineering, computer science, economics and actuarial science. Additionally, the subject provides a solid foundation for professional qualifications such as accountancy and finance.

FURTHER MATHEMATICS

Examination board: Edexcel

OVERVIEW

A Level Further Mathematics is an advanced course designed for students who have a strong aptitude and interest in mathematics and will gain a grade 8 or 9 at GCSE. It builds upon the concepts and topics covered in A Level Mathematics, providing a deeper understanding and introducing more advanced mathematical techniques.

You will delve into topics such as complex numbers, matrices, differential equations and further calculus techniques. This component of the course emphasises rigorous proof-based reasoning, enabling students to develop their problem solving skills and logical thinking abilities.

Students all study pure mathematics and choose two units from: further pure, mechanics, statistics or decision maths.

You will develop your mathematical reasoning, logical thinking and analytical skills. The course encourages the exploration of connections between different areas of mathematics and application of knowledge to real-world situations.

This qualification is highly regarded by universities and employers, as it demonstrates a high level of mathematical proficiency and problem solving ability. It will prepare you for advanced study in mathematics-related disciplines and equip you with valuable skills for your future endeavours.

For further information or to discuss in more detail,
please contact:

Mr Simon King

Head of Mathematics
simon.king@embley.org.uk

Assessment

Four written examinations, two in pure mathematics, the other two exams are in each of the chosen applied modules. The examinations are held at the end of the two-year programme. The overall grade is determined by the cumulative marks obtained in these examinations.

Future Pathways

Further Mathematics opens up a wide range of opportunities in fields such as engineering, computer science, finance, physics and research.

PHYSICAL EDUCATION

Examination board: AQA

OVERVIEW

If sport is your passion and you are eager to understand the science, performance and psychology behind elite athletes, then A Level PE at Embley will challenge, inspire and empower you. Whether you're aspiring to a career in sport, healthcare, education or just want to push your understanding of human performance, this course is where your ambition takes shape. Your desire to understand, analyse and interpret key factors of sporting performance will be at the forefront of your studies, with much of the content being taught around your own sporting experiences to maximise learning and understanding. You will also be given the tools to improve your own sporting performance through a directed piece of work which monitors your development.

You will learn from experienced staff, including current athletes, coaches and professionals who bring real-world insights into the classroom. Opportunities to train alongside your academic studies through our performance sports programme in rugby, hockey, netball and cricket will help accelerate your own sporting pedigree. In addition, you will be afforded the opportunity to visit elite performance centres, sports science labs, and the UK's leading sports universities, bringing theory to life in the real world and giving you first-hand experience of how the course content is being used in the 21st century sports industry.

For further information or to discuss in more detail, please contact:

Mr Ben Wainwright

Director of Sport

ben.wainwright@embley.org.uk

Assessment

Two exams at the end of the course in addition to one written piece of coursework and a practical assessment in one sport of your choice.

Future Pathways

This is a highly regarded qualification for any student wishing to pursue a career in the sports sector or applying for a university degree in sports science, sports management, healthcare or exercise and health. It can also complement further study in biology, human biology, physics, psychology, nutrition and sociology.

PHYSICS

Examination board: OCR A

OVERVIEW

Monitoring climate change and finding sustainable ways of generating electricity are needed more than ever before. Engineers are needed to develop ways of saving water, improving the world's food supply, making travel more environmentally friendly and recycling waste on a large scale. These specialist roles share a core foundation in physics.

Our well-equipped department and highly experienced teachers bring theories to life. Topics are always related back to the real-world and these come to life through our many prospective trips and attendance at inspiring lectures and workshops at leading universities.

In Year 12 you will build on your GCSE knowledge, looking at important underlying topics such as forces, waves, electricity and quantum phenomena. You will then connect these content areas together in Year 13 and study resonance, particle physics, gravitational and electric fields and electromagnetism.

To conclude the course, you will discover practical applications for what you have learnt and apply them to medical physics. Applying mathematics to real-world problems will develop skills that enable you to make quick but fascinating estimations about the universe, such as how fast does an electron move in a wire? How many atoms make up a human being? What would happen if you sat on a neutron star or approached a black hole? And what is the probability of life existing outside of our solar system?

For further information or to discuss in more detail, please contact:

Miss Brianna Thorpe

Head of Science

brianna.thorpe@embley.org.uk

Assessment

Three written exams at the end of the course. Practical and data analysis skills will be tested during these exams.

Future Pathways

This is an important qualification in a range of careers, including technology and science. It is useful for medical and veterinary careers and is a qualification which is welcomed in law, banking and accountancy, since a good A Level grade demonstrates a student's analytical and problem solving skills and mathematical competencies.

EXTENDED PROJECT QUALIFICATION

Examination board: AQA

OVERVIEW

Started in Year 12, studying an Extended Project Qualification (EPQ) is an opportunity for you to gain UCAS points (worth half an A Level) by investigating an area of interest to you. It is recognised by leading universities and many of our students often receive reduced offers for A Level requirements if an A and A* grade is achieved in the EPQ.

Many students choose to study an area that will contribute to their university course or future career aspirations. You will research a subject of your choice before producing a dissertation, investigation, performance or artefact.

The options for topics are limitless. In recent years, student's EPQ projects have ranged from technical enquiry into quantum computing, epigenetics and embryonic stem cells to end-of-life legislation, U.S. Death Row inequality, water scarcity in Malawi, concussion risks in rugby and the role of performing arts in tackling climate change.

Although the nature of the project is individually driven, students receive one-to-one guidance to support the requirements of their title.

For further information or to discuss in more detail, please contact:

Mr Alex Cherry

Director of Sixth Form

alexander.cherry@embley.org.uk

Assessment

No exam, this is a research-based project.

Future Pathways

This is a standalone qualification designed to extend and develop students' skills in independent research and project management skills. This qualification is highly regarded by universities.





Sixth Form Guide

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