



GCSE CURRICULUM



THE BOOTHAM GCSE CURRICULUM - 2024

At Bootham, students are encouraged to be adventurous and challenging in their search for knowledge, to develop a thirst for learning, enjoy learning for its own sake and continue learning after they leave school.

The aim at Bootham during the Senior years is to provide both depth and breadth; students will study their academic subjects plus a wealth of curricular enrichment opportunities. We offer a curriculum which stimulates different styles of learning, affording students a range of experiences through which they can learn, make progress and be successful. We want our students to gain qualifications of recognised academic value and rigour which give all students experience in linguistic, mathematical, scientific, technological, human and social, physical and aesthetic and creative exploration; we want them to achieve qualifications at the highest level of which they are capable; we also want them to learn about spiritual, moral and cultural matters. Our aim is that students leaving Bootham will be articulate, confident, grounded, and comfortable with themselves. We aim to develop creative, independent, skilled and collaborative learners with the required skill set for A Level, Further or Higher Education, the working world and beyond.

The academic courses at Bootham broadly follow the National Curriculum (students will, for example, acquire speaking, listening, literacy and numeracy skills) but the school is free to modify this and does so to produce a programme which best suits our students. Being a Quaker school, the care and nurture of the individual is seen as a high priority. This philosophy means that classes are small, classrooms are positive and productive and there are many opportunities to find ways to meet the needs of individuals. It also means that, whilst there is a standard programme of GCSEs, we have a range of options to suit each individual student.

Most students have the opportunity to qualify in nine subjects in Lower and Upper Senior (Year 10 and 11). Students follow IGCSE/GCSE courses in English Language, English Literature, Mathematics, and a choice of one or two Sciences (Biology, Chemistry or Physics). In addition, options are chosen from Modern Foreign Languages, Humanities, and the Creative and Practical subjects. Non-examined PSHE and Physical Education are compulsory.

Of course, all young people are different, and therefore we offer alternatives to our standard nine GCSE programme. For some students, Curriculum Support or EAL lessons are also available as an option instead of a GCSE course, meaning that your child would take eight GCSEs. There are also a number of ways in which your child can elect to take more than nine GCSEs, which will be discussed with those students already performing at a high level.

We place a great emphasis on meeting the needs of the individual. To help in this, we intend that students shall have the freest possible choice of options, so that their academic programme can be closely tailored to their needs, interests and abilities. However, we must recognise that it may be impossible to achieve the programme that everyone would ideally like. We ask you to make your choices freely, but also to accept that we may have to recommend an alteration in some programmes when the choices and their implications for the balance of the timetable are computed.

THE BOOTHAM CHALLENGE

At Bootham, learning does not just take place in the classroom in preparation for exams. Alongside your lessons you will choose after school activities from a wide and varied programme. A full sample programme is available on the website, but they include sports, music, drama, art, cooking, volunteering and fantastic opportunities that are hard to categorise such as 'World Cookery', 'Dungeons and Dragons' and 'Engineering for Dummies'!

All these activities and anything you do outside of school count towards your Bootham Challenge Gold Award. To achieve the award you need to collect 200 credits across at least six of the following categories: Physical, Cultural, Creative, Skills, Volunteering and Service, Global Citizenship and Leadership. More information will be given on how to collect credits when you start Seniors.

PHYSICAL EDUCATION

Physical Education is a compulsory part of the curriculum throughout the School. In Lower Senior (Year 10) all students have six single lessons over a two week timetable, and in Upper Senior (Year 11) five lessons over two weeks. During Lower Senior we hope to refine and consolidate the work covered in the foundation years and then give students the opportunity to study activities in greater depth. Much of our work in Lower Senior is based on team games and we organise a full and varied fixture list in a wide variety of team games including: Athletics, Basketball, Cricket, Football, Netball, Rounders, Swimming and Tennis. We also include a fitness element to the programme using our own fitness suite which our Senior and College students are able to make use of in their own time.

We hope that our students will empathise with, and have an understanding of the spirit and the rules of the games we play as well as engendering a competitive spirit. We also wish to encourage a positive attitude to physical activity and a life long desire to enjoy an active and healthy lifestyle.

In Upper Senior (Year 11) students choose from a list of options which include team games and other activities such as Badminton, Fitness in our own fitness suite and Swimming. It is hoped that those who have already represented the school in a team game will continue to do so. Whatever the choice, we expect all students will show a determination to fulfil their potential, an enthusiasm to work hard, a commitment to support their chosen activity as well as demonstrating a desire to be fit and healthy. All our activities are well staffed and our teams competitive and highly motivated.

PERSONAL, SOCIAL & HEALTH EDUCATION

PSHE is led by by the Head of Wellbeing, teaching and Health Centre staff and is taught in teaching groups as part of the timetabled curriculum. Students participate in one lesson a week during Lower Senior and one lesson a fortnight in Upper Senior. During this time they explore three major topics across the course of each year; Health and Wellbeing, Relationships and Sex Education and Living in the Wider World (which includes Financial Education, planning for the future and Careers Education). Our aim in all areas of PSHE is to help our young people to fulfil their potential, navigate their time at school in ways that are happy and healthy and ultimately to flourish as adults. We aim to help our maturing students to make considered and informed choices so that they can respond to the opportunities of today's society while managing the risks. PSHE education is a subject through which students develop the knowledge, skills and attributes they need to keep themselves healthy, safe and prepared for life and work. As part of this they will learn about their own personal values and the impact that their decisions might have on their health, their wellbeing, society and the wider world.

CAREERS

Careers is an integral part of the PSHE curriculum. In Lower Senior (Year 10) and Upper Senior (Year 11) there are taught lessons as part of the PSHE programme. These lessons will enable students to plan for their futures, identify their skills and ambitions, prepare for job applications and the world of work, and understand employment law. Students will also explore the challenges and rewards of working in a variety of sectors and understand what qualifications and experiences will help them to move towards the areas of work that they wish to pursue. As part of this, students will be helped to understand different types of work and to identify the range of experiences that may include study or paid and voluntary work in this country and abroad. The lessons deal with elements such as decision making, problem solving, communication, teamwork, research, leadership and presentation skills. The subject is non-examined.

VOLUNTEERING

We are keen for all students within school to have the opportunity to improve their community through direct involvement in voluntary service. Service plays an integral part of the activities programme, with our Worldshapers group working on humanitarian and charity projects, and our BEAST team actioning sustainability work in school.

Students can also sign up for a variety of additional volunteering opportunities with the support of our Head of Social Action, including visiting local care homes, fundraising for charity and working with children in primary schools across the city.

Our annual Volunteering Fair takes place every November and we invite organisations from across the voluntary sector to meet with students face-to-face and showcase their opportunities.

Students will usually study 9 GCSEs. However, as explained on page three, there are a number of pathways available to suit each individual student.

Everyone in Lower Senior (Year 10) will take: Core subjects to GCSE:	Mathematics English Language and English Literature Science - (at least one Science subject – Biology, Chemistry or Physics)		
Non-examination courses:	P.E. Careers/PSHE EAL for students whose first language is not English Curriculum Support for those students who are offered it		
Students are expected to take at least one of each of the following subjects, unless agreed otherwise with the Deputy Head (Academic) on an individual basis. In the standard pro- gramme, students choose five options.		Optional GCSE subjects: Art # Biology = Chemistry = Classical Civilisation ^ Computer Science #	
Modern Foreign Languages (including Eng- lish as an Additional Language (marked *)		Design and Technology # Drama # French *	
Humanities (marked ^)		German * Geography ^ History ^	
Creative and Practical subjects (marked #)		Latin ^ Music # Physics = Physical Education # Religious Studies ^ Spanish *	

Students whose first language is not English will normally study 8 GCSEs and English as an Additional Language (EAL) will be incorporated into their timetable, normally in place of a Modern Foreign Language.

Some students will be offered Curriculum Support lessons in place of a GCSE option and it may be possible for other individual requirements to be catered for. These can be discussed with the Deputy Head (Academic) at option choice time.

HOW TO CHOOSE

There are some important factors to consider. The students should ask themselves:-

- Which subjects do I enjoy?
- > Which subjects am I interested in?
- Which subjects am I good at?
- > What do I need to take for A Levels?
- > What do I need for my career?
- > Am I choosing a balanced programme?

Students are the best judges of some of these questions. Subject teachers will expect to be asked about GCSE prospects but they will not exert any pressure for a student to take a particular subject.

Tutors, the Assistant Head (Curriculum Logistics), the Deputy Head (Academic) and PSHE department should be asked for advice concerning A Levels, career entry and constructing a balanced programme. Once started on their chosen GCSE subjects, students are expected to complete the course through to the GCSE examination.

On the standard programme, students can choose one, two or three of the Sciences: Biology, Chemistry and Physics. They should balance their interest and ability in Science against those in the other optional subjects. In order to study Biology, Chemistry or Physics at A Level, students must have studied that subject at GCSE. In addition to this, Biology GCSE is required in order to study Psychology A Level.

A Level linguists would benefit from having taken two GCSE languages, and must have studied their A Level language of choice at GCSE.

All students should choose a Humanities subject and a Creative or Practical subject.

Please note that it is especially important not to choose a subject simply because of the teacher. Staffing will not be known until after the options are chosen. Forms will be provided with this document which explain exactly how option choices should be made.

If you have any further questions, particularly regarding a more individualised programme for your child, please contact the Deputy Head (Academic).

DECISION TIMETABLE

The timetable for making decisions concerning GCSE options involves meetings, discussions and interviews from December:

- Tuesday 9 January: Tutors launch option choice discussions students and parents will have electronic copies of the booklet.
- > 10-19 January: Teachers to discuss GCSE courses as part of lessons.
- > Monday, 22 January: Parents' Evening and Introduction to GCSEs Presentation.
- Monday 5 February: Final option choices submitted.

It may be possible to make a later change, but this depends on option group structure and size of classes.

ENGLISH LANGUAGE / LITERATURE

Bootham follows the CIE IGCSE Specification for English Language and the Edexcel IGCSE for English Literature.

Students' final marks will be achieved through a combination of coursework and examination in English Literature and examination in English Language.

IGCSE ENGLISH LANGUAGE allows students to demonstrate their ability to use English in real life contexts, encouraging them to develop their investigative, inferential, critical and analytical skills in responding to and producing a range of media and non-literary texts. During the course, students will explore and apply the structural and linguistic features of non-literary texts as varied as newspaper reports, magazine articles, formal reports, journals, letters and interviews, as well as exploring and producing different examples of narrative and descriptive writing.

Students study three components:

Paper 1:	Reading (examined unit)	(50%)
Paper 2:	Directed Writing and Composition (examined unit)	(50%)

IGCSE ENGLISH LITERATURE requires students to explore texts from a personal perspective, offering an experience of both modern literature and the literary heritage in a variety of prose, drama and poetry. In addition to developing a greater appreciation of the techniques employed by writers to enhance their meaning for their readers or their audience, students are encouraged to gain a deeper understanding of the social, historical and cultural contexts in which the texts were written and received.

Students will study a variety of texts which will include:

A Shakespeare play	A prose text
A modern drama	A range of poetry from different periods

Students study three units:

Paper 1: Poetry and Modern Prose (closed text exam): 2 hours(60%)

Students will study a selection of poetry and a prose text in preparation for this paper. They will be required to respond to an unseen poem, make a comparison between two poems from a studied anthology and write one essay on the prose text.

Paper 3: Coursework: Modern Drama and Literary Heritage texts: two essays (40%)

Students will submit two assignments: One will be in response to a Modern Drama text. It is likely to be either 'An Inspector Calls' or 'A View From a Bridge'. The second assignment will be in response to a Literary Heritage text and is likely to be 'Romeo and Juliet'. Each assignment needs to be about 800 words.

MATHEMATICS

Mathematics is part of the core curriculum and is therefore studied by every student until the end of Upper Senior (Year 11). The Mathematics IGCSE gives every student the opportunity to experience Mathematics as both a tool as well as a stimulating and worthwhile discipline in its own right.

We deliver the Edexcel IGCSE (Specification A) (4MAO).

TIERS OF ENTRY

The new IGCSE is available at Higher Tier (grades 9 to 4) and Foundation (grades 5 to 1). We envisage entering the majority of students for the Higher Tier, although there is the option to sit the Foundation Level if this would allow the student to feel more confident about securing his or her grade. The final decision will be made during the course, either in the Lower Senior year or after the Upper Senior mock exams, in consultation with the student, parents and Mathematics teacher.

EXAMINATION

The exams are broken down into two papers, each two hours long. The total number of marks for each paper is 100. Each paper will assess the full range of targeted grades. There is no controlled assessment in IGCSE Mathematics.

ENRICHMENT

The Mathematics department offers a wide array of enrichment to complement the GCSE programme. Students who wish to, may sit the Intermediate Mathematics Challenge organised by the UK Maths Trust and we also host and enter a team into the Lower Senior (Year 10) Team Maths Challenge.

LEVEL 2 FURTHER MATHS

Alongside the IGCSE, we currently offer AQA's Further Maths GCSE to some students. This course builds on the subject content of the IGCSE as well as introducing new concepts that are very useful for further mathematical or related study. Students who have taken this course feel that it better prepares them for the higher end IGCSE questions as well as for A Level.

The assessment for Further Maths comprises of two exams, usually at the very end of the exam programme.

MODERN FOREIGN LANGUAGES

FRENCH, GERMAN AND SPANISH GCSE

French, German and Spanish are taught at Bootham. All students must choose at least one of these at GCSE Level; some students will wish to take two. If students are uncertain, they should discuss their choice with their language teachers and/or the Head of Modern Foreign Languages.

Each language will only run if there is a viable class size, so please be aware of this. A second choice might then need to be made. Students have a weekly supplementary oral session with the French "Assistante" and/or the German "Assistent/Assistentin" and/or the Spanish "Lectora" for three terms during the two-year course.

The four Language skills are weighted equally: (25% for each skill)

Unit 1	Listening	25%	Unit 3	Speaking	25%
Unit 2	Reading	25%	Unit 4	Writing	25%

There are three topics to study:

People and Lifestyles	Popular culture	Communication and the world around us
Theme 1 covers the following three topics:	Theme 2 covers the following three topics:	Theme 3 covers the following three topics:
Topic 1: Identity and relationships with others	Topic 1: Free-time activities Topic 2: Customs, festivals and	Topic 1: Travel and tourism, including places of interest
Topic 2: Healthy living and lifestyle	•	Topic 2: Media and technology
Topic 3: Education and work	Topic 3: Celebrity culture	Topic 3: The environment and where people live

EXAMINATIONS

The four skills are examined separately. Candidates can be entered for higher or foundation tier in listening, speaking, reading and writing and these decisions will be made after the mock GCSE exams, in consultation with the student, parents and MFL teacher. All skills are tested under examination conditions and marked externally, however, Speaking is a non exam (NEA). There is no coursework or controlled assessments.

Able students can expect to be extended beyond GCSE requirements to prepare them for further language study. In recent years Modern Foreign Languages have been combined successfully with a variety of subjects at A Level.

LANGUAGE LEARNING

Studying a foreign language allows you to achieve a degree of academic rigour whereby at the same time developing key interpersonal, cognitive and communication skills. Having some knowledge of a different language is likely to be valued by employers and give you a competitive advantage, especially since Brexit. In addition, it can open up more opportunities to work in an international environment in a range of settings, including sales, marketing, engineering, science and technology.

It is increasingly popular to combine a modern foreign language as a module or a "minor" in a variety of degree subjects with the option of studying abroad for a year.

BIOLOGY

OVERVIEW

Biology is the 'Study of Life'. It starts with an understanding of Biological structures and processes, incorporates elements of Physics and Chemistry to help develop a deeper knowledge of the processes that occur within the body and the impact of humans on the environment.

GCSE BIOLOGY

Have you ever wondered why genetically modified organisms glow in the dark or how fungi could feed the world? Have you considered being an organ donor or why offspring of the same parents look different? Well, GCSE Biology has the answers.

Studying Biology focuses on building the understanding and the application of ideas at a molecular level, through cells, organs and systems in both plants and animals. The students will then look at the bigger picture, discuss the role of man in the environment, find out how we have manipulated biological processes and molecules to suit our needs and then look at the impact that we are having on our environment.

All Biology GCSE courses have similar curriculum content which has both challenging mathematical and scientific content. The final examinations assess both the scientific and practical content. The practical content is selected from a suite of 'core' practicals that have to be completed and recorded over the duration of the course.

WHY STUDY BIOLOGY

Biology is the link between the Humanities and Science. It builds on the knowledge and understanding of the Sciences, whilst weaving in elements of social historical change and both Human and Physical Geography. It draws on influences from philosophers, language and mathematics and, as such, complements the programmes of all students. Biology is also a science that links directly to everyday events and news updates, enabling students to understand and explain current affairs.

In addition to the subject content, students develop additional skills including:

- How to generate their own hypotheses.
- The development of practical skills that allow them to test these hypotheses in a valid manner.
- Understanding how data is manipulated to explain practical results.

THE FUTURE

Choosing Biology GCSE is a balance between the knowledge and skills developed through the course, the need for future progression, and personal interest.

The academic nature of Biology makes it a foundation for many routes to both further and higher education. It is required for a variety of University courses and is a bedrock of future careers in Medicine, Veterinary Medicine, Biomedical Science, Nursing, Environmental Sciences, Ecology, Marine Biology and Psychology.

CHEMISTRY

WHY STUDY CHEMISTRY?

- Chemistry is a key science in helping us understand the material world around us.
- Materials why some are hard, others are brittle, some bend, some are strong.
- Fuels why they give so much energy, why some are so flammable, controlling pollution.
- Reactions so many ways of controlling them from explosions to rusting.
- Making stuff plastics, perfumes, poisons, potassium.
- Electrochemistry plating jewellery, batteries
- Plus loads of amazing experiments.

Chemistry is also key to solving many of world's most pressing concerns, including health, climate change and energy. Many of the world's environmental issues are being tackled by chemical research, from reducing air and water pollution to developing more sustainable materials and processes.

MY DEVELOPMENT

- Chemistry helps develop abilities which are sought-after by employers and universities.
- Work confidently with abstract ideas and relate them to real-life situations.
- Organise complex ideas in a way that helps build understanding.
- Interpret evidence and make predictions.
- Think logically and express ideas clearly.
- Operate confidently in an increasingly technological and scientific world.
- Build practical and investigation skills.

These thinking skills make Chemistry useful for a wide range of students. Even if you do not want to follow sciences beyond GCSE, a GCSE in Chemistry can make you a better historian, geographer, economist or politician.

MY CAREER

Chemistry is important for many careers: primary teaching, nursing, medicine, law, food industry, materials sciences, oil and energy industries, engineering, pharmacy, biomedical sciences, forensic sciences, scientific journalism, and environmental sciences, to name just a few. Some of these careers could be very difficult without a GCSE that includes Chemistry.

Chemistry GCSE is an important foundation for Biology, Chemistry and Physics A Levels.

MY APTITUDE

To do well in Chemistry you need to use a wide range of skills from other subjects. You need to be careful and accurate in the way you read and use the language of Chemistry. You will also need to use your Maths skills to carry out chemical calculations, so you'll need to build confidence in working with numbers. We build these skills up throughout the course, but it definitely helps if you're motivated to do plenty of practice.

Chemistry is a central science, with lots of cross-curricular applications. If you're interested in finding out more about these ideas, you should enjoy studying Chemistry.

WHY STUDY PHYSICS?

Physics is crucial to understanding the world around us, the world inside us, and the world beyond us.

How might it help you?

- You would be able to get out of a black hole (only kidding, if you fall in, you can't get back out!)
- Physics teaches you to think
 Studies show it develops critical thinking and problem-solving skills
- Physics explains
 Learn why the sky is blue or how a mobile phone wireless charger works
- Physics will help you to get a great career (including becoming an engineer and other well paid roles)
- Physics is challenging. This should not put you off! Studying this subject requires you to master a wide range of concepts and skills that will serve you well for the rest of your life.

Skills You Will Develop

Physicists are problem solvers. Their analytical skills make physicists versatile. Physics brings a broad perspective to any problem. Physics students learn how to consider many problems as they are not bound by context.

You will develop your critical thinking and problem-solving skills. With these skills you'll be able to test out new ideas. You will learn to question and investigate other people's theories, which is useful for any kind of job that involves research or debate. Physics can help your learning in other subjects. You will for example get better at Maths through practising its application in Physics.

What Can I Do With It?

A background in Physics is a good foundation for careers in Law, Finance, Medicine, Engineering, Computer Science, Astronomy, Biology, Journalism and Earth Sciences.

Even when the job market is slow, physicists get offers of well-paid jobs. Employers know that a physicist brings additional skills with expertise and pay accordingly.

That's why people who have studied Physics at university can expect career salaries similar to computer science and engineering graduates.

What Do I Need To Do Well?

You often hear that to be good at Physics you have to be good at Maths. There is of course a mathematical side to Physics, but it is worth noting that one of the greatest historical figures in Physics, Michael Faraday, knew hardly any Maths and was primarily self-educated. All the Maths you'll need will be taught and practised in the Physics course.

Physics will suit you if you have an inquisitive mind and like finding out how things work and often find yourself wondering why the world around us works in a particular way.

ART AND DESIGN

WHY STUDY ART AT GCSE LEVEL?

GCSE Art and Design is an extremely rewarding course of study for those with a genuine enthusiasm for expressing themselves and communicating ideas in visual form.

The aim of the course is to encourage creativity, expand awareness of visual art and develop a language which deals with the experience of both inner and outer worlds. The skills and abilities taught in GCSE Art are an important preparation for any future study of A Level Art as well as a range of degree subjects including Fine Art, Illustration, Fashion, Textile Design, Interior Design, Animation, Architecture and many others.

WHAT KIND OF WORK WILL I MAKE?

The Senior years are the commencement of a more reflective and sustained process of creative investigation. The principles of playful experimentation and individuality remain central to the experience of Senior students. In addition, there is also a need to practise a more progressive, sequential development of ideas. In this way, students are encouraged to view their creative output as part of a continual personal project.

It is expected that an increased formal understanding of the subject, together with thorough critical study of the work of relevant artists, will lead to a unique, articulate body of work for assessment. Teaching is flexible to allow students to find their own areas of strength within the subject and therefore fulfill their personal artistic aims through the work they create. For example, some students may prefer to specialize in drawing and painting, whilst others may find they have more of an affinity with photography or three-dimensional work. The curriculum is structured to offer support for this diverse range of possibilities.

WHAT IS THE COURSE STRUCTURE?

Lower Senior students follow a programme of learning that introduces them to the processes of observation, research, analysis, experimentation and development. During the year, students compile a portfolio of increasingly personal work that provides a platform for Component 1 of the GCSE submission.

Upper Senior students are usually issued with a new theme at the start of the autumn term to guide the development of their project. They then build upon the most successful moments from their Lower Senior portfolio to create a highly individual and personal project that culminates in a major piece of work, made during the mock exam in January. The absolute deadline for Component 1 is not until after Easter, allowing for some leeway in the revision and remedial improvement of work.

The project brief for Component 2 is issued to students at the beginning of February, with a period of ten hours controlled study taking place around the beginning of the summer term. During the final ten hour period students are required to create a major outcome stemming from their preceding research and development without aid or intervention from their teachers.

60% Component 1 Personal Portfolio

40% Component 2 Externally Set Assignment

CLASSICAL CIVILISATION

Classical Civilisation is a great subject choice for those with a love of history and myth as well as a curious, enquiring mind. If you'd like to delve deeper into the weird and wonderful world of the ancient Greeks and Romans, this is the subject for you. We will be discussing questions such as: how does it feel to have gods that have superhuman power but no moral high ground? Why would great civilisations want to trace their success back to mythical founders? What were the sights, sounds and smells of ancient Roman cities? How much fun would a Roman funeral club be? Where would I have been allowed to sit in the Colosseum?

The skills developed in studying Classical Civilisation very much overlap with those used in English and History, as students will be reading ancient literature in translation and analysing ancient written and visual sources. Much of the course is taught through visual material. The course also provides an introduction to Ancient History and Archaeology.

We have a long-standing and successful A Level in this subject and have also had a high percentage of students in recent years who have gone on to study Classics at university. Graduates in Classical subjects are some of the most readily employable in the arts.

The course is divided into two components, both of which will be examined by written papers at the end of Upper Senior:

COMPONENT 1	COMPONENT 2
Thematic study which involves a comparative study of ancient Greece and Rome and combines literary and visual sources.	Literature and Culture which involves an in-depth cultural study and the study of related literature.
Topic of study:	Topic of study:
Myth and Religion including gods, temples, festivals, mythical stories and heroes, death and burial, the underworld.	Roman City Life including home and family, society, leisure and entertainment.

In the exam, students will answer comprehension and essay questions commenting on ancient source material which they have studied and discussed in detail. They will learn to understand, interpret and analyse a range of evidence from classical sources, as well as evaluate this evidence to form their own judgements which they will present in a clear, concise way.

Computer Science is a lot more than just programming or using a computer!

In this course you will study both the theory and the practicalities of how computers work. You will develop problem solving skills that will enable you to take a real life problem and create a computerised solution.

Component one, computer systems, will focus on the hardware and software that makes up a computer system with extra enhancements of looking at: networks, what malware are and how to defend against it, the ethics around computer science, software development life cycles, and much more. Unit 1.2 does require mathematical skills within lessons and the exam.

Component two, computational thinking, algorithms, and programming, looks at the practical side of computer science where you have the opportunity to create programs and develop an understanding of different types of programming language and how they are translated. In this unit you will look at: how to think like a programmer in industry, program a coded solution to given briefs, and how to perform the common algorithms such as the bubble sort and merge sort. Unit 2.4 does require mathematical skills within lessons and the exam.

UNIT	ASSESSMENT
Component 1: Computer Systems	
1.1 Systems Architecture	
1.2 Memory and Storage	Computer Systems
1.3 Computer networks, connections, and	80 Marks
protocols	1h 30mins
1.4 Network Security	Non-calculator
1.5 Systems Software	50% of GCSE
1.6 Ethical, Legal, Moral, Cultural, and Environmental issues	
Component 2: Computational Thinking, Algorithms and Programming	Computational Thinking, Algorithms and
2.1 Algorithms	Programming
2.2 Programming Fundamentals	80 Marks
2.3 Producing Robust Programs	1h 30mins
2.4 Boolean Logic	Non-calculator
2.5 Translators and Facilities of Language	50% of GCSE
Formal Requirement: Practical Programmi	ng

SUBJECT CONTENT & ASSESSMENT

You will be given the opportunity to solve a larger in size programming task to help consolidate learning from component 2 of the GCSE.

DESIGN AND TECHNOLOGY PRODUCT DESIGN

This course involves designing and making, using a range of materials to solve design problems.

Design and Technology is a multi-faceted subject and covers a variety of disciplines. It is an exciting field of study which has a great deal to offer students as manufacturers, consumers and citizens. Students at Bootham have gone on to have careers in a wide range of areas such as Engineering, Product Design, Interior Design and Architecture.

The Russell Group universities recommend Design and Technology as a "useful advanced level" qualification for careers such as Architecture, Art and Design, General Engineering, Mechanical Engineering and Materials Science.

ASSESSMENTS

Non-exam assessment 50% of the GCSE:

A Design and Make challenge (30–35 hours)

The contextual challenges will be released annually by the examination board on 1st June in Lower Senior. Students choose one challenge. The challenge is split into four sections:

- Investigating
- Designing
- Making
- Analysing and Evaluating

Written exam: 2 hours 50% of the GCSE:

Topics will include:

- New and emerging technologies
- Energy storage and generation
- Modern and smart materials
- Mechanical devices
- Forces and stresses
- Materials and their working properties
- Ecological and social footprints

Students will produce a working prototype and a portfolio of evidence (max 20 pages). Work will be marked by teachers and moderated by AQA.

Students will be required to demonstrate the use of Maths and Science in their work. The written paper will be split into three sections:

- Numerical computations
- Geometry and trigonometry

• Data handling

• Use of scientific vocabulary

• Graphs

Section A

Core technical principles (20 marks): a mixture of multiple choice and short answer questions assessing a breadth of technical knowledge and understanding.

Section B

Specialist technical principles (30 marks): several short answer questions (2–5 marks) and one extended response to assess a more in-depth knowledge of technical principles.

Section C

Designing and making principles (50 marks): a mixture of short answer and extended response questions including a 12 mark design question.

DRAMA

THE COURSE

GCSE Drama is an exciting course that encourages students to develop their skills in theatre, and to use these skills to help communicate and express ideas.

The emphasis in Drama is on practical work (used to explore themes, issues and ideas found in both the students' own work and in the work of other directors, playwrights and theatre companies). Students develop a range of performance and technical design skills. Trips are organised to theatres and performances around the country. Students are required to take advantage of the opportunities provided by the department to see theatrical productions; these visits form the basis of discussion, written evaluations and exercises. Experiencing live theatre is also important for its ability to influence and shape the students' own practical performances.

Drama as a subject is intended not only for aspiring actors, directors and designers but for anyone interested in theatre and who has imagination, intelligence and a sense of humour. The subject demands self-discipline, as it involves working independently of others and working as part of a team – students should be prepared for anything!

The course (OCR) consists of three Components:

COMPONENT 01/02 - Devising Drama - 30% of GCSE

Students will research and explore a stimulus, work collaboratively and create their own devised drama.

This is a practical component where students will explore a chosen theatre practitioner which will influence their own ideas for an original devised performance inspired by a stimulus provided by the exam board.

Students will be required to widely research their chosen stimulus to help shape and form their original performance ideas. They will have to work collaboratively with others to create an ensemble performance for a practical performance exam which will take place at the end of the first year of the course.

Students will also create a devising portfolio which will track the full devising process. This will include initial research, the improvements made during the rehearsal process and final evaluation.

This component is internally assessed and moderated by OCR.

COMPONENT 03 - Presenting and Performing Texts - 30% of GCSE

Students develop and apply theatrical skills in acting or design by presenting a showcase of two extracts from a performance text.

This is a practical component where students will practically explore and analyse the characters and plot of a selected performance text. They will need to work collaboratively in a group to explore context and playwright intentions to enable them to create their own artistic vision of two extracts from that performance text.

Students will study the full performance text before creating a fully realised performance of two extracts for their practical exam.

The component is externally assessed by a visiting examiner from OCR.

COMPONENT 04 - Performance & Response - 40% of GCSE

Students will explore practically a performance text to demonstrate their knowledge and understanding of Drama. Students will analyse and evaluate a live theatre performance.

The written exam in Drama will take place at the end of the course. The exam is separated into two sections.

Section A - Study of a set text

Students will practically explore the plot, context, genre and characters of a performance text. Students will be required to understand how a production of their set text would be put on from the perspective of a range of theatre makers. Students will need to know how a range of scenes could be performed from the perspective of an actor, director, designer and what effects practical decisions would have on the audience.

Section B - Live Theatre Evaluation

All students will see a range of Live Theatre over the duration of the course. As a class we will select one theatre production we have seen and learn to respond to an essay question where students will be required to critically evaluate all elements that bring together a live piece of theatre.

Although assessed as a written exam, the preparation for this component remains very practical.

GEOGRAPHY

The study of Geography promotes better understanding of not only how the Earth has evolved, but also the way in which people interact with their environment, so that you will develop more fully "a sense of place". It helps you form a view of the world and gives you the information to understand what is happening in other countries around the globe.

Geography also gives insights into other ways of life. As people effect change on their surroundings - through pollution caused by over-use of the car, for example - Geography can foster an awareness of and respect for the environment. The course also has a moral element, as it promotes a better understanding of how social injustice occurs and the policies needed to improve matters.

Geography requires an even balance between literacy and numeracy and should also make the connections which help you to better understand other subjects. ICT, map work and field-work are all needed for the Geographical Applications exam. All these skills are transferable and will serve you well in the world of employment way beyond your school life at Bootham.

There will be a field trip to the Lake District in the summer term of Lower Senior.

SUBJECT CONTENT

Living with the physical environment:

- Section A: The Challenge of Natural Hazards includes tectonic hazards, tropical storms and extreme weather in the UK and climate change.
 Section B: Physical Landscapes in the UK includes rivers and glaciation.
- Section C: The Living World includes ecosystems, tropical rainforests and cold environments.

Challenges to the human environment:

- Section A: Urban Issues and Challenges.
- Section B: The Changing Economic World.
- Section C: The Challenge of Resource Management, including a focus on food.

Geographic applications:

- Section A: Issue evaluation.
- Section B: Fieldwork.

WHAT IS ASSESSED

Paper 1: Living with the physical environment:

The Challenge of Natural Hazards, Physical Landscapes in the UK, the Living World and Geographical Skills.

How it's assessed:

Written exam - 1 hour 30 minutes

88 marks

(including 3 marks for spelling, punctuation, grammar and specialist terminology) 35% of GCSE

Questions:

Section A: answer all questions (33 marks)

Section B: answer all questions (25 marks)

Section C: answer 2 questions from questions 3, 4 or 5 (30 marks)

Question types: multiple choice, short answer, levels of response, extended prose.

Paper 2: Challenges in the human environment:

Urban Issues and Challenges. The Changing Economic World. The Challenge of Resource Management. Geographical Skills.

How it's assessed:

Written exam 1 hour 30 minutes - 88 marks (including 3 marks for SPAG) 35% of GCSE

Questions:

Section A: answer all questions (33 marks)

Section B: answer all questions (30 marks)

Section C: answer question 3 and one from questions 4, 5 or 6 (25 marks)

Question types: multiple choice, short answer, levels of response, extended prose.

Paper 3: Geographical applications

Issue evaluation. Fieldwork. Geographical Skills.

How it's assessed:

Written exam 1 hour 30 minutes -76 marks (including 6 marks for SPAG)

30% of GCSE

Pre-release resources made available from late March in the year of the exam.

Questions:

Section A: answer all questions (37 marks)

Section B: answer all questions (39 marks)

Question types: multiple choice, short answer, levels of response, extended prose.

RELEVANCE FOR YOUR FUTURE

Interests of those following Geography courses remain many and varied. Recent career paths of Bootham Old Scholars with a geographical training include:

Key roles in charities like Oxfam	Management Consultancy
Agriculture	Journalism
Careers in IT/Business	Estate Agency/Surveying/Housing and Planning
Tourism/Financial Services	Travel Writing/Reportage/Photography

HISTORY

History is both an enjoyable and exciting option. Students will develop critical skills which are recognised and valued in the world of work; these include analysing different types of sources, distinguishing between fact and opinion, debating and developing coherent arguments based on evidence. History is interesting in its own right, but it also allows students to develop a more balanced sense of their place in the wider world. Studying different cultures and individuals encourages students to think critically, to be more tolerant and thoughtful. An ability to write fluent English is required; however, anyone with an interest in History should find the course fulfilling and rewarding.

CONTENTS OF THE COURSE

Depth Study: United States of America, 1919 - 1941:

America between the wars was a period of economic boom and bust, flappers, organised crime, racism and depression. This course looks at the development of modern America, how and why it was brought to a halt by the Wall Street Crash and how the government tried to solve these problems. Students will also study the influence of gangsters, racist groups such as the Ku Klux Klan and the rise of Hollywood.

International Relations since 1919:

The course begins by looking at the nature of the peace treaties following the First World War, asking whether these were fair, before moving on to look at the role of the League of Nations, the forerunner of the United Nations, and why international peace had collapsed by 1939. Students will then study who was to blame for the Cold War which meant that, for almost 50 years, the world feared a Third World War. Students analyse how effectively the USA contained the spread of Communism, through looking at events such as the Cuban Missiles Crisis and the Vietnam War, together with the reasons for the rise and fall of the USSR's control of Eastern Europe from 1948-1989.

Coursework: Russia, 1905 - 1941:

In 1917 Tsarist Russia was engulfed in revolution and the ruling Romanov family was replaced by a committed group of revolutionaries who then set out to transform Russia into a communist utopia. Students will look at how and why Tsarist Russia collapsed, the nature of the Bolshevik takeover and how Stalin transformed the country through his rule of terror. Students produce an extended piece of writing of up to 2,000 words.

ASSESSMENT

Unit 1: International Relations since 1919 & Depth Study USA	(40%)
Unit 2: International Relations since 1919	(30%)
Coursework (2000 words): Russia, 1905 - 1941	(30%)

LATIN

The GCSE Latin course consists of a mixture of Latin Language and the option of learning about Roman Civilisation. There are three exam papers.

LATIN LANGUAGE 50%

This paper requires students to use their knowledge of Latin grammar and vocabulary (440 words, to be learned in the Lower Senior year) to translate and answer questions on an unseen Latin story. In addition, a small part of this paper requires students to translate short sentences from English into Latin or analyse some grammatical points. The course equips students with a sensitive and analytical approach to language generally and an awareness of the influence of Latin on languages today.

LATIN LITERATURE AND SOURCES (THEMES) 30%

For this paper, students study a range of original Latin texts and other related source material on a given theme, e.g. 'Superstition and Magic'. This theme-oriented approach allows students to get to know a broad variety of writers and ancient sources.

Either: LATIN LITERATURE (NARRATIVES) 20%

This paper offers candidates the opportunity for close reading of one particular narrative of a given author, like Virgil. The narratives are chosen for their richness in content and style, and provide a sense of an ancient writer's voice.

We study all set texts thoroughly and make sure students have accurate translations. They are continuously examined using passages from the selection, with comprehension questions and a small amount of translation. Knowledge of the style of the language will also be tested.

Or: ROMAN CIVILIZATION 20%

Students learn about an aspect of Roman life such as 'Daily Life in a Roman Town' and answer questions in English about this topic in the exam. This gives students an excellent opportunity to build up background knowledge of the Roman world which perfectly complements their study of the language and literature.

The skills developed are complex, but Latin is widely held to promote an eye for detail, logical thought and a high level of language and social understanding. A government document refers to classicists as 'clever and open-minded'.

Classical subjects in general, and Latin in particular, still have a high status with employers. Latin may serve as a language qualification for entry into university courses and is especially welcomed for English, History, and also for courses in Law or Medicine.

GCSE entries for Latin remain at a significant level in independent schools. Most recent Ministry figures available show that Classics graduates are readily employable. The skills developed are complex, but Latin is widely held to promote logical thought and a high level of language and social understanding.

MUSIC

GCSE Music consists of one externally examined paper and two non-examined assessments. Students must submit their non-examined assessments and complete the exam in May/June in any single year.

COMPONENT 1: Performing (30%)

Content overview

- Solo performing
- Ensemble performing

Assessment overview

- Students perform one solo and one ensemble for at least four minutes' combined duration.
- Solo performance: this must be of at least one minute in duration, and may comprise one or more pieces.
- Ensemble performance: this must be of at least one minute in duration, and may comprise one or more pieces.
- Internally marked and externally moderated.

COMPONENT 2: Composing (30%)

Content overview

- Developing musical ideas.
- Compositional techniques and strategies.
- Ensuring technical control and coherence.
- Methods of notating composition scores.

Assessment overview

- Students compose two compositions, of at least three minutes' combined duration.
- One composition to a brief set by Edexcel, of at least one minute in duration.
- One free composition set by the student, of at least one minute in duration.
- Internally marked and externally moderated.

COMPONENT 3: Appraising (40%)

Content overview

- Musical elements, musical contexts and musical language.
- Areas of study: Instrumental Music (1700-1820); Vocal Music; Music for Stage and Screen; Fusions.

Assessment overview

• A written examination of 1 hour 45 minutes.

PHYSICAL EDUCATION

Study GCSE Physical Education to open your eyes to the amazing world of sports performance. Do you...

- Want the knowledge to keep yourself fit, healthy and active for life?
- Find the human body fascinating?
- Want to learn how to train SMART, not just train harder?
- Want to develop the knowledge to improve in the sport or activity you take part in?

60% Theory	40% NEA (Non-exam assessment/Practical Perfor- mance)		
Topics include: Paper One: Human body and movement: Applied anatomy and physiology Physical training	Three practical performances as player/performer (30%):One must be a team activity, one is an individual activity and the third can be either team or individual.Activities chosen must be from a list provided by the exam board (see table below).		
Paper Two: Socio-Cultural influences and well-being: Sports Psychology Socio-cultural influences Health, fitness and well-being	One Performance analysis (10%)		
Assessed in two written exams (60%) Each exam is 1hr 15 minutes long and has equal weighting. Questions are a combination of short answer and extended writing.	Practical performance is assessed internally with external moderation. Analysis of performance is a non-exam assessment (written or oral).		

Candidates will need to demonstrate and apply knowledge to analyse and evaluate performance, as well as to demonstrate and apply skills and techniques in physical activity and sport. GCSE PE includes the use of data analysis skills, which are spread across the components and topics.

Team Activities		Individual Activities			
Association Football	Badminton	Basketball	Amateur boxing	Athletics	Badminton
Camogie	Cricket	Dance	Canoeing	Cycling	Dance
Gaelic football	Handball	Hockey	Diving	Golf	Gymnastics
Hurling	Lacrosse	Netball	Equestrian	Kayaking	Rock Climbing
Rowing	Rugby League	Rugby Union	Rowing	Sculling	Skiing
Squash	Table tennis	Tennis	Snowboarding	Squash	Swimming
Volleyball			Table Tennis	Tennis	Trampolining

Where can GCSE PE take me?

Beyond A Level, the study of PE can lead to university degrees in sports science, sports management or healthcare and compliment further study in Biology, Physics, Nutrition, Medicine, Physiotherapy, Sociology, Teacher Training and many more.

There are many transferable skills, such as decision-making and independent thinking which are useful whatever career path you choose to take.

RELIGIOUS STUDIES

Religious Studies is an exciting and diverse subject that has been studied by students across the world for many millennia. Now, arguably more than ever, it is vital that young people have the language to translate and understand the variety of worldviews and ideologies they come across in their social circles and wider communities. Philosophical and religious questions like why am I here? How should I live? How do I discern truth from lie? unify and frame our lived experience.

Students of Religious Studies GCSE will have the opportunity to study the diverse disciplines of philosophy, ethics, and theology and religion. They will ask and explore questions like: who or what is God? Is a God who does miracles immoral? Is nuclear warfare ever justified? Why did the Romans think that Christians were cannibals? Are religion and science compatible?

They will also develop skills useful for higher study, work and the wider world including critical analysis and evaluation, decoding complex, well-informed and balanced arguments, and constructing one's own. Religious Studies is a reading and writing heavy subject, so good literacy skills are useful, but anyone with a strong interest can thrive.

COURSE OUTLINE

Religious beliefs, teaching and practices (50% of the course - assessed by one 1 hour and 45 minute exam)

The first half of the course involves an in-depth study of the beliefs, teachings and practices of two religions - Christianity and Islam.

In Christianity, students will study the story of Genesis, Adam and Eve and the fall, the nature of God and the Trinity, the concepts atonement and salvation and heaven and hell along with the nature of Christian rituals and mysteries like holy communion and baptism, prayer, pilgrimage, and the nature and purpose of the Church.

In Islam, we will study the core beliefs of Sunni and Shi'a Islam including the Six Beliefs of Sunni Islam and Five Roots of Shi'a Islam. These include the oneness of Allah, the role of prophets, the nature of the afterlife and the importance of angels in divine revelation. We will also study the Five Pillars which includes the role of prayer, purification, pilgrimage and festivals.

Religion, philosophy and ethics in the modern world (50% of the course—assessed by one 1 hour and 45 minute exam)

In the second half of the course, students will study four themes: **The Existence of God** which explores the classical and religious approaches to talking about God, arguments for God's existence, the problem of evil and the nature and validity of religious experience. **Religion, Peace and Conflict** which explores the ethics surrounding war in general, and specific types of warfare alongside reconciliation and restorative justice projects. **Relationships and Family** which explores sexual and familial ethics including: marriage, divorce, adultery, contraception and sexuality. And finally, **Religion and Life** which explores origins of the universe including the big bang and evolution; medical ethics such as abortion and euthanasia; and the relationship between religion and ecology.

NOTES



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