

# Sixth Form Courses Information and Guidance

A levels IB CTEC

2024

# Contents

Introduction		3		
A Level Programme		4	IB Diploma Programme	
Art and Design (Including	AQA	5	Introduction and IB Core	35
Photography)		Ū		00
Biology	AQA	6	Group 1 - Studies in Languages and Literature	
Business	EDEXCEL	7	English A Literature	38
Chemistry	EDEXCEL	8	German A Language and Literature	39
Classical Civilisation	OCR	9		
Classical Languages	OCR	10	Group 2 – Languages Acquisition	
Computer Science	AQA	11	Modern Foreign Languages B	40
Design and Technology	OCR	12	Modern Foreign Languages ab initio	41
Drama and Theatre	EDUQAS	13		
Economics	EDEXCEL	14	Group 3 – Individuals and Societies	
English Literature	OCR	15	Economics	42
Geography	CIE	16	Environmental Systems and Societies (also Group 4)	43
History	OCR	17	History	44
History of Art	EDEXCEL	18	Psychology	45
Mathematics	EDEXCEL	19		
Further Mathematics	EDEXCEL	20	Group 4 - Sciences	
Modern Foreign Languages	AQA	21	Biology	46
Music	AQA	23	Chemistry	47
Music Technology	EDEXCEL	24	Design and Technology	48
Physical Education	OCR	25	Physics	49
Physics	AQA	26	•	
Politics	EDEXCEL	27	Group 5 – Mathematics	
Psychology	AQA	28	Mathematics	50
Religious Studies	OCR	29		
			Group 6 – The Arts	
Career Focused Program	nme		Visual Arts	51
Introduction		30		
Business Marketing	OCR	31	Academic Enrichments in the Sixth Form	
Sport and Physical Activity	OCR	33	Introduction	52
Sports Coaching		00	<b>_</b>	
-r			Supplementary Qualifications	52

The booklet is published in December 2023. Information given refers to courses due to be offered at Bryanston School in the period September 2024-July 2025, notwithstanding popularity of choice and timetabling constraints. It is correct at the time of publication but could be subject to changes.

# Introduction

This booklet sets out the range of courses available for pupils entering the Sixth Form in 2024.

Current pupils make their sixth form programme and subject choices in January of the B year (Year 11) following the GCSE mocks, sixth form talks and sixth form subject fair. These will be confirmed at the B parents' meeting at the end of January. Pupils joining Bryanston in the sixth form make the same choices as our current pupils following the offer of a place. For September 2024 an initial choice needs to be made as to whether to take the International Baccalaureate Diploma (IBDP), to select a programme leading to A level qualifications or a combined Cambridge Technicals (CTEC) and A level progamme. Once that decision has been made there are then further choices of subjects to be selected within each programme.

There are many similarities between the IB and A level programmes, and for pupils the main objective of each is to qualify for entry to higher education. In addition to the subjects chosen, all pupils are expected to broaden their academic profile. For the IBDP this is fulfilled by the Extended essay and Theory of knowledge course. For A level this can be met by involvement in academic enrichment or other self-directed work (It should be noted that a university application without these additions could be weaker).

One clear difference is that the IB framework allows greater but more guided subject choices as opposed to the freer choice of an A level programme; although, as advice given later in the next section indicates, this difference may not be as striking as it seems at first sight.

New A3 (Year 12) pupils are asked to make an initial selection on their application form and it is expected that all pupils joining the school in A3 will have achieved 40 points as a minimum in order to have a successful and meaningful sixth-form career. Most heads of department recommend at least a grade 7 at GCSE for subjects relevant to sixth form study.

Pupils opting for an A level programme are required to study at least three subjects in A3. A compulsory weekly enrichment programme in A3 including the Extended Project Qualification and Public Speaking among several other options will provide breadth alongside other cocurricular opportunities. Some combinations of subjects may not be possible to timetable.

As a further stage, a sixth form induction programme in the final week of the summer term is arranged to allow pupils to gain a more direct insight into what is involved in studying the subjects they have selected. After the end of the summer term, subject changes may not be possible. It is difficult to accommodate pupils changing their minds once courses are under way. Certain subjects may also be unable to take any more pupils because sets are full. Changing one's mind is understandable but unlike at GCSE when a change affects a tenth of a programme, where it affects a quarter or a third of a programme, the risks are increased.

Course changes will be considered in the first two weeks of the autumn term of A3 and again in the week before the half term break after the first formal assessment point.

The details in this booklet are as accurate as they can be and should not be misleading to pupils and parents. It is expected that the courses described below will run, (subject to there being sufficient demand). Nonetheless, there could be further amendments before September 2024.

Enjoy reading about our wide breadth of courses, having exciting conversations and making selections.

Liz Thornton Head of Sixth Form

# A Level Programme

# SELECTING A LEVEL SUBJECTS

This section should be read carefully as it contains details of the courses available, together with some observations about combinations.

Details of the IB programmes on offer can be found on pages 30-58.

Course choices and combinations should be based upon subjects the pupil is good at, enjoys studying and of which they wish to acquire a deeper knowledge and understanding. The incidence of Non-Examination Assessments (NEAs), formerly called coursework, should also be taken into account when building the desired combination; obviously, NEAs reduce the weight of written exams but may have deadlines which overlap with other subjects.

After those considerations have been weighed, the effect of a particular combination on future options ought to be taken into account.

# WORKLOAD

It is expected that during assignment periods and prep pupils will spend on average five hours per subject each week.

### ACADEMIC ENRICHMENT

Details of the academic enrichment programme can be found on pages 59-60.

### A level subjects available September 2024

Classical and Modern Foreign Languages Classical Greek French German Latin Spanish

Humanities and Social Sciences Art History Business Classical Civilisation Economics English Literature Geography Government and Politics History Physical Education Religious Studies

Science, Technology and Maths (STEM) Biology Chemistry Computer Science Design and Technology Mathematics Further Mathematics Physics Psychology

Creative and Expressive Arts Fine Art 3D Art Drama and Theatre Music Music Technology Photography

TOTAL: 29

# Art • AQA Fine Art (7202), 3D Art (7205), Photography (7206)

Component	Assessment	A Level
1	1 coursework project and related study (Personal Investigation)	60%
2	Externally set assignment culminating in a 15 hour controlled test over 15 hours in May of the A2 year	40%

### **SPECIFICATION**

The AQA Fine Art, 3D and Photography Components are all Assessed under the 'AQA ART AND DESIGN' Specification. They are therefore identical in the Assessment model and have the same Assessment Objective as GCSE AQA Art and Design. There are 4 key areas for Assessment:

AO1 – Investigating ideas through looking at Artists as well as the pupil's own ideas

AO2 – Experimenting with a range of techniques and processes, reviewing and refining the work in progress. AO3 – Recording of ideas through a range of techniques. AO4 – Personalisation and realising intentions

# **EXPECTATIONS**

Following on from GCSE, the two Art based subjects develops advanced visual research skills in Fine Art or Three Dimensions. Coursework is the same format as the GCSE and there is a blend of theory and practice, however there is far more emphasis on pupils exploring ideas and techniques. Developing a range of drawing skills with our pupils is now a central aspect of both the A level courses. Independence and creativity are important credentials

For Photography, a keen interest in both the creative aspects of photography and learning the technical aspect of the course to enhance pupil's

work through both digital and analogue techniques are essential. Strong organisational skills and independent skills are also key to the development of their work. Pupils may be required to submit a photography portfolio and a statement that highlight's their interest in this subject. It is also highly encouraged that you attend the Photography ECA in the Summer term of B.

In A3, pupils are introduced to a series of workshops that not only enhance their practical skills but help to guide pupils in a preferred personal direction beyond this point. There are also many opportunities available such as life drawing, Portraiture sessions, Photography workshops and work nights.

The A2 course then expands this further where pupils are expected to explore both their own visual interests and locating their work within a cultural context through the 'Personal Investigation'. If there is not sufficient demand, smaller courses may not be able to run.

# FUTURE

Further career progression is very popular with our Art and Photography pupils. A number of students go on to study Art Foundation, Fine Art degree courses, Architecture or design courses across a wide variety of institutions. We therefore support pupil's application processes through running workshops to guide them through their portfolio preparation, personal statements and mock interviews.

# Biology • AQA (7402)

Component	Assessment	A Level
1	2 hour written paper (91 marks) Structured and extended response questions based on syllabus content studied in A3	35%
2	2 hour written paper (91 marks) Structured questions and a comprehension section based on syllabus content studied in A2	35%
3	2 hour written paper (78 marks) based on content studied in A3 and in A2. Structured questions - including practical techniques, analysis of experimental data and one essay from a choice of two titles	30%

### **SPECIFICATION**

The course covers the following topics:

Biological molecules and enzymes Nucleic acids and DNA replication Cell structure The mitotic cell cycle Cell membranes and transport Immunity Gas exchange Digestion Mass transport in animals and plants DNA and protein synthesis Mutation and meiosis Species and taxonomy Investigating diversity Photosynthesis and respiration Energy transfer Response to stimuli Homeostasis Inheritance, evolution and speciation Control of gene expression Genetic technology

### EXPECTATIONS

The AQA A Level Biology course builds on the skills acquired at GCSE level. Pupils would ideally have gained a grade 7 or above at either dual or triple GCSE science. The syllabus includes the main theoretical concepts which are fundamental to the subject, a section on some current applications of biology, and a strong emphasis on advanced practical skills. The focus throughout is on the understanding of concepts and the application of these to novel contexts, as well as on the acquisition of knowledge. The course encourages creative thinking and problem-solving skills which are transferable to any future career path. 10% of the marks in the exam papers are for mathematical processing, so robust mathematical skills are key to success on the A Level course; a minimum of a grade 6 for GCSE Maths is expected.

Practical Endorsement is an important feature of the AQA A Level Biology course. During the course, students are assessed on their practical skills, and their ability to effectively analyse experimental data. These skills are also assessed in the Paper 3 examination, together with understanding of the principles underpinning the twelve required practicals. Students are required to provide evidence of the completion of this practical work in the form of written reports. Those who demonstrate the required standard across all the requirements of the CPAC (Common Practical Assessment Criteria) will receive a 'pass' grade. The assessment of practical skills will appear on all pupils' certificates as a separately reported result alongside the overall grade for the qualification. In terms of subject combinations, Biology sits well with Geography, Psychology or Chemistry.

# FUTURE

A level Biology is an excellent choice for people who intend to pursue a career in health and clinical professions, including medicine, dentistry, veterinary science, physiotherapy, nursing and forensic science. It is essential for: Biological Science, Biochemistry, Biotechnology, Marine Biology and Genetics. It is useful for: Medicine, Dentistry, Nursing, Veterinary Science, Human Sciences, Psychology, Anthropology and Archaeology.

# Business • Edexcel (9BS0)

Component	Assessment	A Level
1	Covering topics in Themes 1 & 4. Sections A and B each comprise one data response question broken down into a number of parts, including one extended open-response question	35%
2	Covering Topics in Themes 2 &3. Sections A and B each comprise one data response question broken down into a number of parts, including one extended open-response question	35%
3	Based on pre-release material covering topic for all the Themes. Sections A and B each comprise one data response question broken down into a number of parts, including one extended open-response question.	30%

### **SPECIFICATION**

The course is slit into 4 different themes

### Theme 1

Students will develop an understanding of:

- meeting customer needs
- the market
- marketing mix and strategy
- managing people
- entrepreneurs and leaders.

### Theme 2

Students will develop an understanding of:

- raising finance
- financial planning
- managing finance
- resource management
- external influences.

### Theme 3

This theme develops the concepts introduced in Theme 2. Students will develop an understanding of:

- business objectives and strategy
- business growth
- decision-making techniques
- influences on business decisions
- assessing competitiveness
- managing change.

### Theme 4

This theme develops the concepts introduced in Theme 1. Students will develop an understanding of:

- globalisation
- global markets and business expansion
- global marketing

• global industries and companies (multinational corporations).

# **EXPECTATIONS**

Pupils of this course will study business in a variety of contexts (e.g. large/small, UK focused/global, service/manufacturing) and consider:

- The importance of the context of business in relation to decision making.
- The interrelated nature of business activities and how they affect competitiveness.
- The competitive environment and the markets in which businesses operate.
- Influences on functional decisions and plans including ethical and environmental issues.
- Factors that might determine whether a decision is successful e.g. the quality of data and the degree of uncertainty.
- How technology is changing the way decisions are made and how businesses operate and compete.
- The impact on stakeholders of functional decisions and their response to such decisions.

# FUTURE

Recent A level business pupils have gone on to study a huge range of subjects at university, from Business itself, to agriculture, international relations, psychology, economics and finance and many more. Our students are highly employable because they have developed a wide range of skills through the course including research report writing, teamwork, project management, analutical and presenting skills, all of which are in high demand.

# Chemistry • EDEXCEL (9CH0)

Component	Topic	Assessment	A Level
1	Advanced Inorganic and Physical Chemistry	1 hour, 45 minutes	30%
2	Advanced Organic and Physical Chemistry	1 hour, 45 minutes	30%
3	General and Practical Principles in Chemistry	2 hours, 30 minutes	40%

### SPECIFICATION

Topics covered:

- 1. Atomic Structure and The Periodic Table
- 2. Bonding and Structure
- 3. Redox I
- 4. Inorganic Chemistry and The Periodic Table
- 5. Formulae, Equations and Amounts of Substance
- 6. Organic Chemistry I
- 7. Modern Analytical Chemistry I
- 8. Energetics I
- 9. Kinetics I
- 10. Equilibrium I
- 11. Equilibrium II
- 12. Acid-Base Equilibria
- 13. Energetics II
- 14. Redox II
- 15. Transition Metals
- 16. Kinetics II
- 17. Organic II
- 18. Organic III
- 19. Modern Analytical Techniques II

This course takes some of the ideas from GCSE and explores them at a much deeper and advanced level. Pupils find it rewarding and inspiring to take their understanding of the nature of matter much further. There are three strands to the subject at A level and beyond. Physical Chemistry is quantitative and includes topics such as rate, equilibrium, and pH. Inorganic Chemistry focuses on specific areas of the Periodic Table and the detail and patterns in behaviour of some of the elements, such as the transition metals. Organic Chemistry greatly expands in its scope from the hydrocarbons studied at GCSE to look at many other families of carbon compounds and their significance in the modern world, such as carbonyls, alcohols and amino acids. The Department places great emphasis on the value of correction periods and the availability of help for the sixth form from any of the Chemistry staff in the Sanger Building assignment room during assignment periods.

A few course highlights...

Organic Chemistry

• Studying reaction mechanisms allows pupils to explain chemical reactions based on the movement of individual electrons and is the basis of all drug design.

Inorganic Chemistry

• Understand why transition metal compounds are coloured and the science behind photochromic glasses, catalysts and why shape is so important when designing drugs to fight diseases such as cancer. At the end of the two-year course pupils will sit three papers.

#### Assessed practical work

Pupils will complete 16 core practicals (in addition to general practical work completed in lessons). These provide a steady accumulation of skills, rather than a daunting barrier, and act as a source for some exam questions at the end of the course. By the end of the two-year course they will need to have demonstrated an understanding of and an ability to complete the Common Practical Assessment Criteria to achieve a pass in practical work skills.

#### **EXPECTATIONS**

Pupils should ideally have gained at least a grade 7 in the Chemistry papers of their GCSE Science/Chemistry exams. The subject requires independent motivation and industry as well as the flexibility to investigate new ideas and concepts in sufficient depth. Studying Maths at A level would be advisable but can be by-passed if necessary, with our extra Maths for Chemistry course.

### FUTURE

Chemistry stands centrally amongst the sciences, offering an exciting mixture of descriptive knowledge, practical experiments, and problem solving. Universities understand and appreciate the challenges involved. The A level is essential for Medicine, Dentistry and Veterinary courses as well as Chemistry, Chemical Engineering, and many Biochemical courses. The skills acquired from the course are also welcomed in Physics, Biology, Civil, Electrical and Mechanical Engineering, Accountancy, Pharmacy, Agriculture, Dentistry and Law.

Classical	Civilisation	• OCR	(H408)
-----------	--------------	-------	--------

Component	Assessment	A Level
1: The world of the Hero	Literary analysis of passages drawn from Homer and Virgil, including a short comparative essay, a 20 mark and a 30 mark essay. Exam: Two hours, 20 minutes.	40%
2: Culture and the Arts	Evaluation of sources, both visual and literary, with a mixture of short answer and essay questions, including a wider ranging 30 mark essay. Exam: One hour, 45 minutes. Likely options: Greek drama or Greek Art.	30%
3: Beliefs and Ideas	This involves study of an area of classical thought. There is evaluation of sources, both visual and literary, with a mixture of short answer and essay questions, including a wider ranging 30 mark essay. Exam: One hour, 45 minutes. Current option: Greek Religion; possible options: Love and Relationships, Roman Politics of the Late Republic or Democracy and the Athenians.	30%

### **EXPECTATIONS**

No previous knowledge of Classics is required but a willingness to engage with some of the greatest literary texts from the ancient world, all studied in English translation. Resilience and stamina are required to engage with complicated texts such as Homer's Odyssey and Virgil's Aeneid. Some components include visual material, studied alongside literary sources; for instance, in the A3 year the Greek Drama module involves both visual sources, such as images on vases, and literary texts from a selection of tragic and comic playwrights. The course involves a good deal of reading and essay writing, as well as class discussion of texts or visual material often requiring a personal response. The skills of evaluating sources from the ancient world, literary appreciation and analysis of wider themes are all developed over the course.

A level Classical Civilisation combines well with other Arts subjects, such as English, History, Greek or Latin, History of Art, Art, Drama and Theatre; it will, however, serve as a broadening complement to virtually any other subject. A visit to Greece or Italy is usually made available at some stage during the course, as well as visits to relevant talks, theatrical performances and museums.

### FUTURE

There is a fine range of impressive universities offering courses in Classical Studies or Civilisation, or Classical Literature (which can be combined with English Literature, as well as many other subjects). Allied subjects which would be aided by an A Level in Classical Civilisation are Ancient History, Art History, Archaeology, Anthropology, but equally, any Humanities degree would be complemented by this subject. Graduates with Arts Degrees in the Humanities have a wide range of career options.

# Classical Languages • OCR Latin (H443), Classical Greek (H444)\*

Component	Торіс	Assessment	A Level
1	Unseen Translation 1 hour, 45 minutes	Linguistic competence is developed over the course so that pupils can translate both original prose and verse texts from Latin or Greek.	33%
2	Prose Composition or Comprehension 1 hour, 15 minutes	Pupils can either answer a range of grammatical and comprehension questions on a passage of Latin/Greek, or translate a passage into Latin or Greek. We currently offer the grammatical comprehension option.	17%
3	Prose Literature 2 hours	Pupils answer questions on two set texts in both prose and verse, to show their understanding and appreciation of the text and its literary qualities. A	25%
4	Verse Literature 2 hours	appreciation of the text and its literary qualities. A third section includes an essay which draws on knowledge of the text read in A2, as well as additional material in translation, to enable an appreciation of its wider context.	25%

\*The provision of Classical Greek A level is reviewed on a year-by-year basis, dependent on levels of interest.

### **SPECIFICATION**

The A levels in Latin and Classical Greek follow identical formats comprising four papers each, split equally between language and literature.

#### **EXPECTATIONS**

The linguistic knowledge acquired through study to GCSE level (Grade 7 or above) will need to be developed progressively by a systematic review of the language at increasingly sophisticated levels. There is time for the development of satisfyingly firm linguistic foundations during the course. Several prose and one verse author are set for the examined unseen translation component. Pupils develop their versatility in approaching distinct styles of writing and rendering translations in suitably idiomatic English. Linked with greater linguistic confidence is a growing appreciation of Classical literature through the detailed study of set authors. Pupils will need to develop powers of literary analysis and will often form their own response to the text, its ideas, and the way they are expressed. Literary criticism skills are developed, as well as an awareness of the historical and cultural context of the texts. Two set authors are chosen in each year of the course, from a varied selection of literary genres, which encourages a wide understanding of classical literature, whether epic, dramatic, historical, oratorical or philosophical.

A wider appreciation of the Classical world is enhanced by experience of Classical theatre and museum events, as appropriate, and a visit to Greece or Italy is usually made available at some stage during the course. Classical languages combine particularly well with Classical Civilisation, English, History, Art History, Philosophy, Maths and Modern Languages, but will complement any other subject. If there is not sufficient demand, smaller courses may not be able to run.

#### **Example Texts**

Latin prose: Cicero, *Pro Caelio*; Tacitus, *Annals* 14; Pliny, *Letters*.

Latin verse: Virgil, *Aeneid* 2; Juvenal, *Satire* 6; Ovid, *Fasti* 2.

Greek prose: Herodotus 1; Plato, *Republic*; Plutarch, *Antony*.

Greek verse: Homer, *lliad* 16; Euripides, *Hippolytus;* Aristophanes, *Frogs*.

### FUTURE

There is an impressive array of top Universities with strong Departments offering degrees in Classics, which can be combined with other subjects such as Modern Languages or English. Classics A Levels would be welcomed for applications to courses in Law, Ancient History, Literature, Archaeology, Anthropology, Philosophy and Theology, among many other subjects. Graduates with Classics Degrees are highly sought after for employment in a wide range of careers, such as Law, Business/Finance, Civil Service and Education.

Component	Assessment	A Level
1	2 hour, 30 minute computer-based exam	40%
2	2 hour, 30 minute written paper	40%
3	Non-examination assessment (NEA)	20%

# Computer Science • AQA (7517)

### **SPECIFICATION**

Advances in computing are transforming the way we work. This Computer Science qualification has changed with the times, refreshing the content where needed, but retaining the most popular and effective aspects of previous specifications.

The qualification blends theoretical understanding of the fundamental principles of computing with the practical skills of analysing a problem and then designing and implementing a solution. Paper 1 is an on-screen exam that directly tests a pupil's ability to program, as well as assessing their knowledge of data structures, algorithms and the theory of computation. Paper 2 is a written exam covering data representation, computer systems, computer architecture, communication and networking, databases, functional programming and the consequences and uses of computing.

Pupils will also complete a programming project that assesses their ability to use the knowledge and skills gained through the course to solve or investigate a practical problem. They will be expected to follow a systematic approach to problem solving.

# EXPECTATIONS

Studying Computer Science at A level is a rewarding experience. It will inspire and challenge pupils to apply the knowledge they gain with the creative and technical skills they acquire. Taking pupils far beyond the limits of the GCSE course, it requires a combination of ability and commitment throughout. Computer Science blends academic rigour with practical application. Pupils will learn the theory underlying concepts and principles and apply those principles to real-world systems. Computer Science is an intensely creative subject that combines inventions and excitement and can look at the natural world through a digital prism.

While GCSE in Computer Science provides an excellent starting point for the A Level, it is possible to study the A Level without having taken the GCSE. Some additional work would need to be undertaken before starting the course. Computer Science A level requires a higher level of mathematical ability than GCSE and students expecting below a grade 7 in GCSE Maths should approach with caution.

### FUTURE

Computer science complements other science A levels, working particularly well with Mathematics and Physics. Computing is increasingly diverse at degree level, with specialist courses in cybersecurity, software engineering, computer graphics and other subjects being offered alongside the traditional pure computer science and software engineering routes. Students considering pursuing computer science at degree level should be aware that most universities require a Mathematics A level. As well as careers in software development and other digital industries, a computer science degree can lead to careers in engineering, mathematics, economics or business.

# Design and Technology (Product Design) • OCR (H406)

Component	Assessment	A Level
1.Principles of Product Design	<ul> <li>1 hour, 30 minutes written paper (80 marks)</li> <li>This component is set out through four sets of questions that cover technical principles by:</li> <li>Analysis of existing products.</li> <li>Demonstration of applied mathematical skills.</li> <li>Demonstration of technical knowledge of materials, product functionality, manufacturing processes and techniques.</li> <li>Demonstration of understanding of wider social, moral and environmental issues that impact on the design and manufacturing industries.</li> </ul>	27%
2. Problem Solving in Product Design	1 hour, 45 minutes design and written paper (70 marks) This paper has two sections that respond to selected design tasks: Section A focuses on applying knowledge, understanding and skills of designing and manufacturing prototypes and products. Section B requires reflection on the design tasks in Section A in relation to wider factors/issues from the design principles.	23%
3. Iterative Design Project (NEA)	Approximately 65 hours (100 marks) The Iterative Design Project is a substantial design, make and evaluate project centred on the iterative processes - to explore, create and evaluate. Pupils identify a design opportunity or problem from a context of their own choice, and create a portfolio of evidence in real time, to demonstrate their designing skill.	50%

### EXPECTATIONS

The A level course has a 50/50 split between examinations and coursework.

Within the two examined units, pupils are expected to demonstrate an understanding of materials, processes, manufacturing technologies and industrial production. They will also gain an opportunity to develop an awareness of design-related social, economic and environmental issues, while gaining entrepreneurial skills. Within the exams design skills will be tested and 15% of both examinations assess the ability to apply mathematics.

The Iterative Design Project requires pupils to undertake a substantial design project centered on the iterative design process - to explore, create and evaluate. Pupils will be expected to identify a problem or design opportunity from a specific context of their choice and create a portfolio of evidence in real time. The final design is then manufactured to a high quality. Throughout the project pupils will be expected to show innovation and present high levels of communication skills within written, graphical, CAD and three-dimensional practical outcomes.

We recommend that pupils have studied GCSE Design and Technology, though this is not compulsory. They also need to have a confident understanding of and interest in the theoretical elements of the subject and a firm grasp of GCSE level Maths (which forms 15% of the examined assessment). We would recommend the subject to pupils who have achieved a grade 6 or above in both Design and Technology and Maths GCSE. All candidates need to demonstrate a wide range of skills, including initiative and impressive time management.

### FUTURE

Pupils who study Design and Technology at A level are well suited to higher education courses and careers in Industrial Design, Product Design, Design Engineering, Mechanical Engineering and Architecture.

# Drama and Theatre • EDUQAS (A690QS)

Component	Assessment	A Level
1. Theatre Workshop	Candidates are assessed in acting or design, as part of a group performance of 2-5 actors in the summer term of A3. All will contribute to the creation, development and performance of a piece of theatre based on a reinterpretation of an extract from 'Antigone' by Sophocles. The piece must be developed using the techniques of a theatre practitioner or theatre company, such as Bertolt Brecht, Theatre-in-Education or Frantic Assembly. Candidates also produce a creative log, of 1500 words, which can also be produced as a blog or audio-visual recording.	20%
2. Text in Action	Candidates are assessed on acting or design, as part of a group performance of 2-4 actors, plus designers, of two pieces of theatre based on a stimulus set by the exam board, and performed in the spring term of A2: one group devised piece of theatre, using a second practitioner or theatre company and one extract from a text in a contrasting style. Designers give a 5-10 minute presentation to the visiting examiner. All candidates produce a process and evaluation report within one week of the exam which is sent to the examiner.	40%
3. Text in Practice	<ul> <li>Candidates study two complete texts from two different periods - 'Machinal' by Sophie Treadwell and 'Love and Information' by Caryl Churchill; and one extract from 'The Curious Incident of the Dog in the Night-Time' adapted from Mark Haddon's novel by Simon Stephens .</li> <li>Section A – a series of structured questions on a specified extract from one set text studied, addressing interpretation of character, vocal and physical performing skills, interaction, structure, language and design elements such as sound, lighting, costume and set.</li> <li>Section B – An essay question on the second set text, on how to adapt it for a contemporary audience, considering the themes, social, historical and cultural context and the expectations of a 21st century audience, citing the influence of live theatre seen during the course.</li> <li>Section C – A question on a specified extract from 'The Curious Incident of the Dog in the Night-Time', exploring how to perform the text, with consideration of staging, use of space, design elements and other influential productions seen during the course.</li> </ul>	40%

### **SPECIFICATION**

Five texts are studied, which represent a range of social, historical and cultural contexts: Greek tragedy, expressionism, contemporary naturalism, epic (political) and physical theatre are examples of the styles and genres you can expect to explore over the two years. Devised (self-created work), watching and evaluating live theatre and the study of key companies and practitioners feed into the assessed performance of three pieces, giving much scope for practical exploration; not just analysis of text but using imagination and experience to interpret and stage it. It is possible to be assessed on design instead of acting for the practical work, and the written exam will draw on the experience of directing, acting, designing for and watching theatre.

### EXPECTATIONS

Candidates will need to approach practical exploration openly and confidently to make good progress, work with others collaboratively and bring ideas to the table. They will need to do reading, research and preparation during assignment time, to prepare for productive classes and build up the correct terminology and theoretical understanding which underpins good drama and theatre. Some experience in acting or design is important, if not vital and students will need to show initiative to succeed. Written work will vary from charting progress in diary form and explaining the development process of creating drama to short and full essay questions in the final exam.

#### FUTURE

A good drama student takes the initiative and embraces team work as well as being tuned in to the feelings of others – excellent preparation for life and work. Vocational actor, backstage or design training at Drama Schools, Performing Arts, English, Creative Writing, Classical Studies and Art and Design are linked most closely, and the transferable skills gained by good drama students aid creativity, communication (oral, written, in debate), analysis, evaluative and teamwork skills, helping them cope with any academic arts degree. Organisation, practical planning, problem solving and working to deadlines as a team are required, all excellent preparation for the workplace. Many law students take A level drama and Oxbridge accepts it as a valid A level as part of an appropriate application. It makes a strong support for English applications in particular, broadening knowledge of different periods, styles and genres.



# Economics • EDEXCEL (9EC0)

Component	Topic	Assessment	A Level
1	Markets and business behaviour	MCQs, Short answer, Data response and open- response questions based on data (Themes 1 & 3)	35%
2	The National and Global Economy	MCQs, Short answer, Data response and open- response questions based on data (Themes 2 & 4)	35%
3	Microeconomics and Macroeconomics	Data response and open-response questions (All themes)	30%

### **SPECIFICATION**

This specification provides pupils with a coherent combination of microeconomic and macroeconomic content that will develop an understanding of economic concepts and theories through a critical consideration of current economic issues, problems and institutions that affect everyday life. Pupils will:

- Develop an interest in and enthusiasm for the subject.
- Appreciate the contribution of economics to the understanding of the wider economic and social environment.
- Develop an understanding of a range of concepts and an ability to use those concepts in a variety of different contexts
- Use an enquiring, critical and thoughtful approach to the study of economics and develop an ability to think as an economist
- Understand that economic behaviour can be studied from a range of perspectives
- Develop analytical and quantitative skills, together with qualities and attitudes which will equip them for the challenges, opportunities and responsibilities of adult and working life.

Economics combines well with any subject, but especially, Mathematics, Physics, History and Government & Politics. There is no coursework.

# **EXPECTATIONS**

Pupils will need to be very strong at both English and Maths in order to do well but please note that if you want to study Economics on its own at university, most universities will require A level Mathematics.

### FUTURE

This specification leads on to courses in Economics, Finance, International Relations, Politics and Government, Business, Management, Marketing and Law

# English Literature • OCR (H472)

Component	Topic	Assessment	A Level
1	Drama and Poetry pre-1900	Closed text exam: 2 hours, 30 minutes	40%
2	Comparative and Contextual Study	Closed text exam: 2 hours, 30 minutes	40%
3	Literature post-1900	Coursework	20%

### **SPECIFICATION**

In the first year pupils will study Component 2: Comparative and Contextual Study, where the focus is on a literary genre: The Immigrant Experience, American Literature (prose) 1880-1940 or Dystopia, for example. There is a requirement to study an exam text: Small Island by Andrea Levy and The Reluctant Fundamentalist by Mohsin Hamid being two recent choices, as well as reading widely around the topic area. A willingness to embrace literary criticism, to consider the contexts in which a work has been written and received, and an awareness of film and stage adaptations is essential.

Towards the end of the year pupils begin to plan their coursework tasks, submitting titles to the exam board for approval at the end of the spring term. The coursework folder has a 3000 word limit, excluding titles, quotations, footnotes and bibliography, and should include comparison of a drama, a prose and a poetry text. The texts should all have been published and performed in 1900, or later, and one of the three must have been first published or performed after 2000.

In the second year pupils study Component 1: Drama and Poetry pre-1900, comprising one Shakespeare text, with a range of choice from 'Coriolanus' to 'Twelfth Night', as well as one other pre-1900 drama text, The Duchess of Malfi or An Ideal Husband, for example, and some poetry, possibly, Chaucer's The Merchant's Prologue and Tale, Coleridge's Selected Poems or Tennyson's Maud.

All texts mentioned above are on the syllabus but all choices are subject to individual teacher choice.

# **EXPECTATIONS**

Pupils will study a wide variety of prose, poetry and drama texts and will, increasingly, be encouraged to explore comparisons between different genres.

A scholarly enthusiasm for literary ideas and a passion for extensive reading 'off piste' is vital. A willingness to handle historical background and appreciate cultural issues is essential. Imagination, responsiveness and close attention to detail are also essential. The capacity to deal with unusual or initially difficult texts can be advantageous.

Combines well with Arts subjects, especially languages, history and classics. An A level modern language is regarded favourably when applying for English at university.

### FUTURE

English Literature; English Language; Languages; Drama; Law; Journalism; Media Studies and a large range of mixed courses.

English is a popular and competitive subject at university. It is relevant to careers in law, journalism, publishing, education and a variety of business and commercial fields.

# Geography • CIE (9696)

Component	Title	Topic	Assessment	A Level
1	Core Physical Geography	<ul> <li>For this unit the following topics will be studied in the A3 year, through classwork and fieldwork:</li> <li>Hydrology and fluvial geomorphology</li> <li>Atmosphere and weather</li> <li>Rocks and weathering</li> </ul>	1 hour, 30 minute exam. Section A: Three data response questions, on each of the three topics. Section B: One structured question from a choice of the three topics.	25%
2	Core Human Geography	<ul> <li>For this unit the following topics will be studied in the A3 year, through classwork and fieldwork:</li> <li>Population</li> <li>Migration</li> <li>Settlement dynamics</li> </ul>	1 hour, 30 minute exam. Section A: Three data response questions, on each of the three topics. Section B: One structured question from a choice of the three topics.	25%
3	Advanced Physical Geography	<ul> <li>In this unit you will develop your research and analytical skills, by considering two of the following topics during the A2 year:</li> <li>Tropical environments</li> <li>Coastal environments</li> <li>Hazardous environments</li> <li>Hot arid and semi-arid environments</li> </ul>	1 hour, 30 minute exam. Pupils answer questions on two of the optional topics. Each topic comprises one structured question (10 marks) and a choice of one from two essay questions (20 marks).	25%
4	Advanced Human Geography	In this unit you will develop your research and analytical skills, by considering two of the following topics during the A2 year: • Production, location and change • Environmental management • Global interdependence • Economic transition	1 hour, 30 minute exam. Pupils answer questions on two of the optional topics. Each topic comprises one structured question (10 marks) and a choice of one from two essay questions (20 marks).	25%

### **EXPECTATIONS**

Geography allows you to see how and why the world you live in is changing and will enhance your environmental awareness and your sense of place in the world. There is an emphasis on self-directed reading and research at A level, so you need to be genuinely interested and prepared to read geographical items online and in newspapers, magazines and journals. Studying geography requires elements of literacy and numeracy, ICT skills, spatial awareness, teamwork and problem solving. Although it is possible to study A level geography without studying the GCSE, a grade 6 or above at GCSE will provide you with the foundations for success in the sixth form.

Geography combines well with both science and arts subjects, being considered a science subject by universities. It is often taken with combinations of history, English and economics as well as the sciences and mathematics.

# FUTURE

Recent A level geography pupils have gone on to study a huge range of subjects at university, from geography itself, to history, international relations, medicine, architecture and engineering. Geographers are highly employable because they are regarded as real all-rounders, having skills in research, report writing, using ICT and in fieldwork, teamwork and project management skills that are in great demand. As such, Graduate geographers go on to become accountants and bankers, work in the media and Foreign Office, become managers and consultants, work in the Civil Service, Environment Agency and urban planning or even become teachers! Geospatial analytical skills, using GIS, are in great demand by a very wide range of employers, from the Army to water companies and town councils.

# History • OCR (H505)

Component	Topic	Assessment	A Level
1	British period study and enquiry	Anglo-Saxon England and the Norman Conquest 1035-1107 (Enquiry topic: Norman England 1087-1107) You will be examined by answering an essay question and through source evaluation based on the Enquiry Topic: Norman England 1087-1107 (1 hour, 30 minute exam).	25%
2	Non British period study	Apartheid: Reconciliation and South African Politics 1948-1999 You will be examined by answering a two part question: one essay and one shorter question assessing the significance of two events (1 hour exam).	15%
3	Topic-based essay	This is a coursework essay (3000-4000), based on your own independent study of your own interest or something linked to the courses you have studied.	20%
4	Thematic study and historical interpretations	There will be a choice of topics for Component 4: you can choose to study either: The English Government and Church 1066-1216, The Changing Nature of Warfare 1792-1945, or Russia and its Rulers 1855-1964. All are examined through an historical interpretations question on the depth study and a thematic essay (2 hour, 30 minute exam).	40%

# **EXPECTATIONS**

A keen interest, a willingness to argue, a critical eye and an eagerness to read are all important prerequisites for this course. Pupils will be required to think about historical issues in increasingly complex ways, whilst becoming more independent in their approach to their learning.

The Bryanston course covers English, European, Russian and South African History. The required study of Medieval and South African History in A3 is followed by the opportunity for a pupil to choose their own coursework question. In A2, they may be able to select to study either more Medieval History or courses in Russian History or The Changing Nature of Warfare. The coursework enables students to pursue a period or topic that they have a specific interest in, providing it fits within the guidelines provided by the exam board.

GCSE History is not a requirement, although it is helpful, and a grade 6 or above at GCSE is usually expected.

History combines well with all other subjects, from Sciences to Economics, English, Politics, Geography and languages.

### FUTURE

Recent A level History pupils have gone on to study a range of courses at university, including History, Law, Politics, PPE and International Relations.

History is a highly-regarded A level and provides an excellent training for careers in law, journalism, broadcasting, business and the Arts.

# History of Art • Pearson/Edexcel (9HT0)

Component	Topic	A Level
1	Visual Analysis and Themes (3 hours)Section A: Visual AnalysisPupils answer a single compulsory question that requires them to comment on an unseen photograph of a painting, a sculpture and a building.Section B: Themes We will study two themes from a choice of three: Identities in art and architecture and War in art and architecture. For each theme studied, pupils answer a single compulsory question in two parts.	50%
2	<ul> <li><u>Periods</u> (3 hours)</li> <li>Pupils are expected to study two topics from a choice of five. At Bryanston we will be studying:         <ul> <li>a. Invention and illusion: the Renaissance in Italy (1420-1520)</li> <li>b. Rebellion and Revival: the British and French Avant-Garde (1848–99)</li> </ul> </li> <li>For each Period studied, pupils answer a single compulsory question in four parts.</li> </ul>	50%

### SPECIFICATION

The subject content is divided into three areas: Visual Analysis, Themes and Periods

Visual Analysis: The ability to analyse the formal characteristics of any work of art and architecture is a core skill. Pupils will develop visual literacy across painting, sculpture and architecture from within the European tradition of art, from Classical Greece (500 BCE) to the present.

Themes: These are intended to be broad-based explorations of the developments in art and connections between movements and periods across time and place. Pupils must explore artists and works from both pre- and post-1850 and from both within and beyond the European tradition.

Periods: The study of a historical period allows pupils the opportunity to research and explore in detail the key movements, concepts, artists, architects, contextual factors and related developments of art and architecture in a specific place/s and across a clearly defined time frame.

# EXPECTATIONS

History of Art is a richly stimulating sixth form subject, in which pupils develop a sound understanding of the

major periods of Western art history from antiquity to modernity, and the ability to articulate their ideas through lively class discussion and written analysis. History of Art combines well with most other A level subjects, but particularly so with English Literature, Modern Languages, Art, History, Philosophy, Classics and Classical Civilisation. The ideal criteria for a prospective sixth form History of Art pupil are a budding interest in material culture, an aptitude for visual analysis, a good written prose style and a keenness to read widely from the many books held in Bryanston's excellent History of Art Library. This is an essay-based subject and one that demands a genuine engagement with new conceptual frameworks. You will need to be independent-minded and motivated, to love learning and a good argument. We would expect any pupils taking this subject to have achieved a grade 7 in GCSE English Language and Literature.

We strongly believe in the need to experience the great works of art and architecture in-situ, to consolidate art historical issues learned in the classroom. We therefore run regular study visits to London museums and a biennial trip to Italy.

# FUTURE

A History of Art university degree, either taken alone or in combination is an excellent pathway to postgraduate study and a wide range of professions in areas such as public museums and art galleries, academia and teaching, auction houses and commercial galleries, travel and tourism, arts management and journalism.



# Mathematics • Edexcel (9MA0)

Component	Topic	Assessment	Weighting
1	Pure Mathematics	2 hour written examination	331/3%
2	Pure Mathematics	2 hour written examination	331⁄3%
3	Statistics and Mechanics	2 hour written examination	331/3%

### **SPECIFICATION**

The subject content is divided into three areas: pure mathematics, statistics and mechanics.

Pure Mathematics:

- proof
- algebra and functions
- coordinate geometry in the x-y plane
- sequences and series
- trigonometry
- exponentials and logarithms
- differentiation
- integration
- numerical methods
- vectors

#### Statistics:

- statistical sampling
- data presentation and interpretation
- probability
- statistical distributions
- statistical hypothesis testing

#### Mechanics:

- quantities and units in mechanics
- kinematics
- forces and Newton's laws
- moments

The overarching themes below are applied, along with associated mathematical thinking and understanding, across the whole of the content in the specification:

- 1. mathematical argument, language and proof
- 2. mathematical problem solving
- 3. mathematical modelling

Pupils studying Mathematics at A Level can expect a rewarding, enjoyable and intellectually challenging experience. The course takes pupils far beyond the limits of the GCSE course, increasing their knowledge of mathematical techniques and their applications. Through the study of important topics such as differential calculus, the normal distribution and kinematics, pupils will develop their own understanding of mathematical concepts that are both fascinating in their own right and have numerous applications to the world around us.

## **EXPECTATIONS**

Grade 7 at GCSE (or equivalent) is the minimum requirement to commence A Level Mathematics. In our experience, pupils who do not achieve at least this grade find the course exceedingly difficult. For pupils who wish to continue studying mathematics in the Sixth Form but do not meet the entry requirement for A Level, we recommend our Level 3 Certificate in Mathematical Studies (also known as Core Maths) offering as an accessible alternative.

### FUTURE

Mathematics is a stimulating and challenging course that develops the key skills and personal qualities sought after by employers. These include problem solving, logical reasoning, the ability to communicate complex and abstract ideas, and resilience. Mathematics is considered either essential or desirable for degree courses in economics, computer science, physics, chemistry, engineering, business and some social sciences. It is well respected by employers and, in addition to those subjects already listed, can lead to careers in sectors as diverse as education, finance, accountancy and management.

# Further Mathematics • Edexcel (9FM0)

Component	Topic	Assessment	Weighting
1	Core Pure 1 & 2	2 x 1 hour 30 minutes written examination	25% each
Option 3B	Further Statistics	1 hour 30 minutes written examination	25%
Option 3C	Further Mechanics	1 hour 30 minutes written examination	25%

# **SPECIFICATION**

Further Mathematics consists of four externally examined papers. Students must take Paper 1 and Paper 2, the two mandatory Core Pure papers, and two optional papers. The optional courses we currently teach are Further Statistics and Further Mechanics.

Pure Core (compulsory):

- proof
- complex numbers
- matrices
- further vectors
- further algebra
- series
- hyperbolic functions
- further calculus
- polar coordinates
- differential equations

Statistics (optional):

- probability
- discrete random variables
- continuous random variables
- linear combinations of random variables
- hypothesis tests and confidence intervals
- chi-squared tests
- non-parametric tests
- correlation
- linear regression

Mechanics (optional):

- dimensional analysis
- work, energy and power
- impulse and momentum
- centre of mass
- motion in a circle
- further dynamics and kinematics

The overarching themes below are applied, along with associated mathematical thinking and understanding, across the whole of the content in the specification:

- 1. mathematical argument, language and proof
- 2. mathematical problem solving
- 3. mathematical modelling

### **EXPECTATIONS**

Grade 9 at GCSE (or equivalent) is the minimum requirement to commence A Level Further Mathematics, and students should have at least a Grade 7 in Level 2 Further Maths (or equivalent).

Although intellectually demanding, the combined teaching time for Mathematics and Further Mathematics when taken together is less than that for two separate A Levels. As such, Further Mathematics is offered as a fourth subject choice rather than at the expense of another subject.

# Modern Foreign Languages • AQA French (7652), German (7662), Spanish (7692)

# French

Component	Topic	Description	A Level
1	Listening, Reading and Writing	<ul> <li>Aspects of French-speaking society: current trends and issues</li> <li>Aspects of French-speaking society: current issues</li> <li>Artistic culture in the French-speaking world</li> <li>Aspects of political life in the French-speaking world</li> <li>Grammar</li> </ul>	50%
2	Writing	Analytical essays on one text and one film, alternatively two texts, both from a set list.	20%
3	Speaking	Presentation and discussion of an individual research project and a discussion about a topic from the topics studied for Paper 1.	30%

# German

Component	Topic	Description	A Level
1	Listening, Reading and Writing	<ul> <li>Aspects of German-speaking society</li> <li>Artistic culture in the German-speaking world</li> <li>Multiculturalism in German-speaking society</li> <li>Aspects of political life in German-speaking society</li> <li>Grammar</li> </ul>	50%
2	Writing	Analytical essays on one text and one film, alternatively two texts, both from a set list.	20%
3	Speaking	Presentation and discussion of an individual research project and a discussion about a topic from the topics studied for Paper 1.	30%

# Spanish

Component	Topic	Description	A Level
1	Listening, Reading and Writing	<ul> <li>Aspects of Hispanic society</li> <li>Artistic culture in the Hispanic world</li> <li>Multiculturalism in Hispanic society</li> <li>Aspects of political life in the Hispanic world</li> <li>Grammar</li> </ul>	50%
2	Writing	Analytical essays on one text and one film, alternatively two texts, both from a set list.	20%
3	Speaking	Presentation and discussion of an individual research project and a discussion about a topic from the topics studied for Paper 1.	30%

#### SPECIFICATIONS

The A level specifications build on the knowledge, understanding and skills gained at GCSE and have a strong focus on language, culture and society. They foster a range of transferable skills including communication, critical thinking, research skills and creativity. The content is suitable for pupils who wish to progress to further study, including a modern languages degree, be it as a stand-alone subject or, increasingly, in combination with another subject.

The approach is a focus on how a target language society has been shaped, socially and culturally, and how it continues to change. In the first year, aspects of the social context are studied, together with aspects of the artistic and cultural life of the relevant country or countries. In the second year, further aspects of the social background are covered, this time focusing on issues, such as, in French, life for those on the margins of French-speaking society as well as looking at the positive influences that diversity brings. Depending on the language studied, pupils also study aspects of the political landscape in a target language country; for example, in French, this covers contemporary music, immigration from the political perspective and at the way in which political power is expressed through action such as strikes and demonstrations. In German this includes cultural life in Berlin and German re-unification and its consequences. In Spanish, regional identity and the conflict for Catalonian independence are covered, as well as the dictatorships in 20th century Latin America. In this way pupils will develop their knowledge and understanding of themes relating to the culture and society of countries where the language is spoken as well as their language skills by engaging with authentic spoken and written sources. The Writing Paper involves a critical appreciation of the concepts and issues covered in the works studied (one literary work and one film) and a critical and analytical response to features such as the form and the technique of presentation, as appropriate to the work studied.

Knowledge of the grammar and structures specified for GCSE is assumed, although these are revised thoroughly during these courses. In the exam pupils will be required to accurately use grammar and structures appropriate to the tasks set. Paper 1 involves translation in which most

of the key vocabulary is supplied via a supporting text and the main skills tested are language manipulation and the application of grammar.

A modern language is often combined with Arts subjects such as with English and History but also with many other subjects as it can offer a useful extra dimension to an academic profile.

### **EXPECTATIONS**

A grade 7 at GCSE, including a solid performance in the wirting paper, is usually considered to be a suitable foundation for the study of modern foreign languages at A level. A secure understanding of grammar is also very important. Pupils are expected to make at least one extended visit to the country appropriate for the language during their A level course. Bilingual students with sound writing need, in most cases, to choose Modern Languages as a 4th A level, and this needs to be approved by the Head of MFL and DHA. If there is not sufficient demand, smaller courses may not be able to run.

### FUTURE

These courses provide a sufficient basis for further study of the language to degree level. It is often an invaluable adjunct to careers in business, education and the arts. At university, languages may be studied in their own right but also increasingly in combination with other subjects, such as History, Law, Business and Science courses. Indeed, it is increasingly less important for those applying for pure language degree courses to offer two languages at A level, although different universities have different requirements. Beyond pure language skills, languages graduates offer employers various soughtafter skills, such as those of analysis, communication, presentation and a capacity for lateral thought. They can also offer strong interpersonal skills and an ability to think outside the traditional box. Therefore, studying languages opens up career possibilities in a wide range of fields, including but by no means limited to Business, Law and Accountancy. Graduates with language skills are very sought after in the job market.

# Music • AQA (7272)

Component	Assessment	A Level
1	Written Examination: Appraising music 2 hours 30 minutes Section A: Listening Section B: Analysis Section C: Contextual understanding	40%
2	Performance Coursework 10-12 minute recital	35%
3	Composition Coursework Composition 1: Composing to a brief Composition 2: Free composition	25%

# **SPECIFICATION**

Through the interrelated disciplines of analysis, composition and performance, this course aims to offer an understanding and appreciation of music spanning a wide timeframe. Pupils learn about the western classical tradition through detailed study of a selection of set works including: the baroque solo concerto, the operas of Mozart and the piano music of Chopin, Brahms and Grieg. Additionally, there are a variety of other areas of study, two of which are selected for detailed study. These options include, amongst others: Jazz, music for media and music for theatre.

Practical music making is at the heart of the course and is weighted so that pupils who are primarily performers will achieve due recognition. The composition component is sufficiently flexible to allow pupils to write freely and imaginatively.

# **EXPECTATIONS**

Pupils will have studied Music to GCSE or equivalent and will have experience of composition, performing and analysis. Pupils' 1<sup>st</sup> study instrument should be at least grade 5 with theory of an equivalent standard. Fluent reading of notation is essential.

# FUTURE

A level Music courses are recognised as full academic qualifications (including by Oxford and Cambridge universities, which have taught academic music since the fifteenth century) and A level Music opens the door to a variety of degree courses. These include traditional Music BAs, as well as courses with a more substantial performing element, Music Technology degrees and conservatoire courses. Music graduates find employment in a wide range of careers, musical and non-musical.

# Music Technology • Edexcel (9MT0)

Component	Торіс	Overview	Assessment Weighting
1	Recording (NEA)	<ul> <li>Learning production skills and techniques to capture, edit, process and mix an audio recording.</li> <li>Students make a recording of a song chosen from a list of 10 provided by Edexcel</li> </ul>	20%
2	Technology Based Composition (NEA)	<ul> <li>Creating, editing, manipulating and structuring sounds to produce a technology-based composition.</li> <li>One technology-based composition chosen from three briefs set by Edexcel</li> </ul>	20%
3	Listening and Analysing (Written Exam)	<ul> <li>Knowledge and understanding of recording and production techniques and principles</li> <li>A written exam with questions on a series of unfamiliar commercial recordings.</li> </ul>	25%
4	Producing and Analysing (Written Exam)	<ul> <li>Knowledge and understanding of editing, mixing and production techniques</li> <li>A practical exam based involving editing and mixing a number of audio and MIDI files supplied by Edexcel.</li> </ul>	35%

# **EXPECTATIONS**

Music Technology A level is for those musicians interested in learning how music can be created using technology. Students learn how to use the recording studio to record, process and mix songs to a professional standard. In addition students learn to how use samplers, synthesisers and other electronic instruments to create original music. In addition to these practical activities, students also learn the about the technical aspects of sound and music and how the equipment works and how it has developed over the last century.

The course combines practical work with the theoretical side of Music Technology. There are two exams with higher weighting given to the second exam which contains practical tasks.

This is a challenging course which requires musical skills, critical listening and a willingness to engage in study of theoretical topics relating to recording and music production. Students should have some musical experience (ideally having studied GCSE Music, or an instrument to Grade 5 standard) and basic keyboard skills are an advantage for the composition component.

### FUTURE

Music Technology A Level equips students with a broad range of skills, including project management, appraising and analysis, creativity and imagination. Students will be able to progress to undergraduate study in Music Technology, Sound Production, Sound Engineering and many other courses requiring a similar skill set.

# Please note: Music Techonology will only run if student numbers make it viable

# Physical Education • OCR (H555)

Component	Topic	Assessment	A Level
1: Physiological Factors Affecting Performance	In this component you will learn about the key systems of the human body involved in movement and physical activity. This includes human anatomy, physiology and biomechanics. You will understand the changes that occur to these body systems during different types of exercise and during recovery. Application of this knowledge will help you understand how to train for different types of activity and maximise the efficiency of recovery techniques.	2 hour exam (90 marks) - 3 sections: Section A - Short answer questions (10 marks). Section B - 3 x 20 mark sub-divided questions: Anatomy, Physiology and Biomechanics. Section C - 1 x 20 mark synoptic question linking two topic areas.	30%
2: Psychological Factors Affecting Performance	This component focuses on the psychology of sport and the influence of the mind on performance. For example how methods of practice and feedback differ from person to person, depending on personality, ability, group dynamics and goal setting. You will also look at the effects of stress on different performances as well as different styles of leadership in sport.	1 hour exam (60 marks) - 3 sections: Section A - Short answer questions (10 marks). Section B - 2 x 20 mark sub-divided questions. Section C - 1 x 10 mark synoptic question linking two topic areas.	20%
3: Socio-Cultural/ Contemporary Issues	You will study the sociological and contemporary factors that influence physical activity and sport and how modern sport has evolved and its affect on society. You will also study the impact of the Olympic Games and other global sporting events. This component also uses practical examples to show the effects of ever-evolving modern technology on sports performers and spectators such as goal-line technology and Hawk-Eye.	1 hour exam (60 marks) - 3 sections: Section A - Short answer questions (10 marks). Section B - 2 x 20 mark sub-divided questions. Section C - 1 x 10 mark synoptic question linking two topic areas.	20%
4: Performance within Physical Education	You will be required to undertake two parts in this component: Performance of one sport. Evaluation and Analysis of Performance for Improvement (EAPI) of one sport [same or different sport from (i)] As part of this component you will devise a long-term development plan to improve an aspect of performance using your knowledge of the sports physiology and psychology.	This component is assessed via NEA (non- examined assessment). It is internally marked and externally moderated (60 marks) (i) Performance - 30 marks (ii) EAPI - 30 marks	30%

#### EXPECTATIONS

The A level PE course combines physical performance with academic challenge and provides an interesting qualification for pupils who enjoy sport at all levels. Its stimulating content gives you insight into the world of sports performance through sport science, sport psychology and the sociological and cultural factors that influence today's sporting world. You will learn why some people outperform others, from both physical and mental perspectives. You will also delve into the ethical considerations behind performance-enhancing drugs and the influence of technology in giving that all-important marginal advantage over an opponent in modern sport. You need to be genuinely interested in the world of sport and prepared to keep up to date with the sports world through reading articles online and in newspapers, magazines and journals. Studying PE requires good communication and decision making skills and the ability to deal with pressure. The course will develop your ability to analyse, evaluate and interpret both performance and data so sound literacy and numeracy skills

are an advantage; a solid grade at GCSE Biology is advantageous. It is not necessary to be an outstanding athlete or games player, but some ability and a keen interest in sport is essential. Due to the diverse nature of the course that combines science with sociology, PE combines well with both science and art subjects.

#### FUTURE

As a fully recognised A level qualification, PE is considered a science subject by universities. It will support applications for a wide variety of degree courses. Recent A level PE pupils have gone on to read Sport Science, Physiotherapy, Osteopathy, Business management, Biological Sciences, Geography and Events Management, while others have pursued a career in Professional Sport. A level PE is particularly well suited to pupils who have aspirations in the following areas: physiotherapy, osteopathy, chiropractor, sports science, sports therapy, sports marketing, the health and fitness industry, sports coaching and professional sport.

# Physics • AQA(7408)

Component	Assessment	A Level
Paper 1	Measurements and their errors, particles and radiation, waves, mechanics and materials, electricity and periodic motion.	34%
Paper 2	Thermal physics, fields and their consequences, nuclear physics	34%
Paper 3	Practical skills and data analysis, and an option topic	32%

### SPECIFICATION

In the first year of study topics covered include measurements and errors, mechanics and materials, electricity, waves and radiation, particles. These topics are then developed further and linked to the further topics explored; further mechanics, gravitational fields and orbits, electric fields and capacitance, magnetic fields and induction, thermal physics and nuclear physics. A level physics students also study an option topic from the following; astrophysics, medical physics, engineering physics, turning points in physics or electronics. The available options will be agreed on by the department in consultation with the pupils at the time.

## PRACTICAL WORK

Practical Endorsement is a key feature of Science A level qualifications. The Paper 3 written examination contains questions to test understanding of practical science and data analysis. In addition, the assessment of practical skills will appear on all pupils' certificates as a separately reported result alongside the overall grade for the qualification. Physics students carry out 12 specific practical activities over the 2 year course which provide ample opportunity for students to meet the requirements for practical skills. Each student will keep an appropriate record of their practical activities, those who demonstrate the required standard across all the requirements of the CPAC (Common Practical Assessment Criteria) will receive a 'pass' grade.

### SKILLS

Studying Physics in the sixth form develops mathematical and problem-solving skills while providing pupils with a deep knowledge and understanding of how nature behaves at both the microscopic and macroscopic scales. Pupils will have the opportunity to use their imagination, make links within physics and across the sciences, gain experience of scientific methods, develop data analysis, ICT and practical skills, and also to recognise the importance of physics in their own lives and its contribution to society and the economy.

## **EXPECTATIONS**

Strong mathematical skills are key to success in Physics at A level, and so a minimum of a grade 7 for GCSE Maths is required. Pupils should also have gained at least a grade 7 in the Physics papers of their GCSE Science/Physics exams. Pupils with lower Maths and Physics grades at GCSE are likely to struggle to access the material and should consider carefully in discussion with the Head of Physics, a realistic A level outcome.

### SUBJECT COMBINATIONS

Physics is best combined with A level Mathematics, however it does complement a wide range of other subjects, particularly the sciences. If A level Maths is not taken, the student must attend supplementary maths lessons. If you are considering a future in Physics or Engineering you will need to study both Physics and Mathematics at A Level.

### FUTURE

Physics is a highly regarded and academically rigorous subject which develops a desirable skill set in pupils. This makes physicists very employable and able to access a wide range of rewarding careers from predicting climate change to specialising in Medical Physics, from designing computer games to all aspects of Engineering. Physicists are frequently found working high up in many other fields too, for example Law, Journalism, Architecture, Government, Management, Finance, Medicine. Beyond this, because an A level in Physics is so well liked by universities, it can strengthen an application for all degrees, particularly those that require good numeracy and problem-solving skills.

# Politics • EDEXCEL (9PL0)

Component	Торіс	Assessment	A Level
1	UK Politics	<ul> <li>This component will include a 2 hour exam and study of the following:</li> <li>Political participation</li> <li>Democracy and participation</li> <li>Political parties</li> <li>Electoral systems</li> <li>Voting behaviour</li> <li>Core political ideas: Conservatism, Liberalism, Socialism</li> </ul>	33%
2	UK Government	<ul> <li>This component will include a 2 hour exam and study of the following:</li> <li>The Constitution</li> <li>Parliament</li> <li>Prime Minister and Executive</li> <li>Relationships between the branches</li> <li>Devolution</li> <li>Non-Core political ideas - Feminism</li> </ul>	33%
3	Global Politics	<ul> <li>This component will include a 2 hour exam and study of the following:</li> <li>Sovereignty and Globalisation</li> <li>Global Governance (Political and Economic)</li> <li>Global Governance (Human Rights and Environmental)</li> <li>Power and Development</li> <li>Regionalism</li> <li>The European Union</li> <li>Comparative Theory</li> </ul>	

# SPECIFICATION

In the first year the students cover the first component of UK Government and Politics, comprising a thorough understanding of the both the functions and characteristics of UK government including the constitution, political parties, the power of the executive and voting behaviour and participation in the political process. Students also being the study of the Comparative Theory. Pupils also begin the study of global politics.

In the second year the students conclude their study of Global Politics and begin their study of the main political ideologies in action such as liberalism, socialism and conservatism. To reflect societal challenges, the non-core component will be feminism. The components are examined over the course of three two-hour long exams, and there is no course work associated with the qualification.

### EXPECTATIONS

We expect pupils to work hard. Pupils who enjoy reading and debate, have an analytical mind and enjoy engaging with current affairs would make ideal candidates for Politics. Those who have studied History, Geography, Business Studies and English make good candidates, but there are no prerequisites.

### FUTURE

Politics is an increasingly important and sought-after degree. Pupils who study Politics at A level often pursue further study in Politics, International Relations, Social Studies, Economics, Philosophy and Contemporary History degree courses. Past pupils have gone on to study the subject at prestigious universities such as LSE, Bath and York.

# Psychology •AQA (7181, 7182)

Component	Assessment	A Level
1	Introductory Topics in Psychology 2 hour written exam: 4 sections consisting of multi-choice, short answer and extended writing (24 marks per section/96 marks in total).	33.33%
2	Psychology in Context 2 hour written exam: 4 sections consisting of multi-choice, short answer and extended writing (24 marks per section/96 marks in total).	33.33%
3	Issues and Options in Psychology 2 hour written exam: 4 sections consisting of multi-choice, short answer and extended writing (24 marks per section/96 marks in total).	33.33%

# SPECIFICATION

Compulsory

- 1. Social influence
- 2. Memory
- 3. Attachment
- 4. Psychopathology
- 5. Approaches in Psychology
- 6. Biopsychology
- 7. Research methods
- 8. Issues and Debates in Psychology

### Optional

- 1. Option 1
  - a. Relationships
  - b. Gender
  - c. Cognition and development
- 2. Option 2
  - a. Schizophrenia
  - b. Eating behaviour
  - c. Stress

3. Option 3

- a. Aggression
- b. Forensic psychology
- c. Addiction

# **EXPECTATIONS**

Pupils should ideally have gained at least a grade 7 in English, Dual Science: Biology and Maths. A high standard of written work is required, and an understanding of biology is extremely beneficial. There is a great deal of statistical analysis in psychological research methods that need to be calculated by hand, therefore pupils must feel comfortable with this. Pupils need to be really fascinated by psychology and want to work really hard and engage with each topic. Critical thinking (evaluation/analysis/synthesis/application) is vital in psychology and will be tested continually throughout the course.

# FUTURE

Psychology is the study of human behaviour and whether you go on to study it at university or not, it will provide you with greater understanding of why we behave, think and feel the way we do. It is a very useful degree as it promotes written and mathematical skills.

# Philosophy and Theology • OCR (H573)

Component	Topic	Assessment	A Level
Philosophy of Religion	Issues including: Ancient Philosophy The philosophy of mind Arguments for and against the existence of God	Two hour exam	33%
Religion and Ethics	Issues including: Normative Ethical Theories, from Aristotle to Mill Application of ethical theories to practical issues	Two hour exam	23%
Developments in Religious thought Sources of religious authority Historical development of religious ideas		Two hour exam	23%

# **SPECIFICATION**

The RS A level (known here as Philosophy and Theology) is a top choice for anyone who likes theoretical ideas and grappling with the great geniuses of the past. It is a course that demands a good analytic ability, combined with excellent writing and reading skills. What is knowledge? What does morally wrong mean? Why do some believe that God exists? What constitutes a person? Come along and do your best to answer these questions. In order to get to grips with the study of Philosophy, before starting the course, you might want to read 'What does it all mean?' by Thomas Nagel.

# **EXPECTATIONS**

The language and the concepts involved are demanding. Anyone electing to take this subject should be expected to get grade 7 in English at GCSE. Combines well with Languages, English, History.

# FUTURE

It supports applications in Philosophy, Theology, Psychology, Sociology, Anthropology, Law.

# **Career Focused Programme**

The Career Focused Programme (CTEC & A level) Programme is a forward thinking, skills driven course that is at the forefront of real-world approaches to learning. This is a highly regarded course that can be tailored to the unique interests of the learner whilst engaging in both academic and career-related learning. As such, it provides pupils with a range of sought after skills for higher education, apprenticeships or employment.

This programme has been developed for students who want to continue academic study but also wish to engage in careerrelated learning while gaining transferable and lifelong skills in applied knowledge, critical thinking, communication, and cross-cultural engagement.

# Courses

Pupils will choose to study one A level alongside a Cambridge Technical (CTEC) which are nationally-recognised UK qualifications which have a practical approach to learning and which are equivalent to two A levels in the UCAS tariff points they carry. The courses prepare pupils for higher education, an apprenticeship or a position in a career of interest. All our career-related courses are examined through a combination of modular exams and coursework.

Pupils will choose a qualification depending on their interest and focus. We currently offer:

- OCR Cambridge Technical Level 3 Diploma in Business, specialising in Marketing (worth equivalent of 2 A levels)
- OCR Cambridge Technical Level 3 Diploma in Sport and Physical Acitivty, specialising in Sports Coaching (worth equivalent of 2 A levels)

In future years we also hope to offer additional courses.

# OCR Cambridge Technical Level 3 Diploma in Business, specialising in Marketing (05837)

Unit title	Overview	Assessment
1 The Business Environment	Businesses operate in an environment which is dynamic, competitive, uncertain and frequently hostile. They need to constantly adapt to changes in their internal and external environments in order to be successful. In this unit pupils will develop an understanding of how and why businesses operate in the way they do.	Externally assessed exam
2 Working in Business	Businesses today need employees, managers and entrepreneurs who are multiskilled independent thinkers. This unit will cover the skills and understanding needed to work effectively within a business environment.	Externally assessed exam
3 Business Decisions	All businesses make decisions. The ability to make decisions depends on the effective collation, processing and analysis of relevant information. In this unit pupils will develop their skills of business decision-making using multiple sources of information.	Externally assessed exam
4 Customers and Communication	Customers are vital to the success of any business. It is essential that businesses consider the importance of the customer experience and ensure that they communicate effectively with them, whether internal or external. In this unit pupils will learn the purpose, methods and importance of communication in business and the appropriateness of different forms of communication for different situations.	Internally assessed coursework
5 Marketing and Market Research	Marketing is the function that makes sure a business sells the right products, at the right price, in the right place, using the most suitable promotion methods. This unit has particular emphasis on the role of market research and how it contributes to marketing decision-making, and the actions a business may take.	Internally assessed coursework
6 Marketing Strategy	To ensure that resources are used effectively and the right customer is targeted, businesses must carefully plan their marketing activities. Pupils will consider the different approaches to marketing, for example, when taking a new product to an existing market or entering a totally new market with a new product. They will then be able to use business tools to propose a marketing strategy.	Internally assessed coursework
7 Marketing Campaign	To create brand awareness and attract new customers, businesses have many choices of how and where to promote or advertise their products. In this unit pupils will learn why selecting appropriate marketing methods is crucial for success.	Internally assessed coursework
15 Change management	In order to be successful, businesses must be proactive in responding to changes in their day-to- day and longer term activities. Students will develop their ability to interpret quantitative and qualitative data to establish how effectively change is managed. They will learn that they need to be able to support the implementation of change to ensure that the organisational objectives of change are met.	Externally assessed
16 Principles of Project Management	In this unit pupils will learn about the stages of project management, and the type of skills a project manager should have. For the assessment, pupils will plan a project, and prepare a project plan.	Internally assessed coursework
22 Delivering a Business Project	A business project comprises tasks and activities to be carried out in order to reach intended outcomes. Being able to scope and deliver a project is an important skill used in business. This unit will require pupils to learn and apply the skills necessary to deliver a business project. This could be, for example, to research a marketing campaign and carry out the launch event or arrange a sponsored event for charity and then review the extent to which the project has been successful.	Internally assessed coursework

# **COURSE DESCRIPTION**

The Business Marketing Diploma is a top choice for anyone who enjoys learning about the dynamic nature of business. It is perfect for those that want to work in or set up their own business, or for someone that enjoys the challenge of researching scenarios and coming up with creative solutions to problems. This course allows students to investigate what is happening in the real world to businesses and companies they have come across. It enables students to develop a detailed understanding of the skills required to succeed by visiting many different businesses. The coursework elements allow students to uniquely tailor their projects to their own interests and goals, be it food based by running a catering event for unit 22 and investigating the competition and possible locations for a furture business in unit 5, or for those marketing inspired students, they can specialise in a promotional project for unit 22 based on research completed for their marketing assessment in unit 7. This course has the ability to adapt to meet each pupils indivudal requirements.

# FUTURE

This pathway will allow pupils to progress onto degree programmes such as Marketing or Business and

Marketing. It will also allow them to choose a non-related degree programme or to take up employment in business where they could be employed in roles such as Marketing Administrator, Market Research Analyst, Digital Marketing Assistant or Public Relations Officer.

# OCR Cambridge Technical Level 3 Diploma in Sport and Physical Activity, specialising in Sports Coaching (5829)

Unit title	Overview	Assessment	Required
1 Body Systems and the Effects of Physical Activity	In this unit students will gain an understanding of the structures and functions of the key body systems, how these support and impact performance in sport and physical activity, and the effects that physical activity, training and lifestyle can have on them.	Externally assessed exam	Mandatory
2 Sports Coaching and Activity Leadership	This unit will give students an understanding behind the theory of what makes good sports coaches and activity leaders and methods that can be employed to improve the performance of sports participants.	Internally assessed coursework	Mandatory
3 Sports Organisation and Development	In this unit your students will gain an understanding of the organisations involved in sport in the UK, their roles and responsibilities and how they work together. They will also gain an understanding of sports development including the organisations involved, who sports development is targeted at, why sports development is carried out and how the success of sports development initiatives can be measured.	Externally assessed exam	Mandatory
4 Working Safely in Sport, Exercise, Health and Leisure	Throughout the unit students will gain an understanding of key safety requirements to be able to ensure their own, and their clients' safety. Topics include; understanding key health and safety legislations, knowing how to administer emergency first aid, understanding roles, responsibilities and reporting duties in safeguarding children and vulnerable adults, and finally knowledge of key health and safety documents, including how to carry out risk assessments.	Externally assessed exam	Mandatory
5 Performance Analysis in Sport and Exercise	This unit will give your students the skills and knowledge required to carry out performance profiling and analysis, and deliver feedback to the performers in a manner that is suitable for them.	Internally assessed coursework	Mandatory
8 Organisation of Sports Events	This unit is designed for your students to develop skills in planning, promoting and delivering a sports event; with a focus primarily on their individual role, as well as working as part of a team and reflecting on their input and future personal development.	Internally assessed coursework	Mandatory
10 Biomechanics and Movement Analysis	In this unit students will learn the axes and planes of movement, types of movement and levers that the body uses. They will also gain an understanding of Newton's Laws of Motion, forces and stability and how the application of these can affect a performer in a sporting environment. Students will also learn how to analyse movement in order to improve the performance of an athlete or performer.	Internally assessed coursework	Optional
11 Physical Activity for Specific Groups	This unit will allow your students to develop a knowledge and understanding of the different groups of individuals who would benefit physiologically, psychologically and sociologically from participating in physical activity and why these particular groups are targeted by initiatives. This knowledge and understanding will then support students in planning suitable physical activity sessions for the groups identified and the considerations that need to be taken into account for each of them.	Internally assessed coursework	Mandatory
12 Nutrition and Diet for Sport and Exercise	In this unit students will gain an understanding of what is meant by the term 'balanced diet' as well as the principles behind it, the relationship between energy intake and energy expenditure and how this changes depending on the sport or physical activity taking place, and the importance of hydration for performance. They will also gain an insight into the use of nutritional	Internally assessed coursework	Optional

	supplements and how these can be used to improve performance in sport and physical activity.		
13 Health and Fitness Testing for Sport and Exercise	In this unit your students will learn a range of fitness tests, what they test and the advantages and disadvantages of them. Students will learn how to complete client consultations which will give them the background knowledge they need about a client to be able to plan and deliver appropriate fitness tests.	Internally assessed coursework	Optional
17 Sports Injuries and Rehabilitation	This unit will teach students how to recognise and treat common sports injuries both immediately and through longer-term rehabilitation programmes, the possible psychological impacts of sports injuries and how to minimise the risk of sports injuries occurring in the first instance.	Internally assessed coursework	Mandatory
18 Practical Skills in Sport and Physical Activities	This unit gives your students the opportunity to participate in a number of different sports and outdoor activities which allows them to experience, first-hand, situations that participants they may later be coaching or leading will come across. In this unit students will learn how to apply skills, tactics, techniques and knowledge in individual sports, team sports and outdoor activities which will allow them to participate effectively, safely and enjoyably.	Internally assessed coursework	Mandatory
19 Sport and Exercise Psychology	In this unit your students will learn different motivations that people have for participating in sport and physical activity and how performance can be managed through an understanding of attribution theory, stress and group dynamics. Students will also learn the impacts that participation in sport and physical activity can have on a person's mental health and wellbeing, whether an elite performer or a member of the general public.	Internally assessed coursework	Optional

# FUTURE

This pathway will allow pupils to progress onto degree programmes, apprenticeships or to gain employment as an Assistant Club Coach or in the increasingly demanded role of Multi-Sports Coach.

# **IB** Diploma Programme

The International Baccalaureate Diploma Programme (IBDP) is a global alternative to A levels, highly regarded by UK and international universities and employers. It is an exciting option that nurtures inquisitive minds and helps to cultivate global thinkers. In a fast-paced world it sets students up to be creative, thoughtful and principled individuals who are motivated to succeed.

The IBDP provides a balanced, international and socially engaged education. Students choose six subjects which must include their first language, an additional language, a science, maths and a humanity. Depth and specialism are ensured by selecting three for study at Higher Level, with breadth provided by studying three more at Standard Level. The IBDP is a two-year linear course with final exams, although all subjects benefit from a coursework element, contributing a minimum of 20% per subject.

The IBDP Core includes three components: Theory of knowledge, the Extended essay and Creativity, activity, service. These are described below and are key contributions to the IB's mission to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.

The IBDP is recognised by all the leading universities in the UK, Europe and North America. The program's combination of rigour and breadth make IB students a highly attractive prospect for university admissions.

### Subjects and Grading

Subjects are chosen in a way which ensures specialism as well as breadth, with three at Higher Level (HL) and three at Standard Level (SL). One subject must be chosen from each of the first five groups in the table below; the final subject is either chosen from Group 6 - The Arts, or a further subject from one of the other groups (except Group 5 - Mathematics). HL subjects have six lessons, five assignment periods and one correction period a week; SL have four lessons, two assignment periods and a correction period.

Each of the six subjects (both HL and SL) is awarded up to 7 points, with a 7 being broadly equivalent to an A\* at A level and 6 points to an A. With the inclusion of up to 3 points from the Core's Theory of knowledge and Extended essay components, a maximum of 45 points is available. Since we introduced the IB ten years ago, our students have averaged 35 points, equivalent to AAB at A level.

Group 1 Studies in language and literature (native language speakers)	English A: literature German A: language and literature
Group 2	French B
Language acquisistion	Spanish B
(non-native language speakers)	Italian ab initio (Standard level only)
Group 3 Individuals and societies	Economics History Psychology Philosophy Environmental Systems and Societies (ESS) (Standard level only)
Group 4 Sciences	Biology Chemistry Physics Design and Technology Environmental Systems and Societies (ESS) (Standard level only)
Group 5	Mathematics: analysis and approaches (Higher Level only)
Mathematics	Mathematics: applications and interpretation (Standard level only)
Group 6	Visual Arts
The Arts	Film (subject to timetable)

# The IBDP Core

In addition to these subjects, there are three elements to the IB Core which underpins the IB's ethos, two of which (Theory of knowledge and the Extended essay) together contribute up to three points to the final Diploma score.

# Theory of knowledge (TOK)

The TOK course is interdisciplinary and sits within the IB Diploma Core. It is a special program which provides an opportunity for students to reflect on the nature of knowledge, and on how we know what we claim to know. TOK links academic subject areas as well as transcending them. It is a wide-ranging course and deals with:

- Subject-related issues: If we remove statues, are we erasing history?
- Personal and contemporary issues: When should we trust the media? How are my beliefs influenced by my culture?
- Philosophical problems: What is the nature of time? What counts as truth?

Theory of Knowledge helps to develop rigour and logical analysis whilst going beyond a critical thinking course. It introduces students to a range of ideas and allows them to recognise and develop their own independent perspective through openness, respect and collaboration. TOK is unique to the IB programme and provides students the opportunity to explore higher order thinking associated with weighing up various approaches to knowledge.

Assessment takes the form of an internally assessed presentation made before the class and an essay of 1600 words on one of a choice of six prescribed questions, which will be externally marked.

### The Extended essay

The Extended Essay is a great opportunity to develop research and writing skills, and for intellectual discovery and creativity. Many universities, when asked to comment on the value of the IB, mention the Extended Essay as a key strength of the Diploma Programme. Many pupils will choose a research topic in the subject they wish to study at degree level.

The essay has a 4000-word limit and requires around 40 hours of work for the pupil. It is a piece of independent research on a topic chosen by the pupil and supervised by a teacher. The supervisor provides support to the pupil throughout the process with regular correction periods, including reading and commenting on a first draft, and conducting a viva voce (individual interview) upon completion. Work on the essay runs in parallel to studying the six academic group subjects and runs over two and a half terms, from February in A3 until October in A2. The essay is assessed externally and contributes to the Core points.

Essays can be written on a great range of subjects. Here are some examples of recent research questions by Bryanston students:

### Biology: To what extent did human bipedalism lead to

### increased endurance running abilities?

History: To what extent was Guernica a turning point in the Spanish Civil War? English: How is the subject of death treated in selected poems by Emily Brontë and Emily Dickinson? Psychology: To what extent does team sport have a positive impact on depression in adolescents?

# Creativity, Activity, Service (CAS)

*'...if you believe in something, you must not just think or talk or write, but must act'. Alec Peterson, First Director of the IB* 

At the heart of the IB Diploma Programme, CAS enables students to enhance their personal and interpersonal development by learning through experience. It provides opportunities for self-determination and collaboration with others, fostering a sense of accomplishment and enjoyment from their work. A CAS programme is individualised according to pupil interests, skills, values and background.

CAS is organised around the three strands of Creativity, Activity and Service, defined as follows:
- Creativity: arts and other experiences that involve creative thinking.
- Activity: physical exertion contributing to a healthy lifestyle.
- Service: collaborative engagement with the community in response to an authentic need.

The CAS programme formally begins at the start of the pupil's A3 year and continues regularly, ideally on a weekly basis, for at least 18 months with a reasonable balance between Creativity, Activity, and Service.

Pupils also undertake a CAS project of at least one month's duration that challenges pupils to show initiative, demonstrate perseverance, and develop skills such as collaboration, problem-solving, and decision-making. The CAS project can address any single strand of CAS or combine strands. Our pupils complete a CAS portfolio online using Managebac as a collection of evidence that showcases their CAS experiences and reflections. These reflections are central to building a deep and rich experience of CAS.

### **GROUP 1** • Studies in Languages and Literature

### English A • Literature

#### **COURSE DESCRIPTION**

At Higher Level, students study 13 texts, 4 in translation, 5 in original language from the Prescribed Reading List and 4 free choice. The course must include 4 literary forms, 3 periods, 4 countries or regions in at least two continents. At Standard Level, students study 9 texts, 3 translations, 4 in original language from the PRL; 2 free choice, covering 3 literary forms, 3 periods and 3 countries or regions in at least two continents.

There are three broad areas of study and seven concepts (perspective, creativity, identity, culture, communication, representation, transformation) but within this framework, teachers are free to design their own course. A suggested HL course is outlined below.

1. Readers, Writers, Texts (IB1 Autumn Term)

Introduces students to the nature of literature and its study. They learn about the choices made by authors and the ways in which meaning is created.

- Short Stories, Chekhov
- Ariel, Sylvia Plath
- Collected Essays, George Orwell
- The Color Purple, Alice Walker

2. Time and Space (IB1 Spring and Summer Terms)

The importance of culture and context in interpreting a work.

- A Doll's House, Ibsen
- Antigone, Sophocles
- Songs of Innocence and Experience, William Blake
- If this is a Man, Primo Levi

In the second half of the summer term, students choose their pair of texts for the Individual Oral, based on two works studied during the course, and prepare a presentation examining the ways in which a global issue (such as gender, power, justice, the environment etc) is presented through the content and form of the two works.

At HL, students also develop a topic for a coursework essay on one of the works studied of 1200 – 1500 words, using the concepts as a starting point.

3. Connecting Texts (IB2 Autumn and Spring Terms)

This section of the course focuses on intertextual concerns, or the connections between and among diverse

literary texts, creators and ideas. It focuses on the comparative study of literary texts.

- The World's Wife, Carol Ann Duffy
- Frankenstein, Mary Shelley
- Fran Kiss Stein, Jeanette Winterson
- A Midsummer Night's Dream, Shakespeare
- Jerusalem, Jez Butterworth

#### ASSESSMENT STRUCTURE

At the end of the course, there are two exams: Paper 1, in which HL students respond to two previously unseen passages from two different genres and SL students respond to one passage, and Paper 2, in which they write a comparative essay based on two works studied during the course.

# GROUP 1 Studies in Languages and Literature

### German A • language & literature

Assessment				
Paper 1: Guided Textual Analysis • 35% HL & SL SL 1 hour 15 minutes HL 2 hours 15 minutes	Paper 2: Comparative essay • 25% HL, 35% SL SL & HL 1 hour 45 minutes			
Pupils are presented with two unseen non-literary passages or texts. SL pupils will write on only one text; HL pupils will write separately on both texts.	There are four general questions. Pupils write one essay based on two works studied during the course. Pupils are not allowed to discuss any works that have already been used for the Individual Oral or the Higher Level Essay.			
Higher Level Essay • 20%	Individual Oral • 30% SL, 20% HL Total 15 minutes (presentation & questions)			
Only Higher Level pupils submit an essay (1200-1500 words) on one literary or non-literary text that has been looked at, however briefly, during the course. Evidence for this must exist in the Learner Portfolio; in the German Department at Bryanston we use "Padlet" for this.	Examine the ways in which the global issue of your choice is presented through the content and form of one of the works and one of the texts that you have studied.			

#### **COURSE DESCRIPTION**

The Language and Literature course involves the detailed study and analysis of six literary works at Higher Level and four at Standard Level. A wide variety of non-literary texts are also studied and produced. 'Text' is understood as the full range of the term, meaning that visual texts are included, as well as aural sources.

This course is designed to produce a wider understanding of the cultures speaking the target language, as well as to encourage imaginative engagement with texts that leads to individual text production. Speeches are a part of the syllabus, social and other digital media, non-fiction texts, advertising, biographies and film. Pupils will learn to understand language as a tool in different contexts for different purposes and will gain a better understanding of a wide variety of styles and forms.

This is a totally new course which will be examined for the first time in Summer 2021. Parts 1, 2, 3 and 4 no longer exist. Instead there are three Areas of Exploration: Readers, Writers and Texts; Time and Space; and Intertextuality. All the works studied, poems, plays, novels, films, photographs, paintings, etc. fall into these three categories. Within this framework,

the whole course is based on seven concepts: Identity, Culture, Creativity, Communication, Perspective, Transformation and Representation. This gives us a tremendous amount of freedom and flexibility, and, among other things, we intend to look at Expressionism, Rilke's poetry, the paintings of Paula Modersohn Becker, post-war literature of the 1950s, the revolution in Iran and Satrapi's graphic novel "Persepolis". It is worth pointing out that a minimum of two texts studied must be German translations of works originally written in another language.

#### ASSESSMENT STRUCTURE

During the course several literary genres from different literary traditions will be studied, as well as a wide variety of non-literary texts. Assessment is both internal and external through text production (Written Essay for Higher Level pupils), and oral examinations both formally (recorded) and informally in front of the class.

Internal examinations that are externally moderated will take the form of an oral examination (Individual Oral) which will last 15-20 minutes and be worth 30% (Standard Level) or 20% (Higher Level) of the overall mark. Only Higher Level candidates will write an essay (1200-1500 words) on a topic of their choice based around one or more of the "7 Concepts". This will be worth 20% of the overall mark. Two closed examinations, worth 70% (Standard Level) or 60% (Higher Level) of the overall mark, will take place in the summer of the final year.

# GROUP 2 Language acquisition

### Modern Foreign B courses French and Spanish (previous experience required, eg. GCSE)

#### COURSE DESCRIPTION

The focus of the course is to build upon learners' existing (usually GCSE) level of linguistic competence and prepare them for future study, work or leisure. In doing so they develop their intercultural understanding and their awareness and appreciation of different perspectives of people from other cultures. Pupils will develop an understanding of the role of language in communication, culture and thought. This latter area relates to the Theory of Knowledge component in particular. The relationship between language and culture will also be covered. A range of contexts and purposes of language in practical use will be targeted. The focus will also involve providing a stimulating and enjoyable learning experience.

The assessment objectives focus on the use of appropriate language to express and respond to a range of spoken and written texts and organise ideas in a clear and coherent manner. Accuracy, fluency, intercultural understanding, and linguistic competence will be tested in a range of situations.

At Higher Level only, pupils' ability to understand and use two works of target language literature will also be assessed.

Topics: Identities, experiences, human ingenuity, social organisation, sharing the planet.

The themes are prescribed but the syllabus itself is bespoke and tailored to pupils' interests in the target language and its cultures.

#### PREVIOUS EXPERIENCE

A grade 7 at GCSE is considered to be a good foundation for Languages B.

#### ASSESSMENT STRUCTURE

External assessment: 75% Paper 1 Productive skills: one writing task (25%) Paper 2 Receptive skills: separate sections for reading and listening (50%)

Internal assessment: 25% Individual oral SL will focus on the topics studied HL will focus on both the literature and the topics studied

# GROUP 2 Language acquisition

### Modern Languages *ab initio* Italian (*SL only*) (beginner course)

#### **COURSE DESCRIPTION**

Italian ab initio ('from the beginning') is a standard level language learning course designed to be followed over two years by pupils who have no previous experience of learning the language. The main focus of the course is on the acquisition of language required for purposes and situations usual in everyday social interaction. This course aims to develop a variety of linguistic skills, and a basic awareness of culture using the language studied. In addition, it is essential for the pupils to learn about the Italian speaking world. The course is only available at Standard Level.

The course is structured in five main themes: identities, experiences, human ingenuity, social organisation, and sharing the planet. Great emphasis is placed on the knowledge and correct use of grammar; therefore we will be working on learning verbs, tenses, and grammatical constructions (present, past and future tenses). It is also essential to build up a wide knowledge of vocabulary as quickly as possible and so the target language will be used as often as possible in the classroom.

The course will develop competence in reading, speaking, listening and writing in a range of registers and the pupil will be managing a wide range of text types. By the end of the course the pupil should be able to communicate about a variety of topics and to understand written and spoken Italian at a higher level than GCSE.

#### ASSESSMENT STRUCTURE

External Assessment:

Paper 1 Productive skills: two writing exercises (25%) Paper 2 Receptive skills: separate sections for listening and reading (50%)

Internal Assessment:

Interactive skills: individual oral (25%)

Part 1: Presentation of a visual stimulus (Students choose one out of two stimuli based on two of the five course themes)

Part 2: Follow-up questions on the visual stimulus Part 3 General conversation on at least one other of the five course themes.

# **GROUP 3 Individuals and societies**

### Economics

#### **COURSE DESCRIPTION**

Economics is a dynamic social science, based on many levels of logical theory. In its most simple form, economics concerns itself with the how wealth is produced, distributed and consumed in society.

Microeconomics studies how individuals and firms allocate their limited resources with regard to this, and macroeconomics considers the whole economy, especially GDP, inflation and unemployment, and evaluates the policies used to control economic performance. As globalisation increases, so economics applies itself with an increasingly international flavour, with considerable focus on transitional economies such as China and India.

The international element will inevitably lead into a study of development economics; this considers the process of economic and social development in low-income countries. With some focus on methods of promoting economic growth and structural change, it also delves into improving the potential for the mass of the population, for example, through health and education, and workplace conditions.

Ultimately, pupils will be able to interpret the inevitable trade-offs that arise, and make policy decisions based on their findings. Individuals will make their own decisions based on their own code of ethics.

Both Standard Level and Higher Level courses cover the following topics: Microeconomics, Macroeconomics, International Economics and Development Economics

#### PREVIOUS EXPERIENCE

Economics requires some numerical confidence so a solid grounding from GCSE Maths would be an advantage.

#### ASSESSMENT STRUCTURE

Standard Level A combination of two externally assessed examinations 3 hours (80%) and three 750-word internally assessed 'commentaries' (20%)

Higher Level

A combination of three externally assessed examinations 4 hours (80%)

and three 750-word internally assessed 'commentaries' (20%)

## GROUP 3 or 4

### Environmental Systems and Societies (ESS) (SL only)

#### **COURSE DESCRIPTION**

Environmental issues are both local and global in their extent. We all live on one planet Earth, yet use much more than one planet Earth's worth of resources. This is obviously not sustainable and this course attempts to discuss the issues surrounding resource use at various scales, from that of the individual to that of the global community.

The aim of the course is to provide an understanding of the interrelationships between environmental systems and societies; one that enables pupils to adopt an informed personal response to the wide range of pressing environmental issues that they will inevitably come to face. The teaching approach will focus on the evaluation of the scientific, ethical and socio-political aspects of these issues, rather than just providing a journalistic appreciation of them.

#### PREVIOUS EXPERIENCE

Pupils should be able to study this course successfully with no specific previous knowledge of Science or Geography, although having a grade 6 in some of these subjects at GCSE would suggest a better outcome is more likely. There is also a certain mathematical component to the course; again 6 in GCSE Mathematics suggests that you will cope with these demands. As the course aims to foster an international perspective, an awareness of local and global environmental concerns, and an understanding of the scientific method would also be good preparation.

#### ASSESSMENT STRUCTURE

The course is assessed by two exam papers at the end of the second year and by internal assessment during the course.

Paper 1 (25%) Case study: Source material, data analysis and evaluation paper.

Paper 2 (50%) Section A: Short-answer and data-based questions

Section B: Two structured essay questions (from a choice of four).

Internal Assessment (individual investigation) (25%)

Practical work and field work will be undertaken throughout the teaching of the course, with some activities selected and marked against the internal assessment criteria.

As a transdisciplinary subject, Environmental Systems and Societies (ESS) is designed to combine the techniques and knowledge associated with group 4 (the experimental sciences) with those associated with group 3 (individuals and societies). By choosing to study a transdisciplinary course as part of their diploma, pupils are able to satisfy the requirements for both groups 3 and 4 of the hexagon, thus allowing them to choose another subject from any hexagon group (including another group 3 or 4 subject).Transdisciplinary subjects therefore introduce more flexibility into the IB Diploma Programme.

### History

Unit	Syllabus Content	Assessment	% SL	% HL
Paper 1 (SL and HL)	Rights and Protest case studies: • Civil Rights movement in the USA (1954-1965) • Apartheid South Africa (1948-1964)	Source evaluation paper of 1 hour	30%	20%
Paper 2 (SL and HL)	Thematic Study: • Authoritarian States (20th Century) • Emergence of Democratic States (1848-2000)	Essay paper of 1.5 hours	45%	25%
Internal Assessment (SL and HL)	Internal Assessment: A 2000-word coursework essay, which is on a topic of your choice and is worth 25% of your overall grade.	Independent research essay (internally assessed, externally moderated)	25%	20%
Paper 3 (HL only)	<ul> <li>Regional Study:</li> <li>Imperial Russia, revolutions and the establishment of the Soviet Union (1855-1924)</li> <li>European states in the Inter-war years (1918-1939)</li> <li>Versailles to Berlin: Diplomacy in Europe (1919- 1945)</li> </ul>	Essay paper of 2.5 hours	n/a	35%

#### **COURSE DESCRIPTION**

The IB History syllabus covers a variety of topics ranging from the Nineteenth to the end of the Twentieth Century. The course examines major historical events in a global context. It is intended that the course will encourage an understanding of the present through critical reflection upon the past. History is also integral in the Theory of Knowledge.

Paper 1 considers 'Civil Rights movement in the USA (1954-1965)' and 'Apartheid South Africa (1948-1964)', and is focused around the study of and interpretation of different documents and source material.

Paper 2 is a thematic study, which will consider 'Origins and developments of authoritarian states', examining the establishment and consolidation of power in both left and right wing authoritarian states as well as the ideology and nature of these states. Examples include Nyerere, Mussolini, Stalin and Hitler. 'Democratic States 1848-2000' focuses on the evolution and development of democratic multi-party states from the mid-19th century through to the end of the 20th century. Examples include India, South Africa and Germany.

Paper 3 is a regional study in which 'Imperial Russia, revolutions and the emergence of the Soviet Union (1855-

1924)', 'European states in the Inter war years (1918-39)' and 'Versailles to Berlin: Diplomacy in Europe (1919-1945)' will be covered.

At Standard Level the pupils will be expected to sit papers 1 and 2 and in addition Higher Level pupils will be required to sit Paper 3. All pupils will also be required to complete an Internal Assessment: an historical investigation into any area of the syllabus of around 2000 words.

#### PREVIOUS EXPERIENCE

History complements a range of subjects including English, Modern and Classical Languages, Economics and Philosophy. It is helpful to have studied the subject at iGCSE, although it is still possible to pick up History at IB Diploma level with no prior experience. A pupil wishing to study the subject to Higher Level or Standard Level should have achieved at least a grade 6 at iGCSE History. Pupils who wish to study History at IB Diploma level should have inquiring minds and be prepared to be critical and reflective in their thought process. Successful pupils will be independent learners willing to read and research outside lessons.

### Psychology

External Assessment		Standard Level	Higher Level		
Paper 1 Core	2 hours	(49 marks) 50%	(49 marks) 35%		
Paper 2 Options	1 hour	(22 marks) 25%	n/a		
	2 hour	n/a	(44 marks) 25%		
Paper 3 Qualitative research methodology	1 hour	n/a	(30 marks) 20%		
Internal Assessment					
Simple experimental study		(22 marks) (25%)	(22 marks) (20%)		

#### **COURSE DESCRIPTION**

Psychology is the systematic study of behaviour and mental processes. The psychology course examines the interaction of biological, cognitive and sociocultural influences on human behaviour. The core in the first year will cover these three levels of analysis through psychological theories and research:

- Biological psychology: this explores the structure and function of the human brain, how technology is used to investigate brains in action and the contribution of genes to cognition and behaviour.
- Cognitive psychology: this investigates how humans form internal mental representations that guide behaviour, in particular, memory and emotion.
- Sociocultural psychology: this explores how human behaviour and attitudes are affected by social groups and the culture of communities and society.

In the second year, Standard Level (one option) and Higher Level (both options) pupils will study:

• Option 1 Developmental psychology: this investigates changes in individuals over time in how they behave, think and relate to others. This is

through cognitive, social and gender identity development and the influence of the three approaches.

• Option 2 Human Relationships: this investigates social responsibility, interpersonal relationships and group dynamics and the influence of the three approaches.

Both Standard and Higher Level pupils will study Research Methods and will have to design, carry out and write up an Experimental study.

Higher Level: investigate research methods in depth that are used in psychology and apply it to a particular stimulus in preparation for Paper3.

#### PREVIOUS EXPERIENCE

The course requires you to write essays so a grade 6 or above in GCSE English Language is recommended. An understanding of the scientific method is useful and a grade 6 or above in Biology or Dual Science would be desirable.

## **GROUP 4 Sciences**

### Biology

#### **COURSE DESCRIPTION**

The rationale behind the Biology course is to develop in pupils a broad, general understanding of the underlying principles of the subject. The course is arranged in four themes:

- · Theme A: Unity and diversity
- · Theme B: Form and function
- · Theme C: Interaction and interdependence
- · Theme D: Continuity and change

Each theme is arranged into four different levels of organisation:

- · Level 1: Molecules
- · Level 2: Cells
- · Level 3: Organisms
- · Level 4: Ecosystems

Throughout the course, there are 'Linking Questions', which are designed to encourage students to make connections between topics and levels. Both SL and HL students will study all four themes and levels of organisation, but HL students will study a greater breadth and depth.

In addition to theoretical knowledge, students will also develop experimental, technological and mathematical skills through practical investigation work, including an individual investigation, which forms the Internal Assessment.

#### PREVIOUS EXPERIENCE

Topics studied at iGCSE are developed and extended, such that a solid foundation in these areas should have been established through the attainment of the equivalent of at least grade 6 in sciences at that level. The demands of the mathematical analysis and statistical element of the course are such that similar grades would be desirable in GCSE Mathematics.

### Chemistry

#### **COURSE DESCRIPTION**

The course aims develop inquiring, to ethical minds. Through knowledgeable and studying Chemistry pupils gain a thorough understanding of a wide range of aspects of Chemistry and also become aware of how scientists work and communicate with each other. Wherever possible the course draws upon environmental and technological contexts, and identifies the social, moral and economic effects of science.

Both the Standard and Higher Level courses cover atomic structure and bonding, quantitative chemistry and errors, periodicity, energetics, kinetics, equilibrium, organic chemistry, advanced organic chemistry, acids and bases, oxidation and reduction, chemistry in industry and technology.

In addition to this, all pupils will also study one optional topic (usually Energy or Biochemistry). At Higher Level pupils will further their learning through extension work on each of the topics above.

In order to develop aspects of critical thinking and to instil the principles of scientific enquiry, pupils at SL will be required to complete and write up a minimum of 20 hours of practical activity, while those opting for HL will carry out a minimum of 40 hours.

#### PREVIOUS EXPERIENCE

There is a clear, logical progression from the topics studied at GCSE with the Standard Level pupils having the opportunity to reinforce those ideas, while the Higher Level pupils will be given the opportunity to expand and apply their knowledge to a wider field of experience. A grade 7 in the Sciences GCSE or Chemistry GCSE is advisable for the Higher Level course, and at least a grade 6 would be recommended to start the Standard Level course with confidence. At least a grade 7 at Maths at GCSE or equivalent would be helpful to those choosing the Higher Level Chemistry course.

#### ASSESSMENT STRUCTURE

Internal Assessment (20%) is based on a single individual practical investigation and write up completed over a few weeks in A2. Pupils are assessed under the following headings:

- Personal Engagement (8%)
- Exploration (25%)
- Analysis (25%)
- Evaluation (25%)
- Communication (17%)

External Assessment (80%) is made through the sitting of three exam papers in the 6th term of the course:

- Paper 1: Multiple-choice questions
- Paper 2: Short-answer and extended-response questions
- Paper 3: One data-based question and several short-answer questions on experimental work plus short-answer and extended-response questions from one option topic

### **Design and Technology**

#### **COURSE DESCRIPTION**

Both science and technology have a fundamental relationship with design. Technology preceded science, but now most technological developments are based on Traditional scientific understanding. technology comprised useful artefacts often with little understanding of the science underpinning their production and use. The application of scientific discovery to solve a problem enables designers to create new technologies and these new technologies, in turn, can impact on the rate of scientific discovery.

The aim of the IB Design and Technology course is to foster the skill development required to use new and existing technologies to create new products, services and systems. It achieves a high level of design literacy and students are required to develop critical thinking and design skills, which they can apply in a practical context. While designing may take various forms, it will involve the selective application of knowledge within an ethical framework. The creative tension between theory and practice is what characterises the subject within the Diploma Programme.

#### Common Core

All standard and higher-level students complete a common core which includes:

- Human factors and ergonomics
- Resource management and sustainable production
- Modelling
- Raw material to final product
- Innovation and design
- Classic design

#### Higher Level Extension

Higher-level students examine four further topics designed to extend and deepen their understanding of the subject and which aim to introduce aspects of innovation:

- User-centered design (UCD)
- Sustainability
- Innovation and markets
- Commercial production

#### PREVIOUS EXPERIENCE

We recommend that pupils have studied GCSE Design and Technology, though this is not compulsory. They also need to have a confident understanding of and interest in the theoretical elements of the subject. We would recommend the subject to pupils who have achieved a grade 6 or above at GCSE. All candidates need to demonstrate a wide range of skills, including initiative and impressive time management.

#### ASSESSMENT STRUCTURE

- 1) Internal Assessment Project (40%)
  - All standard and higher-level students complete a design project as an internal assessment task. This design project allows them to demonstrate their investigative, analytical, design thinking, design development, prototyping, testing and evaluation skills, and mirrors the design processes used across the various industries that integrate design practice.
    - At SL, the IA project requires students to identify a problem and develop a solution. It is assessed against four common criteria:
      - a) Analysis of a design opportunity
      - b) Conceptual design
      - c) Development of a detailed design
      - d) Testing and evaluation
  - At HL, the IA project is extended to include aspects of Innovation and is assessed against two additional criteria:
     *e)* Detailed development of a commercial product

*f) Making choices for commercial production* 

#### 2) Examined Assessment (60%)

The standard level course is assessed through:

- A multiple-choice paper (Paper 1)
- A core paper, which consists of a short response and extended answer questions (Paper 2)
- The internal assessment design project

At higher level, Paper one has more questions, and students answer an additional paper (Paper 3) consisting of three structured questions based on the HL extension material, one of which is based on a case study.

### **Physics**

#### **COURSE DESCRIPTION**

To study physics is to attempt to understand the nature of the universe itself. It is the search for answers from how the universe exploded into life in the Big Bang to what the nature of time is itself. Some of the greatest discoveries in history have been made by physicists and these discoveries have revolutionized our world – and physicists are continuing to change the way we think today. However, physics is not just about staring into the vastness of space or scrutinizing the tiniest particles that make up the fabric of the universe. The fact is that discoveries in physics are the root of ideas that revolutionize the technology used in our daily lives. It is an everyday, grounded science encompassing advances in communication, medical technology and renewable energy. The Physics course aims to give pupils an appreciation of this, whilst also approaching each topic with enough rigour to prepare a Higher Level pupil for the study of Physics or Engineering at university.

Both SL and HL pupils study the a broad range of topics: space, time and motion; the particulate nature of matter; wave behaviour; fields; and nuclear physics. HL pupils study take each of these topics and extend them to include aspects such as relativity, thermodynamics, simple harmonic motion, induction and quantum physics. Physics is a practical subject and each of the topics are well supported by relevant lab work, which must amount to at least 20 hours for SL and 40 hours for HL. In addition to this there is a 10-hour individual investigation which counts for the Internal Assessment element of the course.

#### **PREVIOUS EXPERIENCE**

Strong mathematical skills are key to success in Physics, and so a grade 7 or higher for GCSE Maths is a requirement. Additionally, pupils should have studied double award Science or Physics at GCSE and gained at least a grade 7 in the Physics papers of their GCSE Science/Physics exams.

#### ASSESSMENT STRUCTURE

Internal Assessment (20%) is based on a single individual practical investigation and write up completed over a few weeks in A2. Pupils are assessed under the following headings:

- Research Design (25%)
- Data Analysis (25%)
- Conclusion (25%)
- Evaluation (25%)

External Assessment (80%) is made through the sitting of two exam papers in the 6th term of the course:

- Paper 1: Multiple-choice and data based questions (36%)
- Paper 2: Short-answer and extended-response questions (44%)

### **Mathematics**

#### **COURSE DESCRIPTION**

Within Group 5, Mathematics is split into two separate courses: namely, *Analysis and Approaches*, and *Applications and Interpretation*. We normally offer the former at Higher Level and the latter at Standard Level as this split typically suits university requirements. The aims of both courses include developing enjoyment of mathematics, understanding the principles of mathematics, communicating mathematics clearly and concisely, and developing logical and creative thinking.

#### Analysis and Approaches (A&A)

This course recognises the need for analytical expertise in a world where innovation is increasingly dependent on a deep understanding of mathematics. This course includes topics that are both traditionally part of a preuniversity mathematics course (for example, functions, trigonometry, calculus) as well as topics that are amenable to investigation, conjecture and proof, for instance the study of sequences and series at both SL and HL, and proof by induction at HL.

The course allows the use of technology, as fluency in relevant mathematical software and hand-held technology is important regardless of choice of course. A&A has a strong emphasis on the ability to construct, communicate and justify correct mathematical arguments.

Students who choose A&A should be comfortable in the manipulation of algebraic expressions and enjoy the recognition of patterns and understand the mathematical generalization of these patterns. Students who wish to take A&A at HL will have strong algebraic skills and the ability to understand simple proof. They will be students who enjoy spending time with problems and get pleasure and satisfaction from solving challenging problems.

#### Applications and Interpretation (A&I)

This course recognises the increasing role that mathematics and technology play in a diverse range of fields in a data-rich world. As such, it emphasises the meaning of mathematics in context by focusing on topics that are often used as applications or in mathematical modelling. To give this understanding a firm base, this course also includes topics that are traditionally part of a pre-university mathematics course such as calculus and statistics. The course makes extensive use of technology to allow students to explore and construct mathematical models. A&I will develop mathematical thinking, often in the context of a practical problem and using technology to justify conjectures.

Students who choose A&I should enjoy seeing mathematics used in real-world contexts and to solve real-world problems. Students who wish to take A&I at HL will have good algebraic skills and experience of solving real-world problems. They will be students who get pleasure and satisfaction when exploring challenging problems and who are comfortable to undertake this exploration using technology.

#### PREVIOUS EXPERIENCE

Due to the nature of the subject, it is expected that pupils embarking on the IBDP have studied mathematics since the start of their schooling. Our entry requirements are detailed in the table below.

Course	Entry Requirement (GCSE)	
A&A SL	Grade 6 (or equivalent)	
A&A HL	Grade 8 (or equivalent)	
A&I SL	Grade 5 (or equivalent)	
A&I HL	Grade 7 (or equivalent)	

Course offerings in Mathematics are determined each year by popularity of choice and timetabling constraints.

#### ASSESSMENT STRUCTURE

Both courses follow the same assessment structure, as summarised in the table below.

Assessment	SL	HL
Paper 1	40%	30%
Paper 2	40%	30%
Paper 3	N/A	20%
Exploration	20%	20%

### Visual Arts

#### COURSE DESCRIPTION

The structure of the course will be split into three sections which apply to both Higher Level and Standard Level:

- Process Portfolio: 40%
- Comparative Study: 20%
- Exhibition: 40%

However these can be interlinked in some cases – for example for HL Students their Comparative Study must have examples of how they have explored the idea behind their comparative study practically through the Exhibition.

The initial A3 foundation year is focused on the Process Portfolio, introducing pupils to a wide range to good art and design practice. The purpose is initially to give them clear and successful goals and outcomes, and to enable them to acquire a range of skills, which will be a foundation for further study. The Comparative Study is introduced after the Easter Holidays. For SL Students this can be completed before the second year because it doesn't have to relate to their exhibition.

Second year pupils will select from an area

covered in the foundation year and then specialise. This will also enable them to reflect on their own strengths and achievements. This will form the core of work for the Exhibition component of the course.

The Comparative Study is related research activity where pupils put their own work in context by referring to artists and how they connect to their practice. The Comparative Study combines both visual and written research and should be between 1,000 3,000 words in length with visual transcriptions and studies and must be explicitly related to their major Exhibition project. The department will therefore make gallery visits during A3 and or A2 years.

#### PREVIOUS EXPERIENCE

Pupils would normally be expected to have a grade 4 in Art and Design at GCSE or equivalent.

#### ASSESSMENT STRUCTURE

Internal: The majority of the assessment in the department will be formative and diagnostic, it will be there to help, improve and guide pupils towards both personal and public success, a greater understanding and critical awareness. These will be conducted by tutorial method at key points during the course.

External: the summative assessment takes place at the end of the course in March of the second year, where the Exhibition is standardised and marked alongside the curatorial practice.

### Academic Enrichment in the Sixth Form

#### Introduction

An important part of the pupils' development in the Sixth Form is the way in which they respond to opportunities to enrich their academic experience, as well as building a strong co-curricular profile. Once they have had a chance to experience something of what their A level/IB/CTEC courses have to offer during the sixth form induction programme, current pupils in B and incoming pupils into A3 attend a meeting at which they are asked to start thinking about how they might go about constructing a full and well-rounded academic and cocurricular profile to show that they are much more than just the grades they get. Aside from their own personal development, they need to do this in order to strengthen their application to Higher Education (which, for the majority, will be through UCAS) and to make them stand out to future employers.

The importance of academic enrichment in the Sixth Form as a whole is especially emphasised in the IB Diploma programme, which incorporate such opportunities in the form of the Extended Essay (EE), the Theory of Knowledge course (ToK) and CAS (Creativity, Activity, Service) for the Diploma programme, and the Personal and Professional Skills (PPS) component of the Careerrelated programme, all of which require pupils to manage their learning independently and engage with the wider world.

Academic departments already play an important role in academic enrichment by organising lectures, trips and by offering supplementary qualifications, and tutors are key to keeping their tutorial pupils focused on the bigger picture of the sixth form years and life beyond Bryanston, making them aware of ways in which they can develop a wider academic profile and encouraging them to engage more actively in this process.

#### **Timetabled Academic Enrichment**

The compulsory strand of the academic enrichment programme runs throughout the sixth form. Pupils pursuing an A level programme (and any IB pupils who are free) will broaden their academic and cultural horizons through a range of courses in the sciences, humanities and the arts. The programme continues in A2 with a programme of weekly talks given by a range of inspiring speakers and which aims to engage pupils further with issues in the wider world beyond Bryanston at a local, national and international level.

#### **Supplementary Qualifications**

In addition to their A level or IB courses, pupils are able to prepare for supplementary qualifications designed to complement their studies in a subject or subjects of their choice, for example:

- Extended Project Qualification (EPQ)
- Ivy House Leadership Award
- L3 certificate in Mathematical Studies (Core Maths)
- ESB Advanced Certificate in Spoken English
- Politics Club
- Critical Thinking
- Life Guard Accreditation
- RGS Young Geographer of the Year Competition
- Graded exams in Music and Drama
- Film IB is also offered as a qualification alongside 3 A levels (and occasionally 2). *Pupils wanting to study IB film will need to partake in the the Film ECA throughout the Summer term of the B Year.*

#### A3 Study Skills

As A3 pupils begin their sixth-form programme, they attend an interactive session on study skills, which aims to:

- Motivate the pupils to raise their expectations of themselves academically.
- Enable them to reflect on and improve their work ethic and habits.
- Give them practical skills to help them learn and revise more effectively.

#### A3 Work Related Learning

In National Careers Week and throughout the year, we run careers events and a Careers Festival. A3 pupils attend several work related opportunities to help them to discover and potentially decide on their career options.

#### **Departmental Events and Societies Lectures**

Academic Enrichment is a vital part of school life. All of A2 and A3 are invited to a weekly series which looks to empower, inspire and challenge brilliant minds. It is a stage from which our pupils share ideas, insights, and perspectives on the world around them. It is about sparking exciting conversations.

Several Academic departments regularly organise events relevant to their subjects to extend pupils' learning in the Sixth Form, such as the Science Society, which is run by the Head of Science, open to all, and irrespective of whether they are studying science, the Science Society aims to engage pupils with diverse topics. Lectures take place on Friday evenings in the DJLT at 7.30pm. The main speaker is sometimes preceded by a short presentation by a member of staff or a student.

#### **Overseas** Trips

Sixth Form Pupils have the opportunity to partake in biennial trip to Nepal in October half term . Places on these trips are highly sought after, and therefore applications and a selection process is normally necessary.

**Liz Thornton** *Head of Sixth Form* 

# Notes