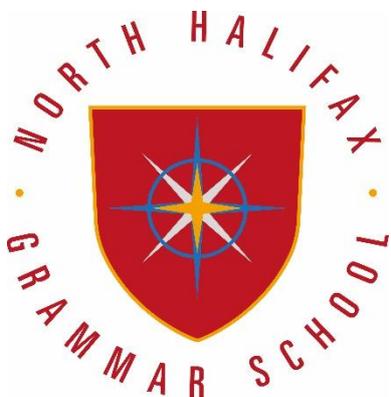


GCSE Options Booklet

Courses Commencing
September 2023



Living to Learn | Learning to Live



“It is our choices, Harry, that show what we truly are, far more than our abilities”
Dumbledore

For the first time in your education you have the opportunity to choose what you wish to study and set your direction for your future. It can be daunting. Up to now your parents/carers and other adults have made these choices in your best interests and while they have listened carefully to your wishes, you have not had the freedom you will now have to act on your hopes and dreams.

It is important that you still listen to those adults who know you and care about you but it is also important that you take that first step into adulthood by making your own choices and taking responsibility for them. That said your choices are limited. There are some subjects that are compulsory and you will need, but beyond these you have some decisions to make so let me offer some advice.

Don't try to overthink your choices. You cannot predict all the possible future choices or opportunities you may have.

Don't try to choose a career. You may have a career in mind and some subjects will be helpful for that, but you are choosing what you wish to study for Year 10 and 11 and what might enable you to take that A Level Post 16.

Don't do what your friends are doing just because they are your friends. This is your opportunity to truly be yourself.

Don't chose because you like the teacher. Your teacher may change before you finish the course.

Do choose a subject that you enjoy. You have to study it for two years and put a lot of effort into it so you should enjoy it.

Do choose subjects that you have an aptitude for, that you achieve in. Your grades will matter so give yourself the best possible chance of achieving.

Do listen to your teachers and family but also be sure to express how you feel and what you wish. This is our time to listen to you.

Do take this seriously but don't worry about the choices you eventually make. Any that might affect your opportunities long term are already compulsory. Far more important than the specific choices you make is the process you undergo in making those choices. The questions that you ask of yourself, your understanding of your passions and interests and your confidence in explaining these to the adults around you.

Kind regards,

Mr Deehan
Principal

Dear Parent / Carer

Please read the advice and guidance I have given to students so you understand our approach to this process and can work with us. You have up to now led and guided your child's education and made excellent choices for them, not least sending them to NHGS. For the first time you are being asked to take a slight step back, to guide more than lead and allow them to make their own choices. Above all else we want them to be happy and that is best achieved by supporting them as they take those independent steps. Only they can make these choices and it will be them that will need to see those choices through.

Do please help them to gather the information they need and to ask the important questions. Ask your own questions too, much will have changed since you had to do this yourself.

Don't worry. They have been well prepared and will make the right choices for them, which is what we all want.

Kind regards,

Mr Deehan
Principal

We expect nearly all of our students to study 10 full GCSEs.

These 10 subjects are made up of our standard 'Core' offer, which comprises 7 subjects:

Combined Science * (worth 2 GCSEs)
English Language
English Literature
Mathematics
Modern Foreign Language (an MFL (in French or Spanish***)
Religious Studies (RS) **

And 3 options subjects chosen from the following:

Art
Business
Computer Science
Design and Technology - Product Design
Design and Technology - Fashion and Textiles
Geography
History
Modern Foreign Language (a second MFL in French or Spanish)
Music
Physical Education (PE)
Psychology
Separate Sciences *



Information about each of these courses is provided later in this booklet.

- In addition to their GCSEs, all students also follow non-examined courses in PE and PSHE.
- Students who have struggled with an MFL in Year 9 may be given the option of studying a GCSE in Media Studies instead of an MFL. These students will be contacted if they are selected for this opportunity.
- Students studying a second Modern Foreign Language in Year 9 will carry this on to GCSE level as one of their option subjects. They will have two further options to choose from the list above. The second MFL option is not available to students who have not studied two languages in Year 9.
- Students will not be allowed to select both Design and Technology options or Design and Technology alongside Art due to the demands of the coursework elements in these subjects. Students must only select either Business or Psychology as an option as class sizes in these subjects are limited.
- In most cases, we require at least 16 students to opt for a course in order to guarantee to run it.
- In some subjects, staffing and facilities will dictate that we have to limit the number of groups / places. This is indicated on the subject page. Where too many students opt for a course, the school will determine the best / fairest way to allocate the places.

* Combined / Separate Sciences. For an explanation please see below and the subject information pages.

** Religious Studies is studied across Years 9 and 10 and examined at the end of Year 10.

The EBACC

The EBACC is a 'composite qualification' achieved by students who get pass grades (4 and above) in English, Mathematics, 2 Sciences, a MFL and either History or Geography. We strongly recommend that all students should aim to achieve the EBACC, although we have not made all elements of it part of our Core Curriculum. We will expect students who do not opt for the subject(s) they need to complete the EBACC to have compelling reasons. For some universities and employers, it has currency as a marker of good all round academic ability. Nationally the Government expects 75% of students to at least attempt the EBACC, although this target is still some way off being realised. As a Grammar school, we should exceed that expectation.

The EBACC helps in applying to the most competitive universities and courses by making students stand out as having an academic background.

Combined / Separate Sciences

This can confuse some people! Whether students stick with Combined Science as part of the core curriculum or opt for more science through Separate Sciences, all students will study Biology, Chemistry and Physics. The cognitive level of the sciences studied is lower in Combined Science and higher in Separate Science GCSEs. Students considering taking sciences at A Level or pursuing careers in medicine, dentistry, veterinary science, engineering, etc. are strongly advised to take Separate Sciences. Students taking A Level sciences after doing Combined Sciences at GCSE will find themselves at a considerable disadvantage. We anticipate around 70% of NHGS students will take Separate Sciences. Students opting for Separate Sciences will choose 2 other option subjects, while students of Combined Science will choose 3 other options.

99 %

3 year average of 5 or more passes at GCSE (4+)

FAQs

Why does our core curriculum contain:

A Modern Foreign Language?

We are a Grammar school and expect our students to take on tough academic challenges. Learning about other languages and cultures is fascinating and shows respect for others. Very few British people learn other languages so it will give you a real advantage in the job market.

Religious Studies?

This is consistently one of our most successful examination courses. In an increasingly divided yet shrinking world, tolerance and respect for others' views is essential. This course embodies many of the school's most important values (see our Vision and Ethos Statements).

Why can't students do both Art and Design & Technology?

The non-examined assessment will swamp you! If you need to discuss this further, talk to us!

Can you make a reasonable adjustment to meet my (child's) SEND?

Quite possibly. Please contact Mrs Alexander, our SENDCo, in the first instance.

Where can I find more information?

Further details can be found on page 29 of this booklet.

Key Contacts

Upper School Leader / Director of Careers and Student Experience
Mr Kennedy d.kennedy@nhgs.co.uk

SENDCo
Mrs Alexander j.alexander@nhgs.co.uk

School Administration
Mrs Greenwood s.greenwood@nhgs.co.uk



Core Subject – Combined Sciences

Exam Board	AQA			
Overview of the subject at GCSE	<p>Combined Science is worth two GCSEs and is a mixture of Biology, Chemistry and Physics, with a combined grade for the course (ie 88 for Combined Science). Separate Sciences of Biology, Chemistry and Physics are worth three GCSEs in total with separate grades for each subject (ie 7 for Biology, 8 for Chemistry, 7 for Physics). Separate Sciences involves studying more content for each of Biology, Chemistry and Physics. The overlap of skills and exam techniques between the sciences means that the third GCSE can be easier than taking a whole additional course with different content, skills and exam techniques.</p> <table border="1" data-bbox="373 654 1465 1178"> <tr> <td data-bbox="373 654 695 1077"> <p>Biology</p> <ol style="list-style-type: none"> 1. Cell biology 2. Organisation 3. Infection and response 4. Bioenergetics 5. Homeostasis and response 6. Inheritance, variation and evolution 7. Ecology </td> <td data-bbox="711 654 1123 1178"> <p>Chemistry</p> <ol style="list-style-type: none"> 8. Atomic structure and the Periodic Table 9. Bonding, structure, and the properties of matter 10. Quantitative chemistry 11. Chemical changes 12. Energy changes 13. The rate and extent of chemical change 14. Organic chemistry 15. Chemical analysis 16. Chemistry of the atmosphere 17. Using resources </td> <td data-bbox="1139 654 1465 1010"> <p>Physics</p> <ol style="list-style-type: none"> 18. Energy 19. Electricity 20. Particle model of matter 21. Atomic structure 22. Forces 23. Waves 24. Magnetism and electromagnetism </td> </tr> </table>	<p>Biology</p> <ol style="list-style-type: none"> 1. Cell biology 2. Organisation 3. Infection and response 4. Bioenergetics 5. Homeostasis and response 6. Inheritance, variation and evolution 7. Ecology 	<p>Chemistry</p> <ol style="list-style-type: none"> 8. Atomic structure and the Periodic Table 9. Bonding, structure, and the properties of matter 10. Quantitative chemistry 11. Chemical changes 12. Energy changes 13. The rate and extent of chemical change 14. Organic chemistry 15. Chemical analysis 16. Chemistry of the atmosphere 17. Using resources 	<p>Physics</p> <ol style="list-style-type: none"> 18. Energy 19. Electricity 20. Particle model of matter 21. Atomic structure 22. Forces 23. Waves 24. Magnetism and electromagnetism
<p>Biology</p> <ol style="list-style-type: none"> 1. Cell biology 2. Organisation 3. Infection and response 4. Bioenergetics 5. Homeostasis and response 6. Inheritance, variation and evolution 7. Ecology 	<p>Chemistry</p> <ol style="list-style-type: none"> 8. Atomic structure and the Periodic Table 9. Bonding, structure, and the properties of matter 10. Quantitative chemistry 11. Chemical changes 12. Energy changes 13. The rate and extent of chemical change 14. Organic chemistry 15. Chemical analysis 16. Chemistry of the atmosphere 17. Using resources 	<p>Physics</p> <ol style="list-style-type: none"> 18. Energy 19. Electricity 20. Particle model of matter 21. Atomic structure 22. Forces 23. Waves 24. Magnetism and electromagnetism 		
Skills required to be successful at GCSE.	<p>The main difference between studying Combined Science and Separate Sciences is that there is less content covered overall in the Combined Science course than when studying Biology, Chemistry and Physics separately. This means that students still receive a strong grounding in applying the scientific method and acquire a good grasp of all the topics covered in the different sciences, but do not tackle some of the hardest concepts of the separate courses.</p>			
Where will the course take you?	<p>Combined Science teaches many skills and a lot of knowledge that is relevant to many careers and also to life in general. We need scientific knowledge to understand the modern world and many of the challenges it presents, from climate change to pandemics!</p> <p>Students considering taking sciences at A Level or pursuing careers in medicine, dentistry, veterinary science, engineering, etc. are strongly advised to take Separate Sciences. Students taking A Level sciences after doing Combined Science at GCSE will find themselves at a disadvantage, but A Level sciences are still available to any student. We anticipate around 70% of NHGS students will take Separate Sciences. Students opting for Separate Sciences will choose 2 other option subjects, while students of Combined Science will choose 3 other options.</p>			

Core Subject – English Language

Exam Board	AQA		
Overview of the subject at GCSE	<p>English Language builds your communication skills and helps you to interact with and interpret the world around you. For English Language, students read a wide range of fiction and non-fiction from the last three centuries looking at a range of texts that reflect on the world we live in. You are trained to become perceptive and critical readers, and to write with impact and flair.</p>		
	<p>Paper 1: Explorations in Creative Reading and Writing</p> <p>Reading critically and responding to a modern fiction text. You are taught:</p> <p>Fact retrieval. Analysing language. Analysing structure. Evaluating writers' choices. Writing narrative and descriptive prose for impact. Writing for purpose in appropriate form and register. Writing clearly and coherently. Different writing structures. Spelling, punctuation and grammar.</p>	<p>Paper 2: Writers' Viewpoints and Perspectives</p> <p>Reading critically and responding to two non-fiction texts from different eras. You are taught:</p> <p>Fact retrieval. Synthesis and inference. Analysing language Comparing writers' perspectives and methods. Writing to argue persuasively in essay, speech, leaflet, article and letter format. Writing clearly and coherently. Different writing structures. Spelling, punctuation and grammar.</p>	<p>Non-exam assessment: Spoken Language Endorsement</p> <p>As part of the GCSE, you will give a presentation on a topic of your choice, which will be awarded a mark that appears on your GCSE certificate. You are taught:</p> <p>Presenting clearly and coherently, and with impact. Using language creatively. Use of notes in oral presentations. Listening and responding with questions. Responding to questions and elaborating on ideas.</p>
Skills required to be successful at GCSE- successful in your subject at GCSE.	<p>You will build and develop the following skills:</p> <ul style="list-style-type: none"> • Selecting and synthesising information; • Separating fact from fiction and being alert to bias; • Analysis, interpretation and evaluation of ideas and the methods used to present them; • Writing in a range of styles and genres; • Organising texts and information effectively; • Technical accuracy in written expression; • Communication of ideas – both verbal and written – in articulate and precise Language; • Delivering an effective presentation. 		
Where will the course take you?	<p>The skills you develop here will support you in your A Level studies in different subjects and across all degree courses at University. Recently English A Level students have gone on to study; English Language and Literature, Speech Therapy, Criminology, Media and Journalism, Medicine, Law, Business, Politics, History, Art, Philosophy, Economics, Geography and Modern Foreign Languages amongst others.</p> <p>English Language skills are useful in every career: Business, Law, Education, Administration, Politics and Government, Medicine, Media, Sales and Marketing, and Journalism to name but a few.</p>		

Core Subject – English Literature

Exam Board	AQA			
Overview of the subject at GCSE	<p>Shelley once said that poetry is the “best words in the best order”, but study of English Literature takes you far beyond merely the study of words. It makes you think about what it is to be human; to understand why people act the way they do; and to explore the impact of history and other contexts on humanity. In addition, you’ll improve your well-being; regular reading is good for your health.</p> <table border="1" data-bbox="344 524 1474 999"> <tr> <td data-bbox="344 524 906 999"> <p>Paper 1: Shakespeare and 19th Century Fiction</p> <p><i>Macbeth</i> by William Shakespeare <i>A Christmas Carol</i> by Charles Dickens</p> <p>Critical Reading Skills: Analysing form, language and structure. Critical Writing Skills: constructing argument, exploring interpretations, using quotation, applying knowledge of contexts.</p> </td> <td data-bbox="906 524 1474 999"> <p>Paper 2 : Modern Texts</p> <p><i>Lord of the Flies</i> by William Golding <i>Love and Relationships or Power and Conflict Poetry</i> <i>Unseen Poetry</i></p> <p>Critical Reading Skills: Analysing form, language and structure. Critical Writing Skills: constructing argument, exploring interpretations, using quotation, applying knowledge of contexts.</p> </td> </tr> </table>		<p>Paper 1: Shakespeare and 19th Century Fiction</p> <p><i>Macbeth</i> by William Shakespeare <i>A Christmas Carol</i> by Charles Dickens</p> <p>Critical Reading Skills: Analysing form, language and structure. Critical Writing Skills: constructing argument, exploring interpretations, using quotation, applying knowledge of contexts.</p>	<p>Paper 2 : Modern Texts</p> <p><i>Lord of the Flies</i> by William Golding <i>Love and Relationships or Power and Conflict Poetry</i> <i>Unseen Poetry</i></p> <p>Critical Reading Skills: Analysing form, language and structure. Critical Writing Skills: constructing argument, exploring interpretations, using quotation, applying knowledge of contexts.</p>
<p>Paper 1: Shakespeare and 19th Century Fiction</p> <p><i>Macbeth</i> by William Shakespeare <i>A Christmas Carol</i> by Charles Dickens</p> <p>Critical Reading Skills: Analysing form, language and structure. Critical Writing Skills: constructing argument, exploring interpretations, using quotation, applying knowledge of contexts.</p>	<p>Paper 2 : Modern Texts</p> <p><i>Lord of the Flies</i> by William Golding <i>Love and Relationships or Power and Conflict Poetry</i> <i>Unseen Poetry</i></p> <p>Critical Reading Skills: Analysing form, language and structure. Critical Writing Skills: constructing argument, exploring interpretations, using quotation, applying knowledge of contexts.</p>			
Skills required to be successful at GCSE	<p>The ability to argue is vital – you have to develop your own opinions and arguments about the texts.</p> <p>Reading skills of selection, synthesis, analysis and interpretation are key. The willingness to develop your awareness of history, philosophy and society are also vital.</p> <p>You will develop your analytical writing skills and learn to be really forensic in your approaches to texts.</p>			
Where will the course take you?	<p>The confidence you build in analysis and in constructing and articulating arguments is useful in multiple degree courses and careers – and is one of the reasons English Literature graduates are so attractive to the legal, political and business professions.</p> <p>Recently English A Level students have gone on to study; English Language and Literature, Ancient History, Criminology, Media and Journalism, Tourism, Law, Business, Politics, History, Art, Philosophy, Economics, Geography and Modern Foreign Languages amongst others.</p> <p>English Literature skills are useful in a wide range of careers: Law, Education, Business, Administration, Art, Politics and Government, Media, Sales and Marketing, and Criticism to name but a few.</p>			

Core Subject – Mathematics

Exam Board	Edexcel (Pearson) 1MA1 Mathematics Higher tier. Higher attaining students may also be taught the additional content for the AQA Level 2 Certificate Further Mathematics or the Edexcel Level 3 Algebra Qualification.
Overview of the subject at GCSE	<p>The aims and objectives of the GCSE in Mathematics are to enable students to:</p> <ul style="list-style-type: none"> • Develop fluent knowledge, skills and understanding of mathematical methods and concepts; • Acquire, select and apply mathematical techniques to solve problems; • Reason mathematically, make deductions and inferences, and draw conclusions; • Comprehend, interpret and communicate mathematical information in a variety of forms appropriate to the information and context. <p>The qualification covers the following content headings:</p> <ul style="list-style-type: none"> • Number • Algebra • Ratio, proportion and rates of change • Geometry and measures • Probability • Statistics <p>The qualification consists of three equally-weighted written examination papers.</p> <p>Paper 1 is a non-calculator assessment and a calculator is allowed for Paper 2 and Paper 3. Each paper has a range of question types; some questions will be set in both mathematical and non-mathematical contexts.</p>
Skills required to be successful at GCSE	<p>The skills developed through the study of Mathematics are in high demand from employers. In addition to developing the ability to solve problems and think logically, the study of Mathematics provides opportunities to develop team-working skills, resilience, effective communication of complex ideas and the ability to use your own initiative. You will learn how to collect and analyse data and how to find efficient solutions to real life problems. These skills and techniques are also important in business, logistics and computer science.</p>
Where will the course take you?	<p>Mathematics is a highly valued qualification by employers and universities. The vast range of degree courses and careers that require solid mathematical skills ensures that taking Mathematics to AS level or beyond will open doors to a world of opportunities.</p> <p>Mathematics underpins most of Science, Technology and Engineering and is also important in areas as diverse as Business, Accountancy, Banking, Insurance, Law, Nutrition, Sports Science and Psychology.</p> <p>Employability Skills</p> <p>The reason why so many employers highly value mathematics qualifications is mathematics students become better at thinking logically and analytically. Through solving problems, you develop resilience and are able to think creatively and strategically. The writing of structured solutions, proof and justification of results help you to formulate reasoned arguments. Importantly you will have excellent numeracy skills and the ability to process and interpret data.</p> <p>Career Opportunities</p> <p>Mathematics qualifications are versatile and are well-respected by employers. Careers for people with good mathematics skills and qualifications are not only well paid, but they are also often interesting and rewarding. People who have studied Mathematics are in the fortunate position of having an excellent choice of career.</p>

Core Subject – Modern Foreign Languages (MFL) French

Exam Board	AQA
Overview of the subject at GCSE	<p>Studying French gives you the opportunity to communicate with 220 million French speakers over 5 continents. French is the second most widely learned foreign language after English and the sixth most widely spoken language in the world.</p> <p>The GCSE French course is divided into three themes:</p> <ul style="list-style-type: none"> • Identity and culture • Local, national, international and global areas of interest • Current and future study and employment <p>You will recognise many of the themes from Key Stage 3 and will continue to extend your knowledge of vocabulary and grammatical structures. The emphasis remains on communication and you will be hearing and using French regularly in the classroom to develop your skills in dealing with authentic situations.</p> <p>All formal assessment is taken at the end of Year 11, but regular internal assessment is undertaken throughout the course. The final GCSE grade will be awarded on the basis of four examinations, each worth 25% of the course.</p> <ul style="list-style-type: none"> • listening • speaking • reading • writing
Skills required to be successful at GCSE	<p>We have many able linguists at NHGS and a thriving modern languages department. An increasing number of students are now taking 2 languages at GCSE.</p> <ul style="list-style-type: none"> • Skills you will develop through the course include: • Communication skills • Problem solving skills • Accuracy and attention to detail • Team working • Creative thinking <p>Language study is training in empathy; gaining a greater understanding of how the world looks from someone else's point of view.</p>
Where will the course take you?	<p>Beyond GCSE, you can take A Level French as one of your 3 A Level subjects. Many of our students go on to study French at University, either as a Single Honours Degree or as a Joint Honours, combining a language with a whole range of other subjects.</p> <p>The ability to speak French is an advantage in the job market, both at home and abroad. Studies show that over two-thirds of UK businesses value foreign language skills and many language graduates go straight into Business Services, Marketing, Advertising, Management, Banking or the Media. Language skills can lead directly into a career in Translating, Interpreting or Teaching, and are also in demand in areas such as Hospitality, Law, Journalism and publishing services.</p> <p>French degrees typically involve spending a year abroad and this can be an opportunity to find work in a field that interests you and gain relevant experience. Or why not use a French degree to become a famous author (JK Rowling) or newsreader (Fiona Bruce, Huw Edwards).</p>

Core Subject – Modern Foreign Languages (MFL) Spanish

Exam Board	AQA
Overview of the subject at GCSE	<p>Studying Spanish gives you the opportunity to communicate with 440 million Spanish speakers in 24 different countries. This makes it the second most spoken language in terms of the number of people who speak it as their mother tongue (only Mandarin Chinese has more native speakers). Spanish is spoken in Spain, throughout the Americas, as well as a few countries in the Caribbean, and Equatorial Guinea in Africa.</p> <p>The GCSE Spanish course is divided into three themes:</p> <ul style="list-style-type: none"> • Identity and culture • Local, national, international and global areas of interest • Current and future study and employment <p>You will recognise many of the themes from Key Stage 3 and will continue to extend your knowledge of vocabulary and grammatical structures. The emphasis remains on communication and you will be hearing and using Spanish regularly in the classroom to develop your skills in dealing with authentic situations. All formal assessment is taken at the end of Year 11, but regular internal assessment is undertaken throughout the course. The final GCSE grade will be awarded on the basis of four examinations, each worth 25% of the course.</p> <ul style="list-style-type: none"> • listening • speaking • reading • writing
Skills required to be successful at GCSE	<p>We have many able linguists at NHGS and a thriving modern languages department. An increasing number of students are now taking 2 languages at GCSE.</p> <p>You will develop the ability to become a competent speaker acquiring the skills needed in this growing international global society.</p> <p>Skills you will develop through the course include:</p> <ul style="list-style-type: none"> • Communication skills • Problem solving skills • Accuracy and attention to detail • Team working • Creative thinking <p>You will also develop an appreciation for the culture of other countries where Spanish is spoken and you will understand the importance of being tolerant, open-minded and empathetic in a multicultural society.</p>
Where will the course take you?	<p>Language skills are in demand and can be used in almost any career, particularly in businesses that trade internationally. Some job options directly related to a degree in languages include: Interpreter, Secondary School Teacher or Translator. Jobs where a degree in languages would be useful include: Broadcast Journalist, Diplomatic Service Officer, Education Consultant, English as a Foreign Language Teacher, Logistics and Distribution Manager, Marketing Executive, Sales Executive or Tour Manager</p> <p>Also remember that many modern language degree programmes offer a year abroad. Some graduates wanting a long-term career using a language choose to take on a short-term role, such as teaching English, while living abroad and perfecting their language skills. Other temporary jobs that take you abroad may be helpful, such as those in tourism. Experience in areas such as administration and IT will also be useful for many jobs that use language skills.</p>

Core Subject – Religious Studies (RS)

Exam Board	AQA
Overview of the subject at GCSE	<p>All students will begin Religious Studies GCSE at the start of Year 9, leading to a full GCSE. Assessment will be through two written examinations at the end of Year 10 we study AQA Religious Studies GCSE Specification A.</p> <ul style="list-style-type: none"> ● Component 1: Study of beliefs, teachings and practices in Christianity and Buddhism. ● Component 2: Study of four religious, philosophical and ethical themes: The existence of God and revelation; Religion, peace and conflict; Religion, crime and punishment; Relationships and families. <p>In all parts of the course, students will be expected to think, act and speak philosophically, to listen to the views of others, to give reasons for their opinions and to develop critical and analytical skills. In addition to building up a body of knowledge to pass the exam, we aim to help our students become the kind of broadminded, sensitive and empathetic young adults our society needs.</p> <p>There are no controlled assessments or coursework.</p> <p>This GCSE will begin in Year 9 after Easter.</p>
Skills required to be successful at GCSE	<p>We believe that knowledge comes first in Religious Studies. We do not presume any prior knowledge of either Buddhism or Christianity and as such teach the main beliefs and practices of each faith from scratch.</p> <p>Once you have begun to learn the key knowledge you need, we start to get you to apply this to questions. Key skills at GCSE are analysis, evaluation and the ability to think critically about issues.</p>
Where will the course take you?	<p>Many people think RS can only lead to a career as a Monk, Nun or RS teacher; this could not be further from the truth however!</p> <p>The study of this discipline could lead you to the study of A Level Religious Studies or Philosophy. The skills you learn will also help you with subjects such as English or History.</p> <p>Most universities offer both Philosophy and Theology. Those who complete a degree in a related discipline often go on to a wide variety of careers. These include graduate training schemes, Banking, Teaching, Journalism, Counselling, Policing, Social Work and Youth Work.</p>

Options Subject – Art

Exam Board	AQA
Overview of the subject at GCSE	<p>Course: Art & Design (Fine Art) Our GCSE Course is rich in opportunities for students to develop new skills and explore contemporary and historical source material. Throughout the course students are encouraged to follow their own lines of interest and enquiry when developing their work. As a result, we see rich and varied outcomes ranging from large scale sculptures, Photography, textile pieces to animations and traditional paintings.</p> <p>Course Structure: Component 1 (60%) Coursework Portfolio and Component 2 (40%) Externally Set Assignment.</p> <p>Coursework Units: Still Life: Photography and digital image manipulation (beginner), drawing for purpose (experimental, design & observational), painting, mixed media, lino printing and monoprinting. Portraiture: Tonal drawing, Photography, digital image manipulation (intermediate/advanced), stencil and spray painting. Natural Form: Experimental drawing, working on prepared grounds, abstraction and surface pattern design, 3D Ceramic sculpture, plaster casting and carving. This unit includes a gallery visit along with at least one workshop with a practising artist.</p> <p>Your portfolio will be assessed over four areas – observation & recording (both written and practical), experimentation and ideas development, Artist research and your overall response to your chosen themes.</p> <p>In January in Year 11, AQA release details on the Externally Set Assignment. Students will choose a theme to study from the selection of starting points provided and produce work to evidence the four assessment objectives. The preparation period for this task is usually between 6-8 weeks resulting in 15 hours of controlled time in which students produce their final outcome unaided.</p>
Skills required to be successful at GCSE- successful in your subject at GCSE.	<ul style="list-style-type: none"> • Good organisation skills and the ability to work independently are essential to the study of Art. • An appreciation of and interest in visual culture would be beneficial as it will enable you to tailor your work to your own interests. • A willingness to try new things and the ability to reflect on your own work and that of others critically. • A reasonably strong foundation in drawing will be helpful, however we do continue to build on this skill continually throughout the course. • The ability to work as a team ensures a safe, inspiring and productive studio environment.
Where will the course take you?	<p>GCSE Fine Art is a perfect foundation for further study at A Level, including Photography, Media and Product Design. This can lead to a number of exciting design based careers including Fashion, Interiors, Theatre, Retail, Graphics and Jewellery. Other career opportunities include Animator, Video Games Designer, Artist, Ceramicist, Illustrator, Curator, Photographer, Architect, Advertising & Publishing, Journalism, Hair & Make up Design & Teaching.</p> <p>As an Art student you will develop skills in problem solving, creative thinking, investigation, research, communication and teamwork skills, and gain the ability to develop, refine and present ideas. Employers and universities regard all of these highly.</p>

Options Subject – Business

Exam Board	Edexcel
Overview of the subject at GCSE	<p>GCSE Business introduces students to core concepts and ideas related to the business world and equips students with the knowledge and skills to understand how businesses work and the environment they operate in.</p> <p>The course is split into two halves, with Theme 1 looking at how entrepreneurs identify business opportunities and establish themselves in the market and Theme 2 dealing with issues relating to the running and management of a business.</p> <p>Studying GCSE Business will give students an understanding of business in the third decade of the 21st Century as all content is focused on contemporary case studies and draws on the dynamic and ever changing world of modern business.</p> <p>Students studying the course will be introduced to lots of new ideas and information that they may not have studied in KS3 but will be interesting and engaging. Topics such as spotting a business opportunity, understanding the external environment of the business and making financial decisions will all be discovered and related to real world context.</p> <p>This subject is limited to two groups of no more than 30 students.</p>
Skills required to be successful at GCSE.	<p>You will need:</p> <ul style="list-style-type: none"> • An interest in the world around you and an appreciation of the impact businesses can have on lots of different people • A lively and enquiring mind and the willingness to undertake a brand new subject never studied before. • A clear and logical style of thinking to help you order your thoughts when putting your examination answers together. • Good mathematical skills to be able to cope with data analysis and presentation. • An ability to link the business ideas studied in class to the case studies that will come up in the examination. • To be able to cope with revising and learning large volumes of notes in this rigorous academic subject.
Where will the course take you?	<p>Business is the most popular degree course in the UK so starting a GCSE course may put students on a path towards study at A Level or university. While it is not essential to take Business at GCSE to study the subject at A Level, the grounding in business ideas that students receive in the GCSE course will help propel them on to further study of the subject.</p> <p>As apprenticeships become a more popular choice for students, GCSE Business can act as a stepping stone to the world of work by giving students an insight into numerous topics that may be useful once they are employed. These would include issues such as managing finance, dealing with customers, managing staff and ordering production. GCSE Business would help anyone thinking of taking a next step into work.</p> <p>As well as studying Business at university the most common courses students go on to attend are Finance, Marketing and Economics. The grounding GCSE Business gives in these areas helps students who want to study these subjects further and are excellent for careers in entrepreneurship, Accountancy, Business Management and Leadership.</p>

Options Subject – Computer Science

Exam Board	OCR
Overview of the subject at GCSE.	<p>Computer systems - this component will assess:</p> <ul style="list-style-type: none"> • 1.1 Systems architecture • 1.2 Memory and storage • 1.3 Computer networks, connections and protocols • 1.4 Network security • 1.5 Systems software • 1.6 Ethical, legal, cultural and environmental impacts of digital technology <p>Computational thinking, algorithms and programming - this component will assess:</p> <ul style="list-style-type: none"> • 2.1 Algorithms • 2.2 Programming fundamentals • 2.3 Producing robust programs • 2.4 Boolean logic • 2.5 Programming languages and Integrated Development Environments
Skills required to be successful at GCSE.	<p>You will not be programming or using a computer all the time in GCSE Computer Science lessons. You will need to have strong skills and subject knowledge in Mathematics and a solid interest in Physics and Electronics would also help. You will be required to create, read, amend and find errors in algorithms, which includes studying flowcharts and written pseudocode.</p> <p>You should be eager to demonstrate your:</p> <ul style="list-style-type: none"> • Creative thinking • Presentation skills • Problem-solving skills • Communication skills • Accuracy and attention to detail <p>You must be an independent learner but also work with the teacher and group to be successful.</p>
Where will the course take you?	<p>Degree apprenticeships are gaining popularity. You can apply for places once you have a Computer Science A Level. Some students that have studied Computer Science at NHGS have gone on to do apprenticeships with large organisations such as Cisco. These organisations pay a salary as well as pay for the degree course and also offer extra qualifications which can be taken alongside your degree. It is also possible to find placements that will offer employment after successful completion of the degree.</p> <p>Qualifications in Computer Science can lead you to work in many areas which include:</p> <p>Graphic Designer / Virtual Reality Games Designer / Web Content Manager / Drone Pilot / 3D Printed Clothing Designer / Video Journalist / Social Media Strategist / Big Data Architect / Cyber Security Analyst</p> <p>You could also use your problem solving skills to work in various research projects.</p>

Options Subject – Design & Technology: Product Design or Fashion and Textiles

Exam Board	AQA
Overview of the subject at GCSE	<p>Design and Technology brings your ideas to life! Use your imagination to create innovative ideas that you will develop in a variety of contexts, using materials you choose. Learn how to appreciate the design process behind items that you use every day. Everything begins with an idea: that idea will be yours!</p> <p>Course content for GCSE D&T: Product Design or Fashion and Textiles</p> <ul style="list-style-type: none"> • Core technical principles – a broad knowledge of a range of materials • Specialist technical principles – a detailed knowledge of at least one material area of your choice • Designing and making principles – skills and knowledge related to the process of designing and making <p>In Year 10 you will undertake several small projects, using a range of materials and techniques, to develop your skills and knowledge related to your chosen specialist area. This will prepare students to produce a personal outcome to an exam board set controlled assessment (NEA task) which will be completed during Year 11. This controlled assessment forms 50% of the GCSE total mark. The NEA task will be started in June of Year 10 and completed by Easter in Year 11. The design folder should consist of approximately 20 pages of A3 paper or the ICT equivalent (e portfolio).</p> <p>The remaining 50% will be a 2-hour written examination - the content has been split into three sections: Core technical principles / Specialist technical principles / Designing and making principles.</p> <p>Product Design (Timber, Metals & Polymers) Product design combines making, modelling and visual communication, allowing you to work in one or a combination of the above materials while using a wide range of tools, machinery and new technologies. The emphasis is on problem solving, invention and creativity and is for pupils who enjoy designing and making high quality products which are innovative and useful.</p> <p>Fashion and Textiles Fashion and Textiles allows you to specialise in wearable constructed designs, stylish accessories, and innovative interior designs, whilst building upon your skills learnt at KS3. Students are taught how to be masters in areas of design including pattern cutting, garment construction and visual communication. Working within this area enables students to be more aware of the global world of design and the role the fashion industry plays in it.</p>
Skills required to be successful at GCSE	The subject combines well with and uses the skills learnt in Maths, Science, Art and Computer Science. The skills and qualities required are creativity, innovation, time management, organisation, discipline, perseverance, problem solving, team work and communication.
Where will the course take you?	<p>This course leads perfectly onto A Level Product Design offered in the Sixth Form. The course will:</p> <ul style="list-style-type: none"> • Provide access to a wide range of careers in the creative, engineering and manufacturing industries. • Prepare for careers in many other fields e.g. Medicine, Law and Computer Science. Whatever career you choose, the knowledge and skills that you learn, particularly those concerned with rapidly developing technologies, will be extremely valuable.

Options Subject - Geography

Exam Board	AQA
Overview of the subject at GCSE.	<p>Paper 1 Physical Geography Exam which accounts for 35% of the marks and lasts 1 hour 30 minutes.</p> <p>Students will answer three questions based on the following topics:</p> <ul style="list-style-type: none"> • The challenge of natural hazards – Why do earthquakes, volcanoes, tropical cyclones and other climatic hazards occur? Students will need to know this in detail, as well as knowing how these issues are managed. • Ecosystems - what are the characteristics of rainforests, deserts or cold environments? How are these areas being used and what global implications does this have? • UK landscapes - What are the characteristic landforms of coastal and river landscapes in the UK? How are these areas being managed to protect them for future use? <p>Paper 2 Human Geography Exam which accounts for 35% of the marks and lasts 1 hour 30 minutes.</p> <p>Students will answer three questions based on the following topics:</p> <ul style="list-style-type: none"> • Changing Urban landscapes - Students will study how cities develop differently in rich and poor countries and how different regions of the world manage peoples changing needs. • Globalisation of the world economy - you will learn why some areas of the world are seeing massive economic growth, yet other areas are stagnating. • Managing global resources - why are there imbalances in food, water and energy resources throughout the world? What challenges are there to access these resources in different countries? <p>Paper 3 Geographical Skills Exam is 30% of the marks and is 1 hour and 15 minutes in length.</p> <p>Students will be taught about investigation, communication, interpretative and presentational skills, which will be important for this examination. Students will also be tested on their two fieldwork enquiry days and a pre-release data booklet on this exam paper.</p>
Skills required to be successful at GCSE.	<p>Students will:</p> <ul style="list-style-type: none"> • Need to come with a lively and enquiring mind; • Need to be able to demonstrate a high level of literacy skills to be able to answer the assessments using a high degree of accuracy; • Need to have good mathematical skills to be able to cope with the analysis skills and presentation skills needed in your assessments and fieldwork activities; • Have an ability to learn your case study details well to lift the quality of your extended answers; • Have an interest in current affairs so that you can apply ideas in your answers; • Be able to cope with revising and learning large volumes of notes in this rigorous academic subject.
Where will the course take you?	<p>Geographers offer a wide range of exciting opportunities, particularly the following key fields:</p> <ul style="list-style-type: none"> • Environmental and Technical Services; • Leisure, Travel and Tourism; • Education, Social and Public Services; • Business and Financial Services; • Information and GIS Services; • Management and Administration Services. <p>As a career it offers unrivalled opportunities for well paid jobs in a wide variety of settings, many with wonderful travel opportunities too.</p>

Options Subject - History

Exam Board	AQA
Overview of the subject at GCSE	<p>History at GCSE offers an exciting mix but keeps popular topics like Nazi Germany and the causes of WWII as well as a mix of British and world history, and ranges from the arrival of the Vikings up to the present day.</p> <p>Paper 1: Understanding of the modern world</p> <ul style="list-style-type: none"> • Germany, 1890 - 1945: Democracy and Dictatorship • Conflict and tension, 1918 – 1939 <p>Paper 2: Shaping the Nation</p> <ul style="list-style-type: none"> • Britain: Migration, empires and the people, c790 to the present day • Medieval England: The reign of Edward I, 1272 – 1307 <p>You will:</p> <ul style="list-style-type: none"> • Progress by engaging in discussions and analysing a wide range of different sources (audio, video, text, cartoons, paintings, and photographs). • Produce diagrams, write notes, highlight and annotate information sheets. • Read and use a range of excellent textbooks. • Be able to use GCSEpod to help your initial understanding and also for revision.
Skills required to be successful at GCSE	<p>You will need to be able to:</p> <ul style="list-style-type: none"> • Ask questions about the past and consider relevant issues critically. • Use a range of sources alongside your own contextual knowledge, considering sources' provenance. • Think about how and why different interpretations have been constructed about people, events and developments from the past and why these have been seen as significant. • Organise and communicate your ideas on paper and reach supported judgements. • Continue to develop your own note taking techniques. • Continue to develop as an independent learner, with critical and reflective thinking. <p>All topics build on the knowledge developed in KS3 History at NHGS.</p>
Where will the course take you?	<p>Most potential employers (from Journalism to Law to Business and beyond) regard History as a very valuable GCSE. This is because it teaches the vital skills that they require (communication, decision-making, providing evidence as justification, attention to detail, research, analysis and an understanding of how the world works).</p>

Options Subject – Music

Exam Board	Edexcel (Pearson)								
Overview of the subject at GCSE	<p>The Music course is split into non-examined assessment (60%) and an exam (40%).</p> <p>Performing (NEA) 30% of the qualification</p> <p>Students must perform as a soloist and as part of an ensemble. Students may choose to perform on any instrument and in any musical style.</p> <p>Composing (NEA) 30% of the qualification</p> <p>Students are given the opportunity to explore and develop their compositional skills alongside an understanding of how music is created. Students must submit two compositions: One composition is in response to a brief, one is a free composition.</p> <p>Appraising: External examination 40% of the qualification</p> <p>Students will develop their listening and appraising skills through the study of music across a variety of styles and genres.</p> <table border="1" data-bbox="355 916 1442 1200"> <tr> <td data-bbox="355 916 644 987">Instrumental music 1700 – 1820</td> <td data-bbox="644 916 1442 987">JS Bach: Brandenburg concerto No.5 Beethoven: Piano Sonata in C minor</td> </tr> <tr> <td data-bbox="355 987 644 1059">Vocal Music</td> <td data-bbox="644 987 1442 1059">H Purcell: Music for a While Queen: Killer Queen</td> </tr> <tr> <td data-bbox="355 1059 644 1131">Music for Stage and Screen</td> <td data-bbox="644 1059 1442 1131">S Schwartz: Defying Gravity (Wicked) J Williams: Main title: Star Wars IV</td> </tr> <tr> <td data-bbox="355 1131 644 1200">Fusions</td> <td data-bbox="644 1131 1442 1200">Afro Celt Sound System: Release Esperanza Spalding: Samba EM Preludio</td> </tr> </table>	Instrumental music 1700 – 1820	JS Bach: Brandenburg concerto No.5 Beethoven: Piano Sonata in C minor	Vocal Music	H Purcell: Music for a While Queen: Killer Queen	Music for Stage and Screen	S Schwartz: Defying Gravity (Wicked) J Williams: Main title: Star Wars IV	Fusions	Afro Celt Sound System: Release Esperanza Spalding: Samba EM Preludio
Instrumental music 1700 – 1820	JS Bach: Brandenburg concerto No.5 Beethoven: Piano Sonata in C minor								
Vocal Music	H Purcell: Music for a While Queen: Killer Queen								
Music for Stage and Screen	S Schwartz: Defying Gravity (Wicked) J Williams: Main title: Star Wars IV								
Fusions	Afro Celt Sound System: Release Esperanza Spalding: Samba EM Preludio								
Skills required to be successful at GCSE	<p>The ability to play an instrument or sing is essential. The ability to read music is desirable but not essential.</p> <p>You need to be confident in working independently which will help with the NEA. Music is a subject that provides all who take part in it with many skills. Besides developing performing, composing and aural skills which naturally are linked with the subject, students will develop skills through cross curricular links with Mathematics, History, English and Geography.</p> <p>Important personal skills such as teamwork, self-confidence, presentation and delivery, analysis (both subjective and fact based), understanding and study of different cultures develop naturally over the course which can then be used in future study of many other subjects.</p> <p><i>Studying GCSE music gives you skills that you will then be able to use in the future – no matter what you want to do!</i> (F. Berry- former A Level student)</p>								
Where will the course take you?	<p>Our musicians have gone on to study in Performance, Musical Theatre, Journalism, Sound Engineering/Technician, Teaching/work with young people, Therapy or Youth Work. Employers recognise the creative and analytical skills that Music can develop in a young person.</p> <p>Music – more than just dots on a stave!</p>								

Options Subject – Physical Education (PE)

Exam Board	AQA
Overview of the subject at GCSE	<p>GCSE PE includes the compulsory study of Applied Anatomy and Physiology, Movement Analysis, Physical Training, Use of Data, Sports Psychology, Socio-Cultural Influences and Health, Fitness and Wellbeing.</p> <p>The combination of physical performance and academic challenge provides an exciting opportunity for you to perform, and then through the academic study learn how to improve your performance through application of the theory. PE is developed through a range of different contexts and the impact it has on our own and others' everyday lives. You will learn the reasons why we do things and why some people outperform others, mentally and physically. We also delve into the ethical considerations behind the use of drugs and gain an understanding of the consequences of inactivity and poor diet.</p> <p>The theory work is assessed with two written papers totalling 156 marks in total (60%).</p> <p>Alongside this are the skills of PE, which are examined via the Non Exam Assessment (NEA) component involving practical activities and a written piece of coursework (40%)</p>
Skills required to be successful at GCSE	<p>To be successful at GCSE PE, you need to have a thirst and a desire to understand how the theory content can be applied to practical activities in sport. For example, the role of the musculoskeletal system plays in allowing a trampolinist to perform a 10 bounce routine in a competition.</p> <p>If you choose GCSE PE you must:</p> <ul style="list-style-type: none"> • Look to play / compete in at least 1 or 2 of your practical choices on a regular basis outside of school. • Attend additional practical sessions laid on by PE to give you the opportunity of a third practical activity choice. • Film evidence of core skills and competition to create a portfolio of evidence to back up the teacher's grade. • Be able to demonstrate a thirst and desire to understand more about other activities other than your main choice. • Listen on a regular basis to Radio 5 Live, Talk Sport or watch Sky Sports news; read newspapers such as the Times or The Guardian and open your mind to a world of sport! • Be able to and regularly access GCSEpod and BBC Bite Size AQA PE to develop those extra ideas/knowledge. • Be interested in sport both practically and also theoretically. This is a must.
Where will the course take you?	<p>Successful application at GCSE level can lead onto A Level PE and Sport here at NHGS.</p> <p>Usual combinations with A Level PE can include Geography, Biology, Maths, Design and Technology, Psychology and Business Studies.</p> <p>This qualification also enables students to develop other skills such as critical thinking, communication, leadership and motivating others.</p> <p>Apprenticeship or employment Post 18 in the fitness and health industry.</p> <p>University courses in Sports Science, Physiotherapy, PE and Sport degrees, plus teacher training in PE. Careers in sport and coaching, personal training, Physiotherapy and Applied Science.</p>

Options Subject – Psychology

Exam Board	AQA
Overview of the subject at GCSE	<p>Psychology is the scientific study of human thought and behaviour. In this subject, students will develop theories about why people think and act the way they do. Students will make predictions about how people will act in the future based on what they know now. Students will ask whether it is our brains which make us who we are, or our upbringing or our friendships. This course will ask students to draw on their own experiences, to be experimenters and test their ideas using scientific methods.</p> <p>Assessment The GCSE Psychology course is 100% examination taken at the end of Year 11, but regular internal assessment is undertaken throughout the course. There are two papers (both 1 hour 45 minutes) each worth 50% of the final grade. The examinations include multiple choice, structured, closed short answer and extended written 9 mark questions.</p> <p>Course content for GCSE Psychology</p> <ul style="list-style-type: none"> • Memory • Perception • Development • Research Methods • Psychological problems (mental health issues - depression and addiction) • Language, thought and communication • Social Influence • Brain and Neuropsychology
Skills required to be successful at GCSE.	<p>You will need:</p> <ul style="list-style-type: none"> • A lively and enquiring mind and the willingness to undertake a new subject never studied before. • A good memory in order to learn a number of theories and studies in detail. • A high level of maturity and sensitivity - a number of the topics studied are socially sensitive and you need to be sensible and mature enough to cope with their content. • An interest in the world around you and people's behaviour so that you can apply your knowledge to real life situations. • The ability to argue – you have to develop your own opinions and arguments about the behaviour being studied and support these with evidence. • A high level of literacy skills to be able to read theories and studies and answer extended writing exam questions using a high degree of detail and accuracy. • Good mathematical skills to be able to cope with data analysis and presentation. • To evaluate theories and studies describing advantages and disadvantages of each one, using examples and explanations as evidence to support your thinking. • To be able to cope with revising and learning large volumes of notes in this rigorous academic subject.
Where will the course take you?	<p>Psychology can lead to careers in Counselling, Teaching, Medicine, Advertising, Human Resources, Management, Social Services, and also Specific Psychology careers such as Clinical or Forensic Psychology.</p> <p>GCSE Psychology can help prepare you for future A Level study.</p> <p>The combination of essay writing and mathematical skills that the subject develops prepares students really well for further study in a wide range of subjects. Students who go on to study Psychology at degree level similarly develop a broad range of skills which make them amongst the most employable of graduates on completing their degree.</p>

Options Subject – Separate Sciences

Biology

Exam Board	AQA
Overview of the subject at GCSE	<p>Biologists are scientists who study the natural world and all the living things in it, from the largest mammals down to our very own microscopic DNA. They try to understand how animals and organisms work (including humans), how we evolved and the things that can make us sick or improve our health. Biologists use this knowledge to do things like trying to stop the spread of disease, tracking down natural resources, improving public health, animal care and conservation and to work out the true impacts of things like pollution.</p> <p>Subject content:</p> <ul style="list-style-type: none"> ● Cell biology; ● Organisation; ● Infection and response; ● Bioenergetics; ● Homeostasis and response; ● Inheritance, variation and evolution; ● Ecology.
Skills required to be successful at GCSE	<p>As with the other sciences, Biology helps you to build up research, problem solving, organisation and analytical skills. If you study Biology, you will likely find yourself working on group projects, which will help you build your teamwork and communication skills too.</p> <p>Transferable skills you can gain from studying Biology include data investigation, excellent numeracy and good research skills.</p> <p>The Biology course does have considerable content and therefore regular revision and review of the material is essential and you will need excellent independent study skills to succeed.</p>
Where will the course take you?	<p>Careers using Biology</p> <p>Biology is a key subject for lots of STEM careers, particularly in Healthcare, Medicine and jobs involving plants or animals. The list is pretty long and includes: Nursing, Dentistry, Forensic Science, Psychology, Physiotherapy, Botany, Environmental Science, Zoology, Geology, Oceanography, Pharmaceuticals, Energy, Teaching, Science Writing, Genetics and Research. Biology is excellent preparation for non-scientific careers, thanks to the skills it provides – everything from analytical thinking to writing reports.</p>

Options Subject – Separate Sciences

Chemistry

Exam Board	AQA
Overview of the subject at GCSE	<p>The GCSE Chemistry course will introduce students to the following chemical principles;</p> <ul style="list-style-type: none"> • Matter is composed of tiny particles called atoms and there are about 100 different naturally occurring types of atoms called elements. • Elements show periodic relationships in their chemical and physical properties and these periodic properties can be explained in terms of the atomic structure of the elements. • Atoms bond by either transferring electrons from one atom to another or by sharing electrons. • The shapes of molecules (groups of atoms bonded together) and the way giant structures are arranged is of great importance in terms of the way they behave. <p>All formal assessment is taken at the end of Year 11, but regular internal assessment is undertaken throughout the course. The final GCSE grade will be awarded on the basis of two written examinations only. The examination includes multiple choice, structured, closed short answer and open response questions.</p> <p>Course content for GCSE Chemistry:</p> <ol style="list-style-type: none"> 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
Skills required to be successful at GCSE.	<p>To be successful in GCSE Chemistry it is expected that students should have the following skills:</p> <ul style="list-style-type: none"> • A reasonable standard of Mathematics to be able to cope with calculations and reasonable written English and comprehension skills; • An interest in learning about the applications of science in the world around us; • Resilience and a willingness to work hard throughout the course. <p>The Chemistry course does have considerable content and therefore regular revision and review of the material is essential and you will need excellent independent study skills to succeed.</p>
Where will the course take you?	<p>Chemistry is at the root of many cutting-edge scientific discoveries, new processes and products. Transferable skills you can gain from studying Chemistry include data investigation, excellent numeracy and good research skills. Chemistry A Level is classed as a facilitating subject which is a subject that is most often required by top universities. It would complement the following common degree courses with transferable skills or useful background knowledge: Geography/Engineering/Physics/Biology/Medicine/Maths/Psychology/Computer Science/ Architecture.</p> <p>Careers using Chemistry Medicine, Veterinary Practice and Nursing, Teaching, Engineering, Pharmaceuticals, Physiotherapy, Sports Science; Nursing, Marine Biology, Geology, Surveying. Careers are available in manufacturing (particularly in Agrichemicals, Pharmaceuticals, Paints, Perfumes, Food, and Plastics) and in areas such as Forensics, Environmental Protection, Chemical Engineering and Healthcare. Chemistry students' problem solving skills are useful for many other areas, too, such as Law and Finance.</p>

Options Subject – Separate Sciences

Physics

Exam Board	AQA
Overview of the subject at GCSE.	<p>The GCSE Physics course will introduce students to the following physical principles;</p> <ul style="list-style-type: none"> • The use of models, as in the particle model of matter or the wave models of light and of sound. • The concept of cause and effect in explaining such links as those between force and acceleration, or between changes in atomic nuclei and radioactive emissions. • The phenomena of ‘action at a distance’ and the related concept of the field as the key to analysing electrical, magnetic and gravitational effects. • That differences, for example between pressures or temperatures or electrical potentials, are the drivers of change. <p>All formal assessment is taken at the end of Year 11, but regular internal assessment is undertaken throughout the course. The final GCSE grade will be awarded on the basis of two written examinations only. The examination includes multiple choice, structured, closed short answer and open response questions.</p> <p>Course content for GCSE Physics:</p> <ol style="list-style-type: none"> 1. Energy 2. Electricity 3. Particle model of matter 4. Atomic structure 5. Forces 6. Waves 7. Magnetism and electromagnetism 8. Space physics
Skills required to be successful at GCSE.	<p>To be successful in GCSE Physics it is expected that students should have the following skills:</p> <ul style="list-style-type: none"> • A reasonable standard of Mathematics to be able to cope with calculations and reasonable written English and comprehension skills; • An interest in learning about the applications of science in the world around us; • Resilience and a willingness to work hard throughout the course. <p>The Physics course does have considerable content and therefore regular revision and review of the material is essential and you will need excellent independent study skills to succeed.</p>
Where will the course take you?	<p>Careers using Physics</p> <p>Physics will help you to build up your problem solving, research, and analytical skills. With these skills you’ll be able to test out new ideas plus question and investigate other people’s theories, which is useful for any kind of job that involves research or debate.</p> <p>Physics is a really useful subject for the majority of STEM (Science, Technology, Engineering and Maths) careers and you’ll find Physicists everywhere, in Industry, Transport, Government, Universities, the Armed Forces, the Secret Service, Games companies, Research Labs and more. Physics is especially helpful for jobs that involve building things and developing new technologies, including: Engineering (civil, mechanical, aerospace, chemical, electronic, nuclear, automotive), Astronomy, Robotics, Renewable Energies, Computer Science, Communications, Space Exploration, Science Writing, Sports and Games Technology, Research and Nanotechnology.</p> <p>The numeracy and logical thinking acquired through studying Physics can be a starting point for a whole range of careers.</p>

What is MyDirections?

MyDirections provides young people with the information they need to make decisions about the future. Each user has their own unique login and password and will access careers information tailored to their age and interests. All students at NHGS have been provided with their username and password by Mr Kennedy and should have activated their account in December 2022. Designed for use by young people in Year 7 up to the age of 19, MyDirections includes articles relevant to all the different stages of career planning. In addition, local events and opportunities are advertised on the website's home page, outside of the login and password.

How do I use the website?

Students can login to the website here (<https://ck.mydirections.co.uk/login>) and use the information provided by Mr Kennedy to login. The first time a young person logs in to the site, they will be asked to complete a simple assessment about their career readiness. This information can be used by a careers adviser to identify those who might need extra support. Users are then asked to choose from 21 subjects, 5 routes and 19 sectors that interest them. A brief explanation about each option, ensures young people understand their choices before making their selection. MyDirections generates content associated with the user's preferences and recommends other articles that may be of interest. Young people can alter their choices at any time - and also select if they are 'undecided'.

What is on the website?

For Year 9 students considering GCSE options the Directions 2023 booklet in the MyDirections portal will be particularly useful. The Directions 2023 booklet gives impartial information and advice on making choices for GCSE courses and provides students with activities to help them make informed decisions. As well as providing factual information, MyDirections also encourages young people to think about careers they may not have thought of, by linking the subjects they have selected to a wide range of careers and courses. Useful websites related to the sectors and subjects they have chosen, enables users to undertake further detailed research should they want to.

In addition to tailored content, MyDirections also includes articles about general topics - for example, using labour market information, choosing qualifications and attending a careers event. A CV builder is available to all users and job search articles cover everything from where to look for vacancies, through to starting your first job or apprenticeship. Information about how a young person can contact their careers adviser is prominent on every page.

NORTH HALIFAX GRAMMAR SCHOOL ETHOS STATEMENT

We create excellence by being :



Living to Learn | Learning to Live



