



NOTTINGHAM
GIRLS' HIGH SCHOOL
BE EXTRAORDINARY



INTRODUCTION TO GCSES

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INTRODUCTION

At this stage in Year 9, we invite you to choose the subjects you would like to study in Years 10 and 11.

This is likely to be the first opportunity you have had to influence the direction of your education. Some of you may already have a clear idea of subjects you'd like to take - and others you'd like to drop - but many of you probably feel less certain. Please don't worry - the options process is designed to provide a framework within which you can preserve a balanced base for the future and make choices safely. We want you to play to your strengths and study what you enjoy!

We hope you'll read through this booklet with your parents - and discuss it with them. For further guidance about planning a well-balanced GCSE programme, advice about particular subject choices, or general queries about the options process, we're all here to help, including your Form Tutor, our Careers Advisor and your subject teachers.

The next two years will begin to shape your future and we hope you'll enjoy making some decisions about the direction you'd like to take.

YOUR COURSES

Girls will choose 9 GCSEs, made up from the following:

THREE COMPULSORY SUBJECTS STUDIED BY ALL

- English Language
- English Literature
- Mathematics

AT LEAST TWO SCIENCES

- Biology
- Chemistry
- Physics

WE ENCOURAGE AT LEAST ONE MODERN FOREIGN LANGUAGE

- French
- German
- Spanish

WE ENCOURAGE AT LEAST ONE HUMANITY

- Geography
- History
- Religious Studies

THE FINAL OPTION CHOICES CAN BE SELECTED FROM:

- A modern language (French, German, Spanish)
- A humanity (Geography, History, Religious Studies)
- Art and Design
- Computer Science
- Design and Technology
- Drama
- Food Preparation and Nutrition
- Latin
- Music
- Physical Education

You will also continue with lessons in PE and PSHE.

YOUR CHOICES

We do our utmost to ensure that you are able to take the subjects you want, and our option blocks are built around your choices.

We do, however, ask you to list your options in order of preference and to specify an additional 'reserve' choice of subject. We are unlikely to have to use it - and would never do so without talking to you first - but if, for example, numbers for a particular subject choice are very low, it may not be viable to run the course.

The timetabling of technology lessons means that it may not be possible for you to study more than one subject from Design and Technology and Food Preparation and Nutrition. If you would like to opt for two, then it is more likely that we may have to use your reserve subject choice.

Do think about what subjects you want to take, not what your friends are taking, and don't hesitate to ask for advice if you need it. If you are intending to take an additional GCSE, we would strongly recommend that you contact our examinations office before committing to a course of study outside school. It is not always possible for us to accommodate additional GCSEs because of examination board regulations.

COURSE OVERVIEW

Art is a form of communication - a means of expressing ideas and feelings. It is different from other subjects and will enable you to develop a wide range of skills and understanding. The GCSE Art and Design course encourages new ways of thinking creatively and helps extend your problem-solving skills. This means that it complements your literary, mathematical and factually based subjects, providing you with a very rich and diverse educational experience.

The GCSE portfolio is produced out of the day-to-day content of your lessons rather than in addition to it. Sustained commitment and enthusiasm for the subject is needed throughout the course. However, in return it will offer you opportunities for intellectual and creative development and will provide you with an area of your studies where the important qualities of initiative, independence of thought and an innovative and experimental approach are actively encouraged.



COURSE STRUCTURE

Within the course we pay particular attention to extending and improving the skills which make up the language with which you will work. Basic observation drawing is important but there is considerable scope for personal interpretation within the structured approach to coursework and examination projects. You will be able to investigate a broad selection of media and processes alongside the important art and design appreciation content of the course. This develops the awareness and sensitivity which will enrich and extend your own work and help you to establish further understanding of the diverse, visual world in which you live.

The AQA Art and Design GCSE requires you to submit a portfolio of work followed by a controlled assessment. All of these units consist of projects which are progressed through several weeks of preparation work towards a final piece. The final piece for the examination unit is completed under examination conditions.

The portfolio and the controlled assessment represent 60% and 40% of the Art GCSE marks, respectively.

It must be emphasised that the route through to almost all design and art careers starts with GCSE Art, goes on with A level Art, an Art Foundation course and from this to a degree specialisation. This includes some degree courses in areas such as graphics, industrial design, fashion / textile design and architecture.

STUDENT COMMENTS

“It’s good to have a subject where you can try things out, experiment, sometimes take risks.”

“It’s interesting to look at other artists’ and designers’ work; it helps me develop my ideas in ways I wouldn’t necessarily have thought of.”

“It’s very different from my other subjects; it makes you think in a very different way.”



INTRODUCTION

The students will study seven different areas of Biology with a focus on investigative skills. Students start GCSE Biology in Year 10.

COURSE OVERVIEW

Cell Biology: Cells are the basic unit of all forms of life. In this section we explore how structural differences between types of cells enables them to perform specific functions within the organism.

Organisation: In this section we learn about the human digestive system, the respiratory system, the circulatory system and how damage to these systems can be debilitating if not fatal. We also learn about the plants transport system and how leaf cells are dependent on it for carbon dioxide and water.

Infection and response: Pathogens are microorganisms such as viruses and bacteria that cause infectious diseases in animals and plants. They depend on their host to provide the conditions and nutrients that they need to grow and reproduce. This section will explore how we can avoid diseases by reducing contact with them, as well as how the body uses barriers against pathogens.

Bioenergetics: Sunlight is the ultimate source of energy for all living systems. In this section we will explore how plants harness the Sun's energy in photosynthesis in order to make food. We also look at respiration where both

animals and plants use oxygen to oxidise food which transfers the energy that the organism needs to perform its functions.

Homeostasis and response: Cells in the body can only survive within narrow physical and chemical limits. They require a constant temperature and pH as well as a constant supply of dissolved food and water. We study the control systems in the body that constantly monitor and adjust the composition of the blood.

Inheritance, variation and evolution: In this section we look at cell division, mutations, natural selection, evolution, selective breeding and genetic engineering.

Ecology: Ecosystems provide essential services that support human life and continued development. In order to benefit from these services we need to engage with the environment in a sustainable way.

“We are embedded in a biological world and related to the organisms around us.”

Walter Gilbert

DID YOU KNOW?

In 2017 85% of Biology GCSE students scored A* or A.



INTRODUCTION

We experience chemical reactions all of the time: from breathing to baking a cake, driving a car or listening to an MP3 player. Chemistry is concerned with the materials that make up the universe and all of life. You will look at the physical and chemical properties of atoms and molecules, their synthesis and use in the 21st century. Wherever possible, investigative work is used to illustrate and enhance the theories we study. Practical is still at the heart of Chemistry: There's no better way to learn about science than through purposeful practical activities that form a natural part of day to day teaching and learning.

COURSE OVERVIEW

Summary of content

1. Atomic structure and the periodic table
2. Bonding, structure and the properties of matter
3. Quantitative chemistry
4. Chemical changes
5. Energy changes
6. The rate and extent of chemical change
7. Organic chemistry
8. Chemical analysis
9. Chemistry of the atmosphere
10. Using resources



Year 10 starts by looking at what makes up the atom followed by how this helped scientists arrange the elements and develop the Periodic Table. This leads on to how elements combine to make compounds and how their properties enable us to use them in everyday life. We then move on to study chemical reactions involving metals and as well as acids and alkalis. These topics continue to build on the Chemistry knowledge your daughter has acquired since Year 7 and help to explain the phenomena encountered so far.

Later in Year 10 we study quantitative Chemistry, energy changes and the rate and extent of chemical change.

Year 11 concentrates on analysing and identifying substances experimentally as well as the impact humans have had on our natural resources and how we can live more sustainably. Topics will also include organic Chemistry and the Chemistry of

the atmosphere.

STUDENT COMMENTS

“Chemistry is an entertaining and practical subject involving a diverse range of skills.”

“GCSE Chemistry is a fantastic science. It makes you think, but once you understand, it’s extremely rewarding.”

“GCSE Chemistry is fun, especially when we do practicals.”

“It’s relevant to everyday life and it’s fun.”

“It fits with a lot of other subjects.”

“Satisfaction of one’s curiosity is one of the greatest sources of happiness in life.”

Linus Pauling,
Nobel Laureate in Chemistry 1954



DID YOU KNOW?

In 2017, 75% of Chemistry GCSE students at NGHS achieved grade A or A* - the national average was 42%.

INTRODUCTION

The Computer Science qualification is, above all else, relevant to the modern and changing world of computer science. Computer Science is a practical subject where girls can apply the knowledge and skills learned in the classroom to real-world problems. It is an intensely creative subject that involves invention and excitement. Our Computer Science GCSE will value computational thinking, helping girls to develop the skills to solve problems and design systems that do so. These skills will be the best preparation for those who want to go on to study Computer Science at AS or A Level and beyond. The qualification also provides a good grounding for other subject areas that require computational thinking and analytical skills.



WHAT WILL YOU STUDY?

The specification is split into three components:

1. Computer Systems

Focuses on Computer Systems and is similar in style to the old A451 unit. It is an examined unit and makes up 40% of the assessment total.

2. Computational Thinking, Algorithms and Programming

This is a new written exam, focused on computational thinking and algorithms. Students will be tested on the elements of computational thinking and logic. They are principally assessed as to their ability to write, correct and improve algorithms.

3. Programming Project

This component is the non-exam assessment where candidates will be challenged by a range of exciting and engaging tasks to apply the knowledge and skills they have learned.

DID YOU KNOW?

We have a dedicated VLE to support and develop learning

All Senior girls have iPads to support teaching and learning

INTRODUCTION

The GCSE course will help you to understand and appreciate the design and manufacture of existing products, making you a more discriminating purchaser. It will help you to be creative in your approach to work, develop sketching ability and use of digital technologies in designing and creating products. You will learn about iterative design practices and strategies used by the creative, engineering and manufacturing industries. You will learn about important issues that effect design in the wider world such as sustainability, global issues and user-centred design. You will learn about a range of materials and components that can be used to create products including smart materials.

WHY STUDY DESIGN AND TECHNOLOGY?

Have you ever wondered what designers actually do? Have you ever wondered how things move or work? Have you ever wondered why somethings go together and others clash? Have you ever wondered how you can design products to be good for the environment? Have you ever wondered how a product continues to stay popular in the market place?

WHAT'S INCLUDED?

During the two year course you will study a wide range of materials including papers and boards, timber, metals, polymers and textile fibres and fabrics. You will also learn about wider design principles and the affect of design on users and the world we live in. You will then develop a deeper knowledge and understanding of specific materials and related techniques and processes, in order to construct working prototypes and achieve functioning design solutions. You will complete an iterative design challenge where you will 'explore' real needs and contexts, 'create' solutions and 'evaluate' how well the needs have been met and the problem solved. The content requires you to apply mathematical and scientific knowledge, understanding and skills. This content reflects the importance of Design & Technology as a pivotal STEM subject.



HOW WILL YOU BE ASSESSED?

The Iterative Design Challenge is a single coursework task that is worth 50% of the qualification. The other 50% of the qualification covers the principles of design and technology in an examination. This is a single examination component with questions covering both 'core' and 'in-depth' content. This examination is 2 hours.

WHAT ARE THE BENEFITS?

- You will gain skills useful in a wide range of jobs, in further study of design or engineering and in your personal life develop decision making skills, including the planning and organisation of time and resources when managing a project
- You will become an independent and critical thinker who can adapt your technical knowledge and understanding to different design situations
- You will learn to be ambitious and open to explore and take design risks in order to stretch the development of design proposals
- You will develop an awareness of implications of the costs, commercial viability and marketing of products.

DID YOU KNOW?

In 2017 NGHS students achieved 100% A* - A at GCSE

WHERE CAN THE QUALIFICATION TAKE ME?

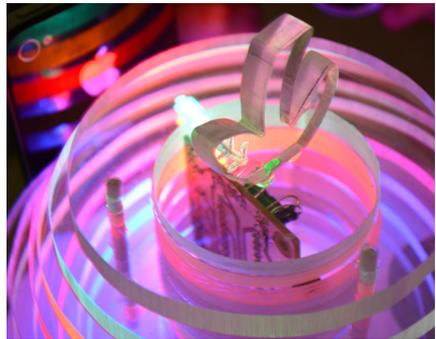
The study of design and technology can lead to future careers in product design, engineering, architecture, fashion and graphic design; it will develop your design and thinking skills that open up a world of possibility, providing the tools to create the future.

STUDENT QUOTES

"Design and Technology gives you the satisfaction of thinking like a designer and seeing a project through from an idea to the making of the product."

"You get the chance to work and think like a real designer."

"It's more hands-on than your other subjects."



"A design education frequently leads to careers outside the creative industries, as the skills of creativity and innovation which design courses help to develop are highly transferable."

The Design Council 2016

INTRODUCTION

To study this subject at GCSE you need not only to be good at and committed to drama but also willing to undertake a considerable body of background research and theoretical study.



SPECIFICATION AT A GLANCE

Component 1: Understanding drama

What's assessed

- Knowledge and understanding of drama and theatre
- Study of one set play from a choice of six
- Analysis and evaluation of the work of live theatre makers

How it's assessed

- Written exam: 1 hour and 45 minutes
- Open book
- 80 marks
- 40% of GCSE

Questions

- Section A: multiple choice (4 marks)
- Section B: four questions on a given extract from the set play chosen (46 marks)
- Section C: one two part question (from a choice) on the work of theatre makers in a single live theatre production (30 marks)

Component 2: Devising drama (practical)

What's assessed

- Process of creating devised drama
- Performance of devised drama (students may contribute as performer or designer)
- Analysis and evaluation of own work

How it's assessed

- Devising log (60 marks)
- Devised performance (20 marks)
- 80 marks in total
- 40% of GCSE

This component is marked by teachers and moderated by AQA.

Component 3: Texts in practice (practical)

What's assessed

- Performance of two extracts from one play (students may contribute as performer or designer)
- Free choice of play but it must contrast with the set play chosen for Component 1

How it's assessed

- Performance of Extract 1 (25 marks) and Extract 2 (25 marks)
- 50 marks in total
- 20% of GCSE

This component is marked by AQA.

DID YOU KNOW?

In 2017 NGHS students achieved 100% A* - B at GCSE.

STUDENT COMMENTS

“It’s more than just Drama.”

“It’s the lesson you look forward to.”

“You can be your true self.”

“The class is more like a family.”

“Without discipline there can be no theatre art”

Constantin Stanislavski



ENGLISH LANGUAGE AND LITERATURE

AQA



ENGLISH LANGUAGE

This course aims to develop your ability to read a wide range of non-fiction and fiction texts over time and analyse them effectively. You will also have the opportunity to write creatively.

In English Language assessment is by examination at the end of a two-year course. There are two equally-balanced papers, relating reading sources to the topic and theme of writing tasks; the reading sources are supportive in that they act as the stimulus for writing tasks, providing students with a clear route through each paper. Paper 1, Explorations in Creative Reading and Writing, looks at how writers use narrative and descriptive techniques to engage the interest of readers. Paper 2, Writers' Viewpoints and Perspectives, looks at how different writers present a similar topic over time.

The approach to spoken language (previously speaking and listening) is not part of the GCSE grade but is a separate endorsement that will require skills in presenting ideas.

ENGLISH LITERATURE

This course aims to enable you to read and analyse a variety of texts of different form and genre, from Shakespeare to the modern novel and poetry across different times.

Assessed at the end of a two-year course, in English Literature there are two examinations. Worth 40%, Paper 1, Shakespeare and the 19th century novel, will include the whole-text study of *Romeo and Juliet* and a 19th century novel. Worth 60%, Paper 2, Modern texts and poetry, includes the detailed study of a post-1914 text of prose fiction or drama. It will also include studied poems from an anthology and include unseen poetry. Both examinations encourage candidates to demonstrate their reading comprehension and critical insight, evaluating and comparing writers' choices and different responses to texts.

“Great literature is simply language charged with meaning to the utmost possible degree.”

Ezra Pound

FOOD PREPARATION AND NUTRITION OCR

Food Preparation and Nutrition will encourage students to:

- Demonstrate effective and safe cooking skills by planning, preparing and cooking using a variety of food commodities, cooking techniques and equipment.
- Develop knowledge and understanding of the functional properties and chemical processes as well as the nutritional content of food and drinks.
- Understand the relationship between diet, nutrition and health, including the physiological and psychological effects of poor diet and health.
- Understand the economic, environmental, ethical and socio-cultural influences on food availability, production processes and diet and health choices.
- Demonstrate knowledge and understanding of functional and nutritional properties, sensory qualities and microbiological food safety considerations when preparing, processing, storing, cooking and serving food.
- Understand and explore a range of ingredients and processes from different culinary traditions (traditional British and international), to inspire new ideas or modify existing recipes.

HOW WILL YOU BE ASSESSED?

Food Preparation and Nutrition is a linear qualification with 50% external assessment by examination and 50% through non-examined assessment (NEA) assessed by the centre and externally moderated by OCR. There are two NEA tasks to complete, a Food Investigation task worth 15% of the course and a Food Preparation Task worth 35% of the course, both of which are completed in Year 11.

STUDENT QUOTES

“I enjoy doing a practical and creative subject to balance my studies. It also shows I have a wide range of skills.”

“I like the security of 50% coursework. You have to keep working at it but you feel in control.”

‘Good food is a global thing and I find that there is always something new and amazing to learn - I love it!’

Jamie Oliver



INTRODUCTION

- How do natural hazards such as earthquakes and hurricanes affect people?
- Why is the risk of flooding increasing?
- How can we manage fragile environments?
- What are the issues and opportunities of a globalising world?
- How do the lives of the rich and poor vary in urban areas?
- Is there enough food, water and energy for everybody?

Geography is a hugely broad and diverse subject which attempts to make sense of our changing world. It intertwines the natural environment and the lives of people across the globe at different stages of development, and tries to manage the impacts the physical and human spheres have on each other. Geographers are encouraged to develop a sense of place and an appreciation for the environment.

Geographers will learn in a variety of ways and will use a range of different resources to inform their thinking. They will keep a close eye on current world events and regularly discuss news worthy stories.

At GCSE students will learn about natural hazards and how they threaten human lives. They will also study the reasons for the development gap and strategies for reducing it. Different biomes such as tropical rainforests and hot deserts are also investigated, along with fluvial and coastal landscapes and their distinctive landforms. Students will also learn about the opportunities and challenges presented by urban spaces in the UK. The final topic will cover the global inequalities in the supply and consumption of resources.

Geography teaches a wide range of skills and students will become proficient in map reading, analysing graphs, identifying opposing view-points and decision making. Fieldwork is a compulsory element of the course and provides the opportunity for data collection which is



then analysed and evaluated. There will be two days of fieldwork in the summer term, visiting both urban and coastal landscapes which will give students an opportunity to learn outside the classroom and apply theory to practice.

Geography is an excellent bridging subject between the sciences and the arts, and the transferable skills are recognised by both employers and higher education establishments. Geography is not just interesting and enjoyable, but it encourages ways of seeing and thinking that make geographers eminently employable. Previous geographers have gone on to pursue a variety of courses and careers, including but not limited to; film and media, banking, medicine, architecture, environmental sciences, law and education.

THE UNITS COVERED IN GCSE GEOGRAPHY ARE:

Living with the Physical Environment

- The Challenge of Natural Hazards
- The Living World
- Physical Landscapes in the UK

Challenges with the Human Environment

- Urban issues and Challenges
- The Changing Economic World
- The Challenge of Resource Management

Geographical Applications

- Issue Evaluation
- Fieldwork
- Geographical Skills

GCSE GEOGRAPHY IS ASSESSED USING THREE EXAMINATIONS:

Paper 1 - Living with the Physical Environment - 1 hour 30 minutes - 35%

Paper 2 - Challenges with the Human Environment - 1 hour 30 minutes - 35%

Paper 3 - Geographical Applications - 1 hour 30 minutes - 30%

DID YOU KNOW?

Geography consistently achieves outstanding results, with 100% of girls obtaining an A*-A grade in 2016.

“Education is the most powerful weapon which you can use to change the world.”

Nelson Mandela

INTRODUCTION

Dear Teacher

I am a survivor of a concentration camp. My eyes saw what no man should witness. Gas chambers built by learned engineers. Children poisoned by educated physicians. Infants killed by trained nurses. Women and babies shot and buried by high school and college graduates.

So I am suspicious of education. My request is: help your students become human. Your efforts must never produce learned monsters, skilled psychopaths, educated Eichmans. Reading, writing and arithmetic are important only if they serve to make our children more human.

This letter is given to new teachers by a principal at an American school to convey the importance of teaching history - we need to learn from the past. However, the following questions are frequently asked in school and at parents' evenings:

- I like History, but what use is it?
- What jobs can you get with a History qualification?
- What is the point of studying History?

Those familiar with the job market and those who have gained qualifications in History will tell you that, in fact, History is a well-respected subject



amongst employers who value the skills it develops. In addition to gaining a broader world view, History students are able to develop their skills of analysis, a methodical approach to problem solving and the ability to present a reasoned argument. GCSE History teaches you to communicate clearly and to describe, explain, analyse and interpret information drawn from a wide range of sources. As these are added to a host of other skills and an increased understanding of other people and cultures it becomes easy to understand how a wide range of opportunities can be opened up through the study of history. Indeed, this is borne out by the most popular career choices of History graduates, listed here in order of popularity: administration and management, teaching, buying, selling, advertising, banking and law.

COURSE OVERVIEW

Part 1 : Understanding the modern world

- A. Germany 1890-1945: Democracy and dictatorship
- B. World conflict and tension 1918-1939

Part 2: Shaping the Nation

- A. Britain: Health and the people
- B. Elizabethan England c1568-1603

The course is assessed through two examination papers at the end of Year 11.

STUDENT COMMENTS

“History is an important subject in today’s world, and the lessons are always enjoyable.”

“History is amazing because, not only is it really interesting, it means you understand more about events going on today.”

“To be ignorant of the past is to remain forever a child.”

Cicero



THE GAP IN THE BRIDGE.

DID YOU KNOW?

In 2017, 100% of GCSE History students at NGHS achieved grade A* to C. 86% were A* or A.

INTRODUCTION

Latin is all around you. 50% of our own language is derived from Latin.

Do you ever eat a Magnum or use Nivea? Do you ever say etcetera, vice versa, e.g. or A.D.? Do you listen to Dido? Have you heard of Status Quo? Do you know anyone called Mark, Victoria, Miles or Amanda? Is your star sign Aquarius, Pisces or Virgo?

All of these words and many more are based on Latin. Latin will also provide you with a key to understanding many European languages including English, French, Spanish, Portuguese and Italian.

By studying Latin you should develop the following skills:

- Clear, logical thinking
- The communication of ideas
- Problem solving
- Independence of thought and study
- The precise use of English
- The appreciation and interpretation of literature
- Analytical skills in both language and literature
- An insight into a different culture

COURSE OVERVIEW

You will continue to use the Cambridge Latin Course, following the adventures of Quintus in Britain and moving on to the intrigues of the imperial court in Rome. Most of the grammar required for GCSE will be covered in Year 10. In Year 11 you will read the prose and verse authors



set for examination. By the end of the course you will be reading original Latin texts with confidence and enjoyment. As part of the course you will have the chance to visit the Roman baths at Bath and the Roman Fort at Chester, experience some classical drama, attend lectures given by university professors and take part in classical trips abroad.

EXAMINATION

There is one language paper which includes passages for translation and comprehension, with a prescribed vocabulary list of 450 words. There are also two literature papers, one poetry and one prose, which may include stories about the Druids and Boudica, and Horace's poem about the Town and Country Mouse.

HOW IS LATIN VIEWED BY UNIVERSITIES AND EMPLOYERS?

Students of Latin are highly regarded by many university departments and some prospective employers who appreciate its rigour and the precision required in the study of the language.

STUDENT COMMENTS

“Latin opens up a whole new world.”

“It is challenging and fun.”

“Latin helps me to think logically.”

“I like looking at the derivation of words.”

“Translating Latin is satisfying - it is like a puzzle.”

“Latin enhances my English vocabulary.”

“Latin helps you with your other subjects.”



DID YOU KNOW?

In 2016 and 2017 NGHS students achieved 100% A* - B at GCSE Latin

WHY STUDY MATHEMATICS?

- It is interesting in itself.
- It affects every aspect of modern life. Without work done using mathematics you would not be able to travel by car or aeroplane, listen to an MP3 player or benefit from the information generated by a body scanner, for example.
- It develops skills for analysing and solving problems.
- It encourages the development of a logical and enquiring mind.
- It has been studied for millennia but it remains a fascinating, developing subject and is still studied across the world.

COURSE OVERVIEW

Here at NGHS, we do Pearson Edexcel's GCSE. There are two tiers of entry for Mathematics and you will be entered for the higher tier. There are three examination papers, which are taken at the end of Year 11.

As part of the reforms, there have been new topics introduced to the higher tier including functions and inverse functions, deducing turning points and simple geometric progressions.

DID YOU KNOW?

In 2017 25% of girls achieved the new Grade 9.

COURSE AIMS

This course aims to encourage you to:

- Develop a positive attitude to Mathematics
- Consolidate basic skills and meet appropriately challenging work
- Apply mathematical knowledge and understanding to solve problems
- Think and communicate mathematically - precisely, logically and creatively
- Appreciate the place and use of Mathematics in society
- Apply mathematical concepts to situations arising in your own lives
- Understand the interdependence of different branches of Mathematics
- Acquire the skills needed to use technology such as calculators and computers effectively
- Work cooperatively, independently and practically
- Acquire a firm foundation for further study

STUDENT COMMENTS

"Maths is a really fun subject."

"I found Maths really helpful with the sciences. It is also a very satisfying subject that really tests your logic."

"Maths is relevant in everyday life no matter what you do. I really enjoyed it at GCSE and decided to do it for A level."

"Pure mathematics is, in its way, the poetry of logical ideas."

MODERN FOREIGN LANGUAGES AQA

The courses:

- AQA French
- AQA German
- AQA Spanish

INTRODUCTION

Languages are becoming more and more important in the world of work, in all sorts of careers. Study to at least GCSE level gives you a head start in travel, work and educational opportunities.

As part of the core curriculum, you will continue with one of your modern foreign languages. The department encourages you to consider further languages. To find out more about languages at work, visit the website at www.languageswork.org.uk.

WHAT IS INVOLVED IN THE STUDY OF A LANGUAGE AT GCSE?

- The four skills of listening, speaking, reading and writing are equally important.
- We aim to develop your ability to communicate and express your ideas, listen, read and translate carefully and accurately.
- You will sit four exams in listening, speaking, reading and writing. The speaking exam will be conducted in school by your language teacher.
- Year 11 language lessons are complemented with timetabled



speaking sessions with native speaker assistants. We are fortunate to have our own assistants who have wide experience of working with our students.

- There are opportunities for travel to make practical use of your chosen languages.

WHY STUDY LANGUAGES?

- Many universities actively encourage their students to continue language study alongside their degree course.
- Opportunities to communicate internationally have never been greater. It is likely that, in future years, monolingualism will be considered a handicap to personal

and career development.

- Making friends, learning about and involving yourself in other cultures is much easier.
- Learning someone else's language, you also learn about your own.
- Language study is so much easier when you are young. Do it now; build on the opportunities you have been given.

STUDENT COMMENTS

“French is great fun, up to date and interesting. I'm really pleased that I chose this as one of my options.”

“German is a great language to learn! It's really rewarding when you finally grasp another rule!”

“We are really lucky to have the chance to study so many languages. I am glad that I chose Spanish and French.”



“If you talk to a man in a language he understands, that goes to his head. If you talk to him in his language, that goes to his heart.”

Nelson Mandela

DID YOU KNOW?

In 2017 language students achieved:

57% A*-A and 83% A*-B in French

80% A*-A and 90% A*-B in German

88% A*-A and 91% A*-B in Spanish



MUSIC

PEARSON EDEXCEL

INTRODUCTION

The Music course at GCSE is full of variety and will allow you to explore opportunities in both composition and performance. You will also learn about music in a wider sense and further develop your listening skills. The whole course is designed to give you the best possible musical experience.

COURSE OVERVIEW

Coursework accounts for the majority of your final mark and this comprises composing and performing. This linear course means that you have the full two years to perfect your techniques, ensuring that you reach your full potential in both areas. During the course, you will work on two compositions (one to a brief set by the board, one free) and two performances (one solo and one ensemble, of at least four minutes combined duration). All coursework is assessed internally and the performances are recorded at school during year two. They must be at least Grade IV standard.

There is also a listening paper, which accounts for the remainder of the final mark, and which you will sit in the summer term of Year 11. Throughout the course you will learn about a wide variety of different styles of music - from baroque orchestral music to music for stage and screen. Lessons are informative and interesting and will allow you to put what you have learned into practice,

through informal compositions and performances.

Our aim in the Music department is to make your studies enjoyable and everything achievable.

STUDENT COMMENTS

“Music GCSE gives you the opportunity to be creative.”

“There’s lots of variety in the course.”

“You learn about different musical styles and cultures through listening, performing and composing.”

“There is lots of help in all areas which makes the course enjoyable and everything achievable.”

“You learn to appreciate music properly.”

DID YOU KNOW?

In 2017 our Music students achieved 100% A* - B at GCSE.

***“If music be the food of love, play on.
Give me excess of it...”***

Twelfth Night, Shakespeare



INTRODUCTION

This GCSE in Physical Education will equip students with the knowledge, understanding, skills and values they need to be able to develop and maintain their performance in physical activities. Students will also gain understanding of how physical activities benefit health, fitness and well-being.

COURSE OVERVIEW

(Theory) 60%

Fitness and Body Systems; including applied anatomy and physiology, movement analysis, physical training and use of data.

Health and Performance; including health, fitness and wellbeing, sport psychology, socio-cultural influences and use of data.

(Practical) 40%

Practical Performance; skills during individual and team activities, general performance skills. The assessment consists of students completing three physical activities from a set list:

One must be a team activity.

One must be an individual activity.

The final activity can be a free choice.

Students will be assessed against set assessment criteria.

Personal Exercise Programme; produce a written personal programme which must be completed, analysed and evaluated.

QUALIFICATION AIMS AND OBJECTIVES

- develop theoretical knowledge and understanding of the factors that underpin physical activity and sport and use this knowledge and understanding to improve performance
- understand how the physiological and psychological state affects performance in physical activity and sport
- perform effectively in different physical activities by developing skills and techniques and selecting and using tactics, strategies and/or compositional ideas
- develop their ability to analyse and evaluate to improve performance in physical activity and sport
- understand the contribution that physical activity and sport make to health, fitness and well-being
- understand the key socio-cultural influences that can affect people's involvement in physical activity and sport



INTRODUCTION

The GCSE Physics course is designed to be a hands-on introduction to the rules that apply to everything in the universe from the sub-atomic to the universe-wide. The course is centred on learning through everyday examples, so you will see how the science applies to aspects of everyday life. If you have ever wondered how a piece of technology works or asked yourself a more fundamental question about the Earth and stars, then the Physics course can offer answers to these questions and a deeper understanding of the rules found in nature.

COURSE OVERVIEW

Forces and motion

How do forces affect motion?
How do we track moving objects and what does that tell us about them?

Electricity

How is electricity generated?
How can we measure and control electricity?

Waves

How do we use waves in everyday communication?
What can we learn about waves in order to use them most effectively?

Energy resources and energy transfer

How can we make efficient use of our

natural energy resources?
How does the study of energy transfer lead to lower energy bills?

Solids, liquids and gases

How can the study of kinetic theory explain how clothes dry?
How can we explain evaporation and condensation?

Magnetism and electromagnetism

How does a speaker use magnetism to create sound?
How do motors work?

Radioactivity and particles

Is radioactivity always dangerous?
How can we detect radioactivity and how can we identify the different types?

“If you want to learn about nature, to appreciate nature, it is necessary to understand the language that she speaks in.”

R Feynman (1965)

DID YOU KNOW?

In GCSE Physics we consistently have 100% of girls achieving a C grade and above, 93% at B or above and over 70% achieving an A or A* grade.



INTRODUCTION

“I know you won’t believe me, but the highest form of human excellence is to question oneself and others.”

Socrates

- Do you enjoy being challenged with questions about belief, values, meaning, purpose and truth?
- Do you like answering back?'

If you want to develop your own attitudes towards religious and ethical issues, then Religious Studies is for you.

When does life begin?



COURSE OVERVIEW

Our GCSE covers religions and contemporary ethical and philosophical themes, ensuring you have a diverse choice of intriguing subjects to explore. Christianity, Buddhism, Philosophy of Religion and Ethics are all studied and you will learn how these areas form the basis of our culture, and develop valuable skills such as analytical and critical reflection that will help prepare you for further study.

The beliefs, teachings and practices of Buddhism and Christianity will be covered alongside:

The study of Ethics - How to apply topical issues to ethical decision making. This course includes environmental issues, prejudice, the right to life, war and peace, personal and social responsibility, and medical ethics.

The Philosophy of Religion content encourages you to reflect upon ultimate questions about the meaning and purpose of life, and to develop your own reasoned response to those questions. This allows you to use examples from Buddhism and Christianity. Topics include the existence of God, revelation, the problems of evil and suffering, immortality, miracles, science and religion.

The course is examined at the end of Year 11. In the examination you will be expected to illustrate your answers by reference to real life examples in relation to the issues raised and to make appropriate references to the religious stories and philosophical teachings which you have studied.

“Science without religion is lame, religion without science is blind.”

Albert Einstein



DID YOU KNOW?

In 2016 our RS students achieved 95% A* - B at GCSE with 89% A* - A.

WHY STUDY RS?

“...because life isn't fair and I want to know why”

Religious Studies is relevant to everyone - religious or not! The key skills developed through the Religious Studies GCSE have been used to form the basis of many successful careers in Medicine, Civil Service, Teaching, Law, Journalism and many more.

STUDENT COMMENTS

“I have studied topics that really matter in today's world - matters of life and death.”

“Religious Studies has improved my communication skills and taught me to argue logically.”

“...In all of life there is nothing more important to determine than what is right”

CS Lewis

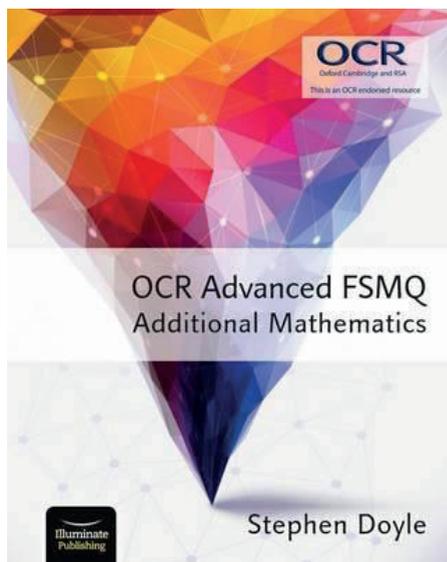
ADDITIONAL MATHEMATICS FSMQ

OCR Additional Mathematics FSMQ is a Level 3 qualification that sits between GCSE and A Level, and provides excellent preparation for A Level Mathematics and Further Mathematics. This is a course targeted at students who will be working towards a Level 8 or 9 at GCSE (previously A*). In our experience, girls entering Year 12 with this qualification have found the transition to A Level much smoother, and have excelled in A Level Mathematics or Further Mathematics.

The course extends many of the ideas already met at GCSE. Four areas of Pure Mathematics are covered in Additional Mathematics FSMQ: Algebra, Co-ordinate Geometry, Trigonometry and Calculus. Each of these is used to support a topic from a recognised branch of Applied Mathematics.

The aims of the course are:

- To introduce students to the power and elegance of advanced mathematics.
- To allow students to experience the directions in which the subject is developed post-GCSE.
- To develop confidence in using mathematical skills in other areas of study.



There is a single two hour examination at the end of Year 11.

As this is taken in addition to the standard nine GCSE's, the course will be taught one hour per week, in an after school session.

GCSE CLASSICAL GREEK

Classical Greek like Latin is an inflected language so once you have mastered the way the Latin language works Greek is very similar with the added challenge of a new alphabet. Like Latin the Classical Greek GCSE course involves reading and studying some literature so as well as learning the language we will read some Homer or a Greek play or some Greek history or philosophy. Greek culture lies behind many aspects of 21st century life (vocabulary, literature, democracy, ethics, Pythagoras, aeroplane engines...) so everyone should find something to appeal to them.

As this will be in addition to the standard nine GCSE's, the course will be taught in a weekly after school session.



PERFORMING ARTS TECHNICAL AWARD

The Technical Award in Performing Arts offering learners a multi-discipline qualification with the opportunity to learn production skills and discover more about careers in the performing arts sector.

Technical Awards are practical, vocational qualifications available to 14-16 year olds to take alongside GCSEs. If approved by the Department for Education, a single award will be equivalent to a GCSE qualification.

For the production elements of this course, we envisage making use of the fantastic new SPACE, our technical facilities and staff. It is aimed at those with an interest in the technical aspect of theatre and performing arts, and may include work on lighting, sound, wardrobe and other elements.

As this will be in addition to the standard nine GCSE's, the course will be taught in a weekly after school session.



MOOCs

‘massive open online courses’

MOOCs are designed as a new way to enable to people to learn independently, and have been created by 40 partners including leading UK and international universities, the British Council, British Library and British Museum.

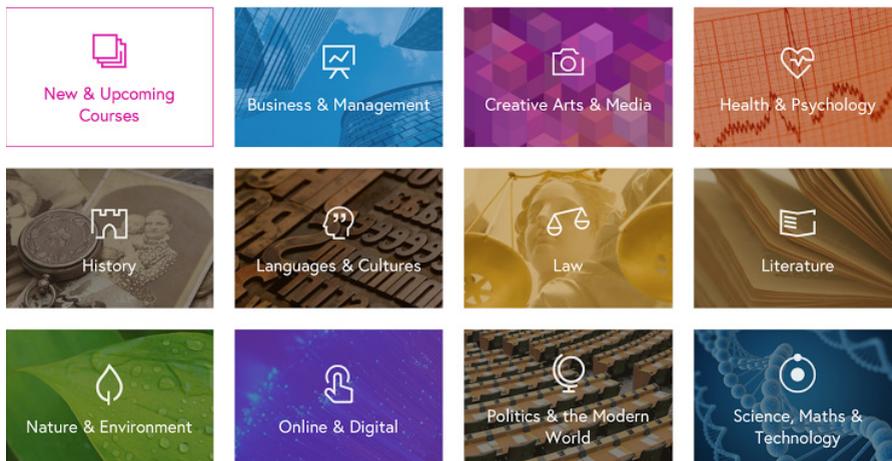


There are many benefits for students which have been identified by schools so far:

- Getting a view on subjects they may wish to study in future
- Getting access to new ideas, topics and resources outside of their current scope and comfort zone
- Feeling more comfortable for the transition to University, developing critical thinking and research skills.
- Improving learning techniques and styles
- Bridging gaps that currently exist between GCSE and A Level, Years 12 and 13, A Level and University
- Improving UCAS application forms and interviews (Universities are well aware of these courses; many have invested substantially in creating them)

Completing a MOOC will be in addition to the standard 9 GCSE's.

The courses are designed to encourage independent learning and developing an interest in area that may complement or contrast their studies. They can be a short course, or be part of a longer program that runs over the course of a few months.



Some examples of courses currently available are:

- Getting a grip on mathematical symbolism (for aspiring engineers and science students); Loughborough University
- Inside cancer: how genes influence cancer development; University of Bath
- Exploring cancer medicines; University of Leeds
- Developing your research project; University of Southampton
- Forensic science and criminal justice; University of Leicester
- Genomics in Healthcare
- Good brain, bad brain: University of Birmingham
- Italian for beginners; The Open University
- Building a future with robots; University of Sheffield
- Life on the roman frontier; Newcastle University
- Preparing for university (critical thinking, developing an argument, analysing data); UEA

USEFUL LINKS:

Additional Maths FSMQ - OCR

www.ocr.org.uk/qualifications/free-standing-maths-qualification-fsmq-additional-mathematics-6993/

Classical Greek - OCR

www.ocr.org.uk/qualifications/gcse-classical-greek-j291-j091-from-2012/

Performing Arts Technical Award - AQA

www.aqa.org.uk/news/new-technical-award-performing-arts

MOOCs

www.futurelearn.com/schools

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