



**GEORGE
SPENCER
ACADEMY**

Our Year 12 Curriculum

A guide for parents and students

ETHOS OF EXCELLENCE

An introduction to our Year 12 Curriculum

Welcome to our Year 12 Curriculum booklet and thanks for taking the time to read and engage with this information. Year 12 is an exciting year as students begin to specialise in their chosen subjects and begin work in earnest on their A-level or other level 3 courses.

The overall purpose of this booklet is to share our curriculum with parents so that you are more able to support your young people with their learning. At George Spencer Academy, we pride ourselves on providing students with rich learning experiences through a creative and innovative curriculum. Our formal curriculum is built from sequences of topics and lessons which are designed to help students know more and remember more in each subject. Students learn better when they understand how lessons fit within their broader context and when they are able to make connections between and within their subjects. Parents can support their young people by discussing this formal curriculum at home, and the information in this booklet will help you do this by summarising key topics and discussion points in each subject.

Alongside the formal curriculum, our wrap-around curriculum aims to provide a holistic approach to the development of each child. This includes Form time learning on topics such as well-being, learning strategies and values for life in modern Britain. It also includes opportunities for extending learning outside of the classroom, especially through reading texts, watching films or documentaries and visiting places of interest. As parents, your help with this is much appreciated and this booklet provides ideas for partnership learning at home which will usefully complement what is being taught in school.

Included in this booklet:

- A list of ideas for students to read, watch and visit at home for each subject;
- A calendar of key curriculum dates;
- A page for each subject which includes an intent statement, links between and within subjects, half-termly topics, skills and key questions for discussion, plus information on how students will be assessed. Also included is information on revision guides and websites and on the exam specification being studied.

If you have any queries regarding our Year 12 curriculum, please contact Mrs L. Floate at lfloate3@george-spencer.notts.sch.uk. This booklet is also available in the Curriculum section of the school website if you wish to use the hyperlinks that are included in some places.

Read, watch and visit- supporting our Year 12 Curriculum at home

Here are some ideas to extend learning outside of the classroom in each subject. Students should aim to engage with activities for all of the subjects that they study in Year 12; teachers will provide additional suggestions on request.

So that we can keep track of participation and reward excellent effort, please log activity at

https://docs.google.com/forms/d/e/1FAIpQLSfDxOAEh5snHt1hihilJAjCRau-yG0WFjHQRKLhH82reIV28A/viewform?usp=sf_link

	Read	Watch	Visit
English Language	The Myth of Mars and Venus - Deborah Cameron	TED talk: Lera Boroditsky: How language shapes the way we think	The Museum of Brands - London
English Literature	The Bell Jar by Sylvia Plath	Armando Lanucci's Documentary on Milton https://www.youtube.com/watch?v=4j_itlVgOk	RSC Stratford
Maths	AMSP Newsletter SUMS (Steps to University for Mathematical Students) https://amsp.org.uk/resource/sums	The Imitation Game (Netflix)	Bletchley Park
Further Maths	What Is Mathematics? An Elementary Approach to Ideas and Methods: An Elementary Approach to Ideas and Methods (Oxford Paperbacks): Amazon.co.uk	How Imaginary Numbers Were Invented Complex numbers and how they came to be. A new mathematical idea introduced in the first lesson of Y12 FM Videos AMSP - Help videos	A Maths Trail for the Science Museum and South Kensington London Maths Trail
Core Maths	https://www.moneysavingexpert.com/students/	https://www.bbc.co.uk/programmes/p00msxfl	The Science Museum - London
Biology	'Genome: the autobiography of a species in 23 chromosomes' by Matt Ridley	Stem cell revolutions https://www.stemcellrevolutions.com/watch	Museum of Natural History, Kensington, London https://www.nhm.ac.uk/
Chemistry	Periodic Tales - The Curious Lives on the Elements - Hugh Aldersey -Williams	Incredible Chemistry powering your smartphone	Science and Industry Museum - Manchester
Physics	Great Physicists: The Life and Times of Leading Physicists from Galileo to Hawking. William H. Cropper	'The Universe' on Netflix https://www.netflix.com/gb/title/70143831	Malcolm Parry Observatory in Long Eaton http://www.longeaton.derbyshire.sch.uk/about-tles/observatory
Physical Education	The Line – Richard Freeman	The Dawn Wall	Ashbourne Shrovetide Games
BTEC Sport	The Chimp Paradox: The Acclaimed Mind Management Programme to Help You Achieve Success, Confidence and Happiness - Steve Peters	Living with Lions 1997	Queen Elizabeth Olympic Park, London
Spanish	Spanish Short Stories: Cuentos Hispánicos: Volume 1 (Penguin Parallel Text Series)	Perdida (2018)	A flamenco show (various dates and locations here: https://www.list.co.uk/events/what:Flamenco/)

	Read	Watch	Visit
Geography	Disaster by Choice by Ilan Kelman (2020)	Seaspiracy (2021) - SEASPIRACY Netflix OFFICIAL WEBSITE	London Olympic Park, Stratford East London – Urban Regeneration
History	Last Kingdom by Bernard Cornwall	October: Ten Days That Shook the World (1928 film by Sergei Eisenstein)	Jorvik Viking Centre, York
Philosophy	Sophie's World by Jostein Gaarder	https://www.youtube.com/watch?v=c0Z7KeNCi7g (Homeopathy, quackery and fraud)	Creswell Crags/ChurchHole and Robin Hood's Cave
Psychology	The Lucifer Effect by Philip Zimbardo – Social Influence and Obedience.	100 Humans	Freud Museum, London (online if not in person)
Sociology	The Gift, Marcel Mauss	Pretty in Pink	The Workhouse, Southwell
Criminology	Kleptopia Tom Burgis	12 Angry Men	National Justice Museum, Nottingham
Government and Politics	Alastair Smith and Bruce Bueno de Mesquita, <i>The Dictator's Handbook: Why Bad Behaviour is Almost Always Good Politics</i>	TLDR News channel https://www.youtube.com/channel/UCSMqateX8OA2s1wsOR2EgJA	Visit: People's History Museum, Manchester https://phm.org.uk/
Design Technology	Iconic Designs: 50 Stories about 50 Things Stuff matters by Mark Miodownik	What Makes a Product Design Iconic?	NTU Degree Showcase New designers exhibition - London
Art	Art in Theory 1900-2000: An Anthology of Changing Ideas	The Power of Art - Rothko https://watchdocumentaries.com/simon-schamas-power-of-art/?video_index=7	Royal Academy Summer Exhibition (Yearly) https://www.royalacademy.org.uk/exhibition/summer-exhibition-2021
Cambridge National ICT	Bletchley Park: The Secret Archives Hardcover – Illustrated, 4 Feb. 2016	Enigma Film	Bletchley Park - WW2 museum
Computer Science	Computational Fairy Tales – Jeremy Kubica	BBC Click https://www.youtube.com/user/ClickBBC	Bletchley Park https://bletchleypark.org.uk/
Business Studies	https://www.tutor2u.net/business/blog/the-incredible-logistics-of-grocery-stores The Incredible Logistics of Grocery Stores	The Defiant Ones Netflix	Legoland – the growth of a brand
Economics	The Next Fifty Things that Made the Modern Economy (2020) https://www.amazon.co.uk/Next-Fifty-Things-Modern-Economy/dp/1408712660	EconplusDal Youtube Channel https://www.youtube.com/channel/UCQbBh9Jn2licSPZOiNKJu0g	Nottingham University - School of Economics https://www.nottingham.ac.uk/economics/events/index.aspx
Media Studies	Media Magazine	JUNGLE BOOK 1997 & 2016	National Science and Media Museum, Bradford

Key dates in our Year 12 Curriculum

Here is a list of key dates, all of which are designed to keep you informed about our curriculum and about how your child is progressing at George Spencer Academy. For other dates, such as term dates and INSET days, please see the school website or the student planner.

Thurs 15/09/22	Year 12/13 Information evening/ meet the Y12 Learning Manager evening
Week beginning 19/12/22	Assessment point 1 information available to parents
Week beginning 17/04/23	Assessment point 2 information available to parents
Thurs 25/05/23	Year 12 Progress Evening
Week beginning 12/06/23	Year 12 PPE (Pre-Public Examinations)
Week beginning 24/07/22	Assessment point 3 information available to parents

Assessment point information is collated by teachers three times a year and sent home to parents on paper; it is also available digitally through INSIGHT. It includes scores for qualities such as independence, attitude and response to feedback, as well as a target grade and a predicted grade in each subject. The predicted grade is the A-level or level 3 grade that a teacher believes the student is most likely to achieve in that subject if they continue to make normal progress from this point up to the end of Year 13. Predictions are based on teacher assessments, including pre-public examinations, in-class tests and homework pieces.

Our Year 12 English Language Curriculum

Exam board information- AQA

Resources for home study and revision- English Student Hub, EMC e-magazine, Seneca learning.

We aim to develop students of English who:

- Are challenged and engaged by a curriculum that enthuses students and staff, while fostering a love of language and literature;
- Build a life-long competence in reading and communicating with skill and clarity, as well as an appreciation of how we can manipulate and are influenced by language in the wider world, through knowledge of writers' methods;
- Gain knowledge of a wide range of language discourses that teaches them something about the world they live in and supports both their academic achievement and their personal wellbeing.

Big Ideas in Year 12 English Language

Representation is at the heart of Y12 English Language. Students will engage with a wide range of spoken, written and multi-modal texts: anything from the posts on a chat forum to political speeches and everything in between. They will ask three key questions of any text: who is represented, how and why? The answers to these questions will be provided by applying the precise, technical language that underpins the course. Alongside this, our Y12s look at how our gender, occupation, the groups we socialise with and the place(s) we come from might influence and shape the language we use and the way others perceive and respond to us.

Making Connections

Our Year 12 English Language Curriculum will build on the analytical skills developed at GCSE level. We will look more closely at the language and structure of texts and broaden our knowledge of what we understand context to be. Students will also hone and refine their evaluative skills.

Our Year 12 English Language Curriculum will build towards students adopting a more precise and academic language when analysing real world texts. Students will begin forming judgements based upon the work of linguistic theorists and researchers by asking questions of their data and posing challenges.

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	Introduction to language study Linguistic methods	Linguistic methods - Paper 1 skills and practice Language and Gender Language and Region	Consolidation of Language of Gender and Region Language and Occupation Language and Social Groups	Language and Occupation Language and Social Groups	PPE preparation of Year 12 topics Paper 2 Section A and Paper 1 Section A Original Writing NEA	PPE and feedback Original Writing NEA Language Investigation NEA Introduction to Child Language Development Introduction to Language Change
Knowledge	Linguistic methods and terminology. How representations are linguistically created.	Theories and ideas about language and gender and regional variation.	Theories and ideas about language and social groups.	Theories and ideas about language and social groups.	How to create powerful narratives, persuasive or informative texts.	Investigation methodology CLD and change terminology and theory.
Skills	AO1 methods: pragmatics, phonology, grammar, lexis and semantics, discourse Introducing subject specific terminology	AO1 methods: pragmatics, phonology, grammar, lexis and semantics, discourse Introducing subject specific terminology	AO2 relevant theories, concepts and ideas AO3 - contextual factors and influences	AO2 relevant theories, concepts and ideas AO3 - contextual factors and influences	NEA: Analysing style models, writing own texts, writing critical commentaries	AO1/AO2/AO3: Relevant concepts, theories and ideas AO1/AO1: lexical and semantic change
Key questions	Why do newspapers use different headlines for the same story?	Who interrupts more: men or women?	Why do doctors sometimes use language we don't understand?	Why do teenagers use slang?	How do brands convince us to buy their products?	Are emojis a good way of communicating feelings and ideas?
Assessment	Paper 1 Q1	Paper 1 Q1 or 2 and Q3	Paper 2 – Question 3	Evaluation topic	NEA OW draft	Year 12 PPE
Cross Curriculum Connections	Spanish HT1 - grammar terminology	Media (Paper 1) Media Language and Representations analysis of Newspapers and news online (Term 1) Fine Art Y13 - Personal investigation (HT1)				

Any questions? Please contact Mrs S. Ferguson, sferguson@george-spencer.notts.sch.uk

Our Year 12 English Literature Curriculum

Exam board information-
OCR English Literature H472

Resources for home study and revision- 'Paradise Lost' John Milton; 'Measure for Measure' William Shakespeare; 'A Streetcar Named Desire' Tennessee Williams; 'The Duchess of Malfi' John Webster

We aim to develop students of English who:

- Are challenged and engaged by a curriculum that enthuses students and staff, while fostering a love of language and literature;
- Build a life-long competence in reading and communicating with skill and clarity, as well as an appreciation of how we can manipulate and are influenced by language in the wider world, through knowledge of writers' methods;
- Gain knowledge of a wide range of literature that teaches them something about the world they live in and supports both their academic achievement and their personal wellbeing. Students will also gain knowledge of the timeless nature of literary themes.

Big Ideas in Year 12 English Literature

In year 12 you will examine the darkest parts of our human nature and examine just how far mankind is willing to go to achieve greatness and power. You will do this through the examination of corrupt, evil, twisted figures presented to us in literature. Through collaborative group work and discussion, you will gain a sense of understanding of how mankind is governed by society and how much is governed by our own desires. In order to do this, you will examine a huge range of texts from the English Civil War to modern Britain and examine the impact of factors which shape us as a human race: religion, gender, sex, race, violence, power, corruption, love, hate and death. By using your own cultural understanding, you will work together to analyse and infer meaning through the complexities of language use and presentation.

Making Connections

Our Year 12 English Literature Curriculum will build on the skills gained in GCSE Literature, specifically: the ability to examine language and its effects as well as infer meaning from its use; understanding the representation and influence of historical and political context in different texts; and the ability to articulate meaning clearly and fluently.

Our Year 12 English Literature Curriculum will build towards the year 13 Literature Curriculum by being able to apply honed essay writing skills to produce high quality coursework; gaining historical and political knowledge to new texts as well as being able to compare texts studied in year 12 to new texts in year 13.

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	Paradise Lost Measure for Measure	Paradise Lost Measure for Measure	Duchess of Malfi Sylvia Plath poetry	Duchess of Malfi Sylvia Plath poetry	A Streetcar Named Desire Bloody Chamber	A Streetcar Named Desire Bloody Chamber
Knowledge	Biblical context, language and poetry terminology. Shakespeare's language and context.		Webster's context, characters and their motivations, poetry terminology.		Literary and dramatic techniques. Gothic context and themes.	
Skills	Articulate informed personal and creative responses to literary texts Demonstrate understanding of the significance and influence of context Analyse how meanings are shaped in literary texts	Explore literary texts informed by different interpretations Demonstrate understanding of the significance and influence of context	Explore connections between literary texts Demonstrate understanding of the significance and influence of context Analyse how meanings are shaped in literary texts Develop independent study and personal responses	Explore connections between literary texts Explore literary texts informed by different interpretations Demonstrate understanding of the significance and influence of context	Develop independent study and personal responses Articulate informed personal and creative responses to literary texts	Develop independent study and personal responses Articulate informed personal and creative responses to literary texts Demonstrate understanding of the significance and influence of context
Key questions	To what extent are humans 'free'? Is 'free will' an illusion or a reality?	Does intrinsic morality or governed law prevent 'evil' behaviour?	Is there a definitive amount of power? Does it transfer or multiply?	To what extent do we hide our true selves from the rest of the world?	Is it possible for women and men to become truly equal?	You can never escape your past. To what extent do you agree with this statement?
Assessment	'Measure for Measure' extract analysis	'Paradise Lost' essay question	'Measure for Measure' extract to whole text	'Duchess of Malfi' and 'Paradise Lost' comparison	Coursework draft	End of year mock (Paper 1)
Cross Curriculum Connections		Drama - analysis of dramatic effects - Year 12 HT6				

Any questions? Please contact Ms R Billig rbillig@george-spencer.notts.sch.uk

Our Year 12 Mathematics Curriculum

Exam board information- AQA A Level Mathematics 7357

Resources for home study and revision-

[Physics & Maths Tutor
www.madasmaths.com](http://www.madasmaths.com)
<https://undergroundmathematics.org/>

We aim to develop all students into mathematicians who:

- Have a coherent framework of knowledge about the mathematical areas of Number, Algebra, Geometry and Measure, Probability and Statistics, Ratio and Proportion;
- Become fluent in the language of mathematics, have the ability to reason mathematically and have confidence in solving increasingly complex problems by applying a combination of mathematical skills to routine and non-routine problems with increasing sophistication;
- Understand the practical applications of mathematics, relish the challenge that studying mathematics provides and believe that by working hard at mathematics they can succeed.

Big Ideas in Year 12 Mathematics: - Pure - Calculus, Trigonometric Functions, Logs and Exponentials, Geometry; Mechanics - Kinematics, Forces and Motion; Statistics - Working with Data, Hypothesis Testing

Making Connections

Our Year 12 Mathematics Curriculum will build on algebraic manipulation, solving equations and inequalities, coordinate geometry, trigonometry and the data handling cycle from the higher content at GSSE.

Our Year 12 Mathematics Curriculum will build towards using calculus on more complex problems including vectors, conducting hypothesis testing with different distributions and solving complex problems involving projectiles.

	HT1	HT2	HT3	HT4	HT5	HT6
Knowledge	<p>Teacher A <i>Pure Mathematics:</i> 1. Quadratics 2. Polynomials 3. Trigonometric Functions and equations</p> <p>Teacher B <i>Pure Mathematics:</i> 1. Indices and Surds 2. Using Graphs 3. Coordinate Geometry</p>	<p>Teacher A <i>Pure Mathematics:</i> 1. Differentiation 2. Applications of Differentiation 3. Integration</p> <p>Teacher B <i>Pure Mathematics</i> 1. Coordinate Geometry 2. Triangle Geometry 3. Binomial Expansion</p>	<p>Teacher A <i>Pure Mathematics:</i> 1. Logarithms 2. Exponential Mechanics: 3. Vectors</p> <p>Teacher B <i>Statistics</i> 1. Working with Statistical Data 2. Pure Maths Review</p>	<p>Teacher A <i>Mechanics</i> 1. Kinematics 2. Motion with Constant Acceleration 3. Forces and Newton's Laws</p> <p>Teacher B <i>Statistics</i> 1. Probability 2. Statistical Hypothesis Testing</p> <p><i>Pure Mathematics:</i> 3. Proof and Mathematical Communication.</p>	<p>Teacher A <i>Pure Mathematics:</i> Review <i>Mechanics</i> 1. Forces and Newton's Laws</p> <p>Teacher B <i>Statistics</i> 1. Large Data Set</p>	<p>Teacher A 1. Exam Preparation and Revision - retrieval of prior knowledge 2. Year 13 Topics- Rational Functions and Partial Fractions, Functions. Trigonometry</p> <p>Teacher B 1. Exam Preparation and Revision - retrieval or prior knowledge 2. Year 13 Topics Further Transformations of Graphs, General Binomial Expansion, Radian Measure</p>
Skills	Fluency, Problem Solving, Reasoning, Exam Technique					
Key questions	What are the different methods that can be used to solve a quadratic function?	What is the rule for differentiation with polynomials?	What are the different types of techniques used in proof?	How are displacement, velocity and acceleration linked to differentiation and integration?	Why is Newton's 3rd law important? What assumptions do you make?	When can you use the binomial expansion to approximate a function?
Assessment	Y11-Y12 Transition assessment Assessment: 2, 3, 4, 5	Assessment: 6, 10, 12	Assessment: All Y12 pure content	Assessment: 15, 16, 17, 20, 21	Assessment: All Y12 mechanics and statistics	GSA Y12 PPE All Y12 content
Cross Curriculum Connections		Physics Y10 HT5 Y12 Product Design - Trigonometric functions	Geography Y12, HT6			

Any questions? Please contact Mrs J. Cullen, jcullen@george-spencer.notts.sch.uk

Our Year 12 Further Mathematics Curriculum

Exam board information- AQA A Level Further Mathematics 7367

Resources for home study and revision-

[AMSP Revision Videos](#)
[Physics & Maths Tutor](#)
www.madasmaths.com

We aim to develop all students into mathematicians who:

- Have a coherent framework of knowledge about the mathematical areas of Number, Algebra, Geometry and Measure, Probability and Statistics, Ratio and Proportion;
- Become fluent in the language of mathematics, have the ability to reason mathematically and have confidence in solving increasingly complex problems by applying a combination of mathematical skills to routine and non-routine problems with increasing sophistication;
- Understand the practical applications of mathematics, relish the challenge that studying mathematics provides and believe that by working hard at mathematics they can succeed.

Big Ideas in Year 12 Further Mathematics -

Pure - introduction to Complex numbers, Roots of Polynomials, Conics, Hyperbolic Functions, Matrices, Vectors, Series and Proof. Discrete - introduction to the numerous algorithms associated with Graphs & Networks. Mechanics - introduction to kinematics, forces and motion.

Making Connections

Our Year 12 Further Mathematics Curriculum will build on algebraic manipulation, solving quadratics and inequalities, trigonometry, coordinate geometry, sketching and transforming graphs.

Our Year 12 Further Mathematics Curriculum will build towards De Moivre's Theorem for complex numbers, vectors between lines and planes in 3D, further calculus techniques and their applications, numerical methods and applications of differential equations.

	HT1	HT2	HT3	HT4	HT5	HT6
Knowledge	<p>Teacher A: Complex Numbers Loci in Complex Plane Roots of Polynomials</p> <p>Teacher B: Matrices Matrices Transformation</p> <p>Teacher C: Work, Energy and Power</p>	<p>Teacher A: Sums & Series Proof by Induction Hyperbolic Functions</p> <p>Teacher B: Graphs Networks Linear Programming</p> <p>Teacher C: Dimensional Analysis Momentum and Collisions</p>	<p>Teacher A: Further Calculus Further Vectors</p> <p>Teacher B: Graphs and Inequalities</p> <p>Teacher C: Momentum and Collisions Horizontal Circular Motion</p>	<p>Teacher A: Graph Theory Networks - Prims & Kruskal's Algo Critical Path Analysis</p> <p>Teacher C: Work, Energy and Power 2 Momentum and Collisions 2</p>	<p>Teacher A: Linear Programming Network Flows Game Theory Binary Operations</p> <p>Teacher C: Momentum and Collisions 2 Revision</p>	<p>Teacher A: Preparation for summer examination - retrieval of prior knowledge Flow Augmentation Simplex Algorithm</p> <p>Teacher B: Game Theory for Zero Sum Games Game Theory (higher order games)</p> <p>Teacher C: Circular Motion 1 (Horizontal circular motion in 3D)</p>
Skills	Fluency, Problem Solving, Reasoning, Exam Technique					
Key questions	Can you solve polynomial equations which may contain complex roots?	What are the key stages in any Proof by Induction proof	Describe how and when you would use the scalar product.	What is the difference between Prims and Kruskals?	What is max flow - min cut theorem in Networks.	Outline the key steps in the Simplex algorithm
Assessment	Topic Tests	Assessments Ch: 1,2,7,8,11.	Topic Tests	Y12 Pure Content Only	External Exam/PPE	GSA PPE Y12 Content
Cross Curriculum Connections	Y12 Computer Science - HT2 - Programming and Fundamentals of Data structures					

Any questions? Please contact Mrs J. Cullen, jcullen@george-spencer.notts.sch.uk

Our Year 12 Core Mathematics Curriculum

Exam board information- AQA Level 3 Mathematical Studies 1350

Resources for home study and revision-
AQA Mathematical Studies Workbook Level 3 Certificate
Letts AQA Mathematical Studies in a Week

We aim to develop all students into mathematicians who:

- Have a coherent framework of knowledge about the mathematical areas of Number, Algebra, Geometry and Measure, Probability and Statistics, Ratio and Proportion;
- Become fluent in the language of mathematics, have the ability to reason mathematically and have confidence in solving increasingly complex problems by applying a combination of mathematical skills to routine and non-routine problems with increasing sophistication;
- Understand the practical applications of mathematics, relish the challenge that studying mathematics provides and believe that by working hard at mathematics they can succeed.

Big Ideas in Year 12 Core Mathematics

Analysis of data, critical analysis of given data and models, using spreadsheets, Maths for personal finance, the normal distribution, correlation and regression, calculating and estimating probabilities.

Making Connections

Our Year 12 Core Mathematics Curriculum will build on Mathematical skills acquired at GCSE such as graphs, percentages, ratios, substitution into formulae and understanding probabilities.

Our Year 12 Core Mathematics Curriculum will build towards an understanding of personal finance, credit and the solution of financial problems, as well as the analysis of data and information using calculations and statistical techniques. These skills will be transferable to a number of further education courses and roles in business and industry.

	HT1	HT2	HT3	HT4	HT5	HT6
Knowledge	<p>Teacher A: Types of data and collecting data Sampling data Representing data numerically Representing data diagrammatically</p> <p>Teacher B: Numerical Calculation Introduction to Spreadsheet Percentages Taxation: Income Tax and National Insurance Repayments and credit</p>	<p>Teacher A The Normal Distribution Analyse Critically Correlation and Regression</p> <p>Teacher B Repayments and credit Interest Rates Taxation: Value Added tax (VAT) Graphical representation Solutions to financial problems</p>	<p>Teacher A Correlation and Regression Probabilities and estimation Limits of Accuracy</p> <p>Teacher B Fermi Estimation Equation of a straight line Perimeter. Circumference and area Similarity and Pythagorean theorem Surface area and similarity</p>	<p>Teacher A Probabilities and estimation</p> <p>Teacher B Analyse Critically Review of Preliminary material</p>	Revision - retrieval of prior knowledge	Examination
Skills	Fluency, Problem Solving, Reasoning, Exam Technique					
Key questions	How best to represent this data set.?	How much will this credit cost?	What knowledge can I use to make a useful estimate?	What skills can I use to analyse this information?		
Assessment	Topic Test (Wk 4)	Progress Test (Wk 12)		PPE (Wk 28)	AS Core Maths External Exam	
Cross Curriculum Connections	Standard deviation links with - Y12 Biology HT5 - Statistics	Normal Distribution links with - Y12 Biology HT5 - Statistics	Correlation links with Y12 Biology - correlation and causation. Y12 D&T - Theory and Application of Knowledge - HT3			

Any questions? Please contact Mrs J. Cullen, jcullen@george-spencer.notts.sch.uk

Our Year 12 History Curriculum

Exam board information- OCR A Level (2016 onwards)
 Russia 1894-1941 (15%)
 Alfred the Great and the Making of England 871-1016 (25%)
 Rebellion and Disorder in Tudor England 1485-1603 (40%)
 Coursework: Anglo-Saxon England (20%)

Resources for home study and revision-
 George Spencer History Hub

We aim to develop all students into historians who:

- Have a coherent framework of knowledge about the history of the local area, of Britain and of the wider world;
- Have the ability to deploy historical skills, including analysis, investigation, communication and evaluation of interpretations;
- Have a passion for learning about the past and understanding how this can help us make sense of our own identity and place in the world.

Big Ideas in Year 12 History

In Year 12 History students will study both Alfred the Great and the Making of England 871-1016, and Russia 1894-1941. In the Anglo Saxons course, students will study the creation of England and examine the challenges Anglo Saxons kings had against the Vikings. Meanwhile, the Russia module explores arguably one of the most important events in modern history which has shaped world politics over the past 100 years, analysing the nature of communism under the dictatorships of Lenin and Stalin. Students will be challenged to develop their skills in extended writing and evaluation of source evidence.

Making Connections

Our Year 12 History curriculum will build on key themes studied in GCSE History about revolution, democracy and dictatorship. Students will develop skills from KS3 and KS4 on source analysis and evaluation, formulating arguments based on evidence, and develop existing skills on causation, change and continuity.

Our Year 12 History curriculum will build towards the essential skills that will be needed for Year 13 including source analysis and interpretations which form the backbone of the Rebellions in Tudor England module. These skills are also vital as you undergo your own historical investigation as part of your coursework where you can truly explore the Anglo-Saxon era in more detail and depth - like a true historian!

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	Russia, Alfred the Great		Russia, Anglo Saxons			
Knowledge deepened and skills developed	<u>Chronology and Causation</u> Russia Alfred the Great <u>Cause and Consequence</u> Russia <u>Change and Continuity</u> Russia Alfred the Great <u>Evaluation and Analysis</u> Russia Alfred the Great <u>Critical source evaluation</u> Alfred the Great	<u>Chronology and Causation</u> Russia Alfred the Great <u>Cause and Consequence</u> Russia <u>Change and Continuity</u> Russia Alfred the Great <u>Evaluation and Analysis</u> Russia Alfred the Great <u>Critical source evaluation</u> Alfred the Great	<u>Chronology and Causation</u> Russia Edward and Athelstan <u>Cause and Consequence</u> Russia Edward and Athelstan <u>Change and Continuity</u> Russia Edward and Athelstan <u>Significance</u> Edward and Athelstan <u>Evaluation and Analysis</u> Russia Edward and Athelstan <u>Interpretations</u> Russia	<u>Cause and Consequence</u> Russia Edmund, Edgar and Eadred <u>Change and Continuity</u> Russia Edmund, Edgar and Eadred <u>Significance</u> Edmund, Edgar and Eadred <u>Evaluation and Analysis</u> Russia Edmund, Edgar and Eadred <u>Interpretations</u> Russia <u>Similarity and Difference</u> Russia	<u>Chronology and Causation</u> Russia Aethelred II Tudors <u>Cause and Consequence</u> Russia Aethelred II Tudors <u>Change and Continuity</u> Russia Aethelred II <u>Significance</u> Aethelred II <u>Evaluation and Analysis</u> Russia Aethelred II Tudors	<u>Chronology and Causation</u> Russia Tudors <u>Cause and Consequence</u> Russia Tudors <u>Change and Continuity</u> Russia <u>Evaluation and Analysis</u> Russia Tudors
Key questions	Why did the rule of Nicholas II from 1894 result in a failed revolution in 1905?	To what extent were Alfred's reforms innovative?	Was Communist rule shaped more by ideology or circumstance?	Assess the reasons why Eadred was able to defeat the Vikings.	How did Stalin transform the economy of the USSR in the 1930s?	How threatened was Henry VII by rebellion?
Assessment	Russia timed essay, Alfred and the Vikings	Russia timed exam paper, Alfred the Great timed essay	Russia timed exam paper, Anglo Saxons timed question	Russia timed exam paper, Eadred essay question	Russia timed paper, Aethelred II timed question	July PPE
Cross Curriculum Connections	Philosophy and Ethics, year 12, term 2 - Developments in Christian Thought Geography: Year 13, Term 2: Migration and identity Economics: Year 12: Term 2: Market failure and government intervention Politics Y12 HT4 - Unit 1 and 2					

Any questions? Please contact Miss Coell-Pemberton, scoell@george-spencer.notts.sch.uk

Our Year 12 Geography Curriculum

Exam board information- Edexcel A level
 Paper one: Edexcel 9GE01 - Physical Geography 30%
 Paper two: Edexcel 9GE02 - Human Geography 30%
 Paper three: Edexcel 9GE03 - Synoptic themes 20%
 Non-Examination Assessment (coursework) 20%

Resources for home study and revision- Geography A level textbooks: Hodder Edexcel A level book 1 and Pearson Edexcel AS/A level book 1

We aim to develop all students into geographers who:

- Have a detailed knowledge of places, human and physical processes and the relationships between them at local, national and global scales;
- Develop and apply the skills of geographical enquiry including fieldwork, numerical skills, data analysis, evaluation and effective written and verbal communication;
- Have an awareness and understanding of being a global citizen including environmental futures, diversity and sustainability.

Big Ideas in Year 12 Geography Topics in year 12 are split equally between physical and human geography, and enable students to explore geographies at a variety of scales from local to global. In human geography, students will gain an in-depth understanding of how places change over time in both the regeneration and globalisation topics. In physical geography, students will focus on large-scale changes to the physical environment at a variety of timescales from the immediate to geological time in both the coasts and tectonic topics.

Making Connections

Our Year 12 Geography Curriculum will build on skills and knowledge acquired at GCSE level. By Year 12, students will have an overview understanding of many important geography concepts such as the change in and growth of cities, the necessity of resources to human civilisation, human impacts on biomes, and physical processes that continue to shape our landscapes. Each of these concepts are explored in much more detail throughout our four Year 12 topics, regeneration, globalisation, coastal processes and tectonics.

Our Year 12 Geography Curriculum will build towards the most complex global topics in the geography course at Year 13. In Year 13, topics take on geopolitical themes surrounding world governance of climate change, water, migration and political power. The topics in Year 12 build skills and foundation knowledge that allow students to access these important, contemporary topics. Our Year 12 topics will also likely form the basis for the geographical investigation for students' NEA (coursework), which once completed, will account for 20% of the final A Level grade.

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	Coastal Landscapes and Change Regenerating Places		Tectonic Processes and Hazards Globalisation		Tectonic Processes and Hazards Globalisation NEA preparation	NEA preparation
Knowledge	Physical geography - geological structure in coastal landscapes Human geography - Place theory, perceptions and sense of place	Physical geography - Landforms of sea level change including rias and fjords Human geography - stakeholder conflict and measuring success of regeneration.	Physical geography - Plate tectonic theory (sea floor spreading, slab-push / ridge-pull) Human geography - acceleration of globalisation in the 21st century	Physical geography - Evaluation of the impacts of Tectonic hazards. Human geography - socio-economic benefits of TNCs for people in developing countries	Physical geography - Hazard management and vulnerability. Human geography - loss of culture through globalisation	Fieldwork and enquiry - stages of geographical enquiry process
Skills	Written analysis and evaluation Use of qualitative data Use of quantitative data	Written analysis and evaluation Use of qualitative data Use of quantitative data to examine the success of regeneration	Written analysis and evaluation Use of qualitative data Use of quantitative data	Written analysis and evaluation Use of qualitative data Use of quantitative data	Written analysis and evaluation Use of qualitative data Use of quantitative data Define research questions	Define research questions Knowledge and understanding of field methodologies Devise, implement and justify: data collection, sampling techniques
Key questions	Why do some places need regeneration, how is it achieved and how do we know it is successful?	How do coastal erosion and sea level change cause coastal risks?	Why are some locations more at risk from tectonic hazards and disasters?	How does the concept of globalisation affect places at local, national and international scales?	How can we investigate issues in geography using fieldwork?	How can we collect and present data to assess issues in geography?
Assessment	Regeneration enquiry question 1 assessment; Coasts enquiry question 1 assessment	Regeneration enquiry question 2 assessment; Coasts enquiry question 2 assessment	Regeneration unit assessment; Coasts unit assessment	Globalisation enquiry question 1 assessment; Tectonics enquiry question 1 assessment	Globalisation enquiry question 2-3 assessment; Tectonics enquiry question 2-3 assessment	Year 12 PPE: Globalisation; Regenerating Places; Coastal Landscapes and Change; Tectonics processes and hazards
Cross Curriculum Connections	<i>Link to Biology: Year 12, Term 3</i>	<i>Link to Design and Technology: Year 12, Term 2</i>	<i>Link to Economics: Year 13, Term 2</i>		<i>Link to Maths: Year 12, Term 2</i> <i>Link to Psychology: Year 13, Term 1</i>	<i>Link to Biology: Year 12, Term 3</i>

Any questions? Please contact Miss McCool, cmccool@george-spencer.notts.sch.uk

Our Year 12 Philosophy Curriculum

Exam board information- OCR Religious Studies A Level (2016 onwards)

Resources for home study and revision- A Level Textbook - OCR Religious Studies A Level Year 2 Student Book; My Revision Notes OCR A Level Religious Studies (Hodder Education): Religion and Philosophy, Religion and Ethics and Developments in Christian Thought

We aim to develop all students into philosophers who:

- Develop knowledge of different belief systems and behaviours of people in the UK and worldwide while understanding similarities and differences through the idea of diversity;
- Build the skills of analysis, empathy and debate while being able to showcase our own philosophical and ethical views in a respectful manner;
- Develop a passion and awareness of the big and small issues of life in a personal and global perspective, so we can be informed to make wise and ethical choices as a global citizen on a daily basis.

Big Ideas in Year 12 Philosophy

The Course includes 3 areas of study: Philosophy, Ethics and Developments in Christian Thought. Philosophical ideas that we explore are: the nature of God, whether or not you can use language to describe God and how we can prove the existence of non-physical entities. Ethical ideas include: if there is a right and wrong, the idea of a conscience and sexual ethics. Issues regarding developments in Christian thoughts include: Christianity and Feminism, do only Christians go to Heaven and does Christianity support communism?

Making Connections

Our Year 12 Philosophy Curriculum will build on Christian beliefs and practices studied in Years 10 and 11 and will build on some of the ethical issues found in the GCSE course such as: the sanctity of life, medical ethics and war and peace.

Our Year 12 Philosophy Curriculum will build towards analysing the best way to live ethically by comparing different ethical theories both religious and secular, the impact of Christianity including Christian principles, morals and how they may use a range of sources to come decide these and Philosophical ideas about the nature of suffering and how scholars have attempted to prove the existence of God.

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	PHILOSOPHY 1. Philosophical Language and Thought 2. The Existence of God 3. God and the World		ETHICS 1. Normative Ethical Theories: Religious Approaches 2. Normative Ethical Theories 3. Applied Ethics		DEVELOPMENTS IN RELIGIOUS THOUGHT (CHRISTIANITY) 1. Insight 2. Foundations 3. Living	
Knowledge	Considering the impact that ancient western philosophy has on the modern world and on modern philosophy. Reflecting on the developments in neuroscience and whether or not there is more to human experience. Evaluating the impact, the belief in God may have on someone's life. Questioning how far people can ever be trustworthy and how that may impact relationships.		What is right and wrong? Considering how you can reconcile all of the different views on how to live your life in a good way. Reflecting on how society uses different ethical systems to maintain harmony. What impact do Euthanasia laws have?		The nature of humanity and our potential to be both good and evil. Considering the effect that life after death may have on various groups of people. Reflecting on the impact of Jesus throughout history and also in the modern world, to both religious and non-religious people.	
Skills	Discussion, debate and critical analysis Analysis and Evaluation		Application, depth of understanding, exploring contemporary issues Analysis and Evaluation		Interpretation, discussion, investigation Analysis and Evaluation	
Key questions	What is God like? Do good and bad actually exist?	Can God be described? Is the conscience reliable?	Can God be verified? Which sexual relationships are 'ethical'?	Are all religions equal? Are men and women equal?	What is the relationship between religion and society? What is the link between religion and society?	Is morality absolute or relative? Can we use empirical data to prove the existence of God?
Assessment	Free will 40-mark essay	Religious Language assessment Meta Ethics assessment	Inter-faith dialogue, 40-mark essay	Developments in religious thought, 40-mark essay	Secularism 40-mark essay	Philosophy Topics: Nature or Attributes of God Religious Language Meta ethics assessment
Cross Curriculum Connections	Link to Psychology year 13 Autumn HT1 - Relationships, Schizophrenia and religious experience					Link to History Y12 Autumn and Spring term - Alfred the Great and the Making of England 871-1066

Any questions? Please contact Mrs Parr, eparr@george-spencer.notts.sch.uk

Our Year 12 Psychology Curriculum

Exam board information - The course follows the AQA specification .Paper 1 - Introductory topics in Psychology
Paper 2 - Psychology in context
Paper 3 - Issues and options in Psychology

Resources for home study and revision

- online textbook <https://www.illuminate.digital/>
- AQA Psychology for A Level Year 1 & AS Revision Guide – 2nd Edition - optional revision guide- ISBN: 9781912820436
- <https://www.tutor2u.net/psychology/videos> & Seneca
-psychology google classroom

We aim to develop all students into psychologists who can:

- Demonstrate knowledge and understanding of psychological concepts, theories, research studies, research methods and ethical issues in the range of required modules and be able to apply this to a range of contexts;
- Build skills in the analysis and evaluation of psychological concepts, theories, research studies and research methods;
- Appreciate the range of influences on human behaviour, and how an interactionist approach is needed to provide full explanations.

Big Ideas in Year 12 Psychology - Psychology is a science which studies the mind and behaviour - we learn about what makes us who we are. The varied modules answer questions such as why do we conform and obey orders; how does our memory work and why it lets us down; why do some people have phobias and OCD? Students explore the practical applications of psychology, with valuable contributions from improving the accuracy of eyewitness testimony to developing therapies for those with anxiety. This is all underpinned by developing an understanding of how behaviour is investigated by a variety of research techniques.

Making Connections

Our Year 12 Psychology Curriculum will build on varied skills and knowledge from prior studies - including the human biology that students have learned in Science, the source analysis & discussion learned in Social Sciences, and data analysis & interpretation from Maths. Some students will have studied GCSE Psychology, but this is not a prerequisite.

Our Year 12 Psychology Curriculum will build towards the critical analysis required in elaborated evaluation for the more complex Year 13 modules. This is achieved, through weighing up the value, validity and reliability of research evidence and different approaches to explaining behaviour. The Research Methods knowledge underpins the statistics and research design skills developed in Year 13.

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	Biopsychology Social Influence Psychopathology	Social Influence Psychopathology Memory	Attachment Memory Approaches	Attachment Approaches Research Methods	Research Methods	Relationships Aggression Revision
Knowledge	Ethical issues in psychological research e.g. the tyranny from Zimbardo's study.	Developing hinterland knowledge and case studies to enable students to gain a deeper understanding of psychopathology beyond their own limited experiences.	Demand characteristics in psychological research. Issues with clinical evidence. Importance of statistical significance	Cultural bias in psychological research and the issues of generalising results to non-western societies.	Ethical issues and how to plan to avoid them. Evaluation of research method design.	Retrieval of prior knowledge
Skills	Sequencing information Application to human behaviour Effective studying Introduction to effective evaluation of research studies and theories Writing short answer exam questions	Analysing appropriateness and effectiveness of psychological treatments Embedding effective evaluation using PET structure Writing psychological essays	Comparing and contrasting theories & approaches Application to human behaviour Analysis and evaluation	Application to human behaviour Analysis and evaluation Data analysis	Data analysis How to conduct research	Developing evaluation skills through use of counter-arguments. Designing & conducting research studies Revision skills
Key questions	How does adrenaline link to stress?	How can we explain social change?	How can eyewitness testimony be unreliable?	How do early bonds affect your later relationships?	Why are we attracted to some people and not others?	Why do we behave aggressively?
Assessment	Biopsychology	Social Influence Psychopathology	Memory	Attachment	Research Methods	Paper 1 PPE
Cross Curriculum Connections	Social Influence - SOCIOLOGY: Yr13 Crime and deviance unit	Philosophy: Year 13 term 2, Conscience Memory - PE Baddeley and Hitch, working memory model memory system	BIOLOGY: Inheritance and disease (year 12 term 2) BIOLOGY: Evolution and Natural selection (year 12 term 2) CRIMINOLOGY -AC 2.2.2 Describe individualistic theories of criminality SOCIOLOGY: Yr 12 Family and household's unit Topic 2 – Childhood CRIMINOLOGY - AC 2.2.2 Describe individualistic theories of criminality	Approaches - BIOLOGY: Inheritance and disease (year 12 term 2) Approaches - BIOLOGY: Evolution and Natural selection (year 12 term 2) Research Methods - non-experimental methods - SOCIOLOGY: Yr 12 research methods and Yr 13 theory and methods unit	Research Methods - data analysis - MATHS year 12 correlations & analysis of standard deviation	CRIMINOLOGY - AC 2.2.1 Describe biological theories of criminality, 2.2.2 Describe individualistic theories of criminality PE Year 13 Autumn HT2 Aggression

Any questions? Please contact [Ms Wright](mailto:swright@george-spencer.notts.sch.uk), swright@george-spencer.notts.sch.uk

Our Year 12 Sociology Curriculum

Exam board information- AQA

Resources for home study and revision-

Succeed at A Level Sociology Book One Including AS Level: The Complete Revision Guide

We aim to develop all students into sociologists who can:

- Demonstrate knowledge of a range of sociological theories, perspectives, studies and research methods;
- Analyse, evaluate and apply sociological theories, concepts, evidence and research methods;
- Critically examine inequality and diversity in modern British society including the siting of UK society within its globalised context.

Big Ideas in Year 12 Sociology

Students study the following core themes: socialisation, culture and identity, social differentiation, power and stratification. Broadly, this involves looking at the impact of social class, ethnicity and gender on individuals and groups. The themes will be applied to the topics taught. These themes are threads running through many areas of social life. In addition, students must understand the significance of conflict and consensus, social structure and social action, and the role of values.

Making Connections

Our Year 12 Sociology Curriculum will build on skills and knowledge developed in the sciences and humanities at GCSE. Appealing to a cross-section of students, regardless of whether they have studied the subject before, Sociology is a core subject in Humanities that develops broad transferable skills.

Our Year 12 Sociology Curriculum will build towards a successful transition into Year 13 studies. The key themes are developed and explored in greater depth. A more philosophical approach allows students to make connections to other A Level subjects, and importantly, prepares students for Higher Education courses and employment.

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	Family: Childhood Couples Perspectives Patterns	Family Diversity Demographics Policies	Education Class, Gender, Ethnic differences	Education Government policies Perspectives Research methods	Research methods Revision	Research methods
Knowledge	The socialisation process within families	Diversity including multi-cultural Britain, same-sex couples and other versions of families based on choice and identity.	Cultural deprivation - features, reasons and impacts.	meritocracy - from a political and theoretical perspective	Verstehen - the idea of understanding human behaviour.	Key concepts to be revisited and developed for exam purposes. Retrieval of prior knowledge
Skills	Note taking Folder organisation Short answer technique Short essay technique	Essay technique Intro to analysis Application of knowledge to answer questions Long essay development	Analysis Application	Revision techniques Analysis Higher evaluation Selection of material	Exam questions and rubric Applied revision	Long exam essay content and skills 10 mark 'analysis' questions
Key questions	Is childhood disappearing?	How do government policies impact the family?	Why is class important in educational chances?	Is the education system working?	Are official statistics fact?	Why is studying humans so different?
Assessment	Half-term assessment	End of unit assessment	End of topic assessment	End of unit assessment	Topic timed essay	PPE
Cross Curriculum Connections	Philosophy year 13 term 2 - Sexual ethics Psychology year 12 Spring HT1 - 4.1.3 Attachment - Paper 1 Introductory Topics in Psychology – links to family Sociology link: Yr 12 Family and households unit Topic 2 - Childhood				Psychology year 12 summer term 1 - 4.2.3 Research Methods - Paper 2 Psychology in Context – links to interviews, questionnaires, observations Sociology link Yr 12 research methods and Yr 13 theory and methods unit	Philosophy year 13 term 2 - Sexual ethics Psychology year 12 Spring HT1 - 4.1.3 Attachment - Paper 1 Introductory Topics in Psychology – links to family Sociology link: Yr 12 Family and households unit Topic 2 - Childhood

Any questions? Please contact Mr L. Prior, lxprior@george-spencer.notts.sch.uk

Our Year 12 Government and Politics Curriculum

Exam board information- Pearson Edexcel Level 3 Advanced GCE in Politics (9PL0)

Resources for home study and revision-
My Revision Notes: Edexcel Politics (McNaughton)
Edexcel Politics Student Guides (McNaughton)

We aim to develop all students into critical thinkers who:

- Have a coherent framework of knowledge about democracy, political participation, the constitution and sovereignty;
- Can deploy the skills of analysing connections and parallels, similarities and differences between political concepts;
- Have the ability to think critically about the role of politics in the wider world and make sense of current affairs.

Big Ideas in Year 12 Government and Politics

Year 12 Politics is the story of how the US political system has been shaped by a wide variety of factors. We begin by investigating how people and politics interact, understanding the individual in the political process and their relationship with the state. We will scrutinise where, how and by whom political decisions are made, whilst continually making comparisons to government and politics in the UK.

Making Connections

Our Year 12 Government and Politics Curriculum will build on students' understanding of how democracy has changed over time, including the relationship between Parliament and rulers, developed throughout KS3/4 History, and develop skills in source analysis and evaluation from History and English Language.

Our Year 12 Government and Politics Curriculum will build towards the Year 13 curriculum by giving students a more secure grounding in US Government and Politics in order to draw out parallels and contrasts with the UK political system. Understanding of how individuals can shape politics helps to contextualise how groups and individuals rebelled against the state in Year 13 History (Tudor Rebellions).

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	9PL0/3A Unit 3: US Constitution and federalism Unit 3: US Congress Unit 3: US Presidency	Unit 3: US Presidency Unit 3: US Supreme Court and civil rights Unit 3: US democracy and participation	Unit 2: Relations between branches of government Unit 1: Democracy and Participation Unit 1: Political Parties	Unit 1: Electoral Systems Unit 1: Voting behaviour and the media Unit 2: The Constitution	Unit 2: Parliament Unit 2: PM + Executive Unit 1: Conservatism	Unit 1: Conservatism Unit 1: Liberalism Unit 2: Socialism Unit 2: Nationalism
Knowledge deepened and skills developed	<u>Similarity and difference</u> Comparing US federalism to UK devolution Comparing US Congress to UK Parliament <u>Analysis and evaluation</u> The extent to which the Constitution remains fit for purpose The extent to which Congress is effective at carrying out its functions as outlined by the Constitution <u>Critical thinking</u> Why there are similarities/differences between federalism and devolution, and between Congress and Parliament, using comparative theory <u>Using case studies</u> The 10th Amendment The 117th Congress compared to previous Congresses	<u>Similarity and difference</u> Comparing the US President to the UK Prime Minister Comparing the US Supreme Court to the UK Supreme Court Comparing US political parties/elections to the UK <u>Analysis and evaluation</u> The extent to which the US President is imperial or imperilled The extent to which the Supreme Court is adept at protecting race and rights in the US today <u>Critical thinking</u> Why there are similarities/differences between the President and the Prime Minister, and between the Supreme Courts in the US and UK, using comparative theory <u>Using case studies</u> Biden's Cabinet Roe v Wade Interest groups in the USA	<u>Comparison and debate</u> The location of sovereignty in the UK's political system <u>Significance</u> The role of UK political parties in democratic systems <u>Handling data</u> Election turnout figures, activities of pressure groups etc. as evidence for or against a participation crisis <u>Critical thinking</u> The extent to which the balance of power between Parliament and the Executive has changed over time <u>Analysis and evaluation</u> The extent to which the UK is a two-party system <u>Using case studies</u> Contemporary pressure groups Contemporary think-tanks and lobbyists	<u>Comparison and debate</u> The strengths and weaknesses of FPTP in comparison with proportional election systems Debates on further devolution, including an English Parliament <u>Handling data</u> Analysis of election results Electoral systems analysis <u>Critical thinking</u> The importance of social factors in determining the results of general elections How the constitution has changed since 1997 <u>Analysis and evaluation</u> The extent to which the media plays a crucial role in election results <u>Using case studies</u> General elections in 1979, 1997, 2015, 2019	<u>Similarity and difference</u> Strands of conservatism: traditional, one nation and New Right conservatives <u>Analysis and evaluation</u> The extent to which ministerial responsibility applies in the current political context <u>Critical thinking</u> The importance of parliamentary scrutiny of the Executive The strengths and weaknesses of the legislative process <u>Comparison and debate</u> The powers of the House of Lords in comparison with the House of Commons <u>Case studies</u> Successes and failures of Prime Ministers: Wilson, Thatcher, Blair, Cameron, May Key conservative thinkers	<u>Similarity and difference</u> Strands of liberalism, socialism and nationalism <u>Analysis and evaluation</u> Similarities and differences between ideological strands on the economy, society, state and human nature <u>Critical thinking</u> The importance of the nation-state to nationalist thinkers The importance of workers' control to socialist thinkers <u>Case studies</u> Key liberal, socialist and nationalist thinkers
Key questions	Why is the legislative output of Congress lower than that of the UK Parliament?	What factors affect the extent of power exercised by the president?	To what extent is the UK in urgent need of democratic reform?	Does social class still determine voting behaviour?	How far is the prime minister <i>really</i> a president in all but name?	To what extent do conservatives agree about the state and society?
Assessment	"Examine" and "Analyse" 12-mark questions - Unit 3	"Evaluate" 30-mark questions: Unit 3	Unit 1 "Evaluate" question	Unit 1 "Evaluate" question and source question	Unit 2 "Evaluate" question and source question	PPE: Unit 3 (US government and politics)
Cross Curriculum Connections	History Year 9, HT5: Civil Rights movement Geography Year 13: Superpowers	History Year 8, HT1: Parliament and Charles I	History Y13: Tudor Rebellions	History Y12, HT1: The Russian Dumas History Year 8, HT1: Parliament and Charles I	History Year 12, HT2: Lenin and Marxism	

Any questions? Please contact Mr T. Hopkins-Burke, thopkins-burke@george-spencer.notts.sch.uk

Our Year 12 Criminology Curriculum

Exam board information- WJEC

- 1 Changing Awareness of Crime - Coursework assessment
- 2 Criminological Theories Mandatory - Examination

Resources for home study and revision-

- WJEC Level 3 Applied Certificate & Diploma Criminology: Study and Revision Guide, ISBN 1911208969
- WJEC Level 3 Applied Certificate & Diploma Criminology: Revised Edition, ISBN 1912820986
- Criminology Book One for the WJEC Level 3 Applied Certificate & Diploma, ISBN 1838271503

We aim to develop students who:

- Are supported in their progression from any study at Level 2, particularly GCSEs in Psychology, History and Humanities;
- Understand that criminology is relevant to many job roles within the criminal justice sector, social and probation work and sociology and psychology;
- Can demonstrate understanding of different types of crime, influences on perceptions of crime and why some crimes are unreported.

Big Ideas in Year 12 Criminology

Research and analyse a wide variety of crimes as a foundation for the course. Develop case studies of famous criminals such as Harold Shipman, Ian Huntley and Jill Dando to use as examples in assessments. Investigate crime campaigns that have had an impact on laws, public perception and reporting. Answer key questions including what makes someone commit a crime, is there a certain criminal personality type and can criminality be inherited? What do crime scene investigators do, and is their role effective? What can we learn from forensic evidence?

Making Connections

Our Year 12 Criminology Curriculum will build on learners' progression from any study at GCSE, particularly in Psychology, Citizenship, History, Geography and Philosophy and Ethics. The broader skills gained in GCSE English and Maths will also be developed.

Our Year 12 Criminology Curriculum will build towards an understanding of the processes involved in the criminal justice system. The gathering and presentation of evidence, the roles in the courtroom and the impact of sentencing will be developed and evaluated.

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	Introduction to Criminology Campaigns for change Media used in campaigns Types of Crime	Media used in campaigns Plan a campaign Design materials for use in campaigning for change Justify campaigns for change Unreported crime - reasons and consequences Media representation of crime & impact Methods of collecting statistics about crime	Unit 1 Controlled Assessment Crime vs deviance Social construction of criminality Theories of criminality - biological & sociological	Theories of criminality biological, individualistic, sociological Evaluate the effectiveness of criminological theories to explain causes of criminality Analyse situations of criminality Assess the use of criminological theories in informing policy development	Evaluate the effectiveness of criminological theories to explain causes of criminality Analyse situations of criminality Assess the use of criminological theories in informing policy development Revision May Unit 2 Exam	Year 13 material Understand the process of criminal investigations Understand the process for prosecution of suspects
Knowledge	Campaign case studies with an emphasis on current campaigns (hate crimes, domestic abuse, cybercrime) and also including non-crime campaigns. Explain the reasons that certain crimes are unreported Explain the consequences of unreported crime.	Media representation of crime. Deepening knowledge of 'older' films, songs and TV representation of crime. Describe media representation of crime. Explain the impact of media representations on the public perception of crime.	Theories of criminality. Focus on linking theories (to practical situations and real-life crime. Explain the social construction of criminality	Policies relating to crime reduction. Developing case studies of real-life application (CCTV, gated communities etc) of crime prevention theory and policy. Describe biological theories of criminality Describe individualistic theories of criminality Describe sociological theories of criminality.	Retrieval of prior knowledge Explain how social changes affect policy development.	Personnel in the CJS. Student investigations of the role and responsibilities of key personnel in the CJS including prosecutors, judges and magistrates. Knowledge of each of the stages of the trial process including the roles of the personnel involved. Understanding of how evidence is used in court. Understanding of the role of the CPS. Learners should explain the evidential and public interest tests in the decision to prosecute.
Skills	Analysis, Compare and Contrast	Evaluate, Planning, design, Justifying	Compare and Contrast CA preparation	Analyse, Evaluate, Assess	Discussions, Evaluate, Assess, revision skills	Evaluate, Assess
Key questions	What campaigns to change laws have worked?	Why are crime statistics not very good?	What makes people commit crime?	How can crime be reduced?	Which explanation for crime is the most realistic?	What happens at crime scenes? What happens in court?
Assessment	Comparison of campaigns for change timed assessment	Controlled Assessment PPE	Controlled Assessment	Unit 2 PPE	Unit 2 examination	Trial processes timed assessment
Cross Curriculum Connections	Business Studies Analysing financial performance 3.5.2 - links to budgeting when designing campaign Year 12 Media Studies – Media Language and Representation. Term 1 Advertising unit Sociology Types of crime statistics. 4.3.1 Crime and Deviance	Business Studies Analysing financial performance 3.5.2 - links to budgeting when designing campaign Year 12 Media Studies – Media Language and Representation. Term 1 Advertising unit	Biological explanations within Psychology e.g Aggression 4.3.8 & Schizophrenia 4.3.5 Sociology A Level causes of crime.		Biology - HT1 Y13 Unit 6 Topic Forensics Sociology A level. Media impact AC2.4 Assess key influences affecting the outcomes of criminal cases	Business Studies Analysing financial performance 3.5.2 - links to budgeting when designing campaign Year 12 Media Studies – Media Language and Representation. Term 1 Advertising unit Sociology Types of crime statistics. 4.3.1 Crime and Deviance

Any questions? Please contact Mr L. Prior, lxprior@george-spencer.notts.sch.uk

Our Year 12 Media Studies Curriculum

Exam board information- OCR

Resources for home study and revision- Student hub > Subjects > English & Media > Media Studies Hub Website

We aim to develop students of Media who:

- Widen their intellectual horizons through the study of global, national, historical and contemporary media texts;
- Develop independent, reflective, analytical, evaluative and practical skills in the study and creation of media texts;
- Enjoy a lifelong love of media texts and benefit from an enquiring mind when experiencing these texts.

Big Ideas in Year 12 Media Studies

A Level in Media Studies encourages students to study the media in an academic context and apply the knowledge and understanding gained to their own media productions. They develop critical thinking skills as they study the media in both global and historical contexts. Students will study the news, both in print and online; radio, gaming and film, considering how audiences are targeted and how these forms work within the creative industries which are a major player in the UK economy.

Making Connections

Our Year 12 Media Studies Curriculum will build on students' own love of media texts. Some students will have studied Media Studies for GCSE others will come new to the subject. Analytical skills developed in GCSE Media or English will be developed to study a range of media forms and texts.

Our Year 12 Media Studies Curriculum will build towards the skills needed for A Level Media in year 13. Analytical and creative skills will be developed and exam practice will be undertaken so that students are confident to take PPEs and A-Level examination.

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	1 Media Language and Representation (Paper 1) 2 Long Form TV Drama (Paper 2)		Long Form TV Drama (Paper 2)		Non-examined assessment	
Knowledge	Media Language terminology for print and moving image. Contextual knowledge of contemporary society. LFTVD Industry. Positioning of streaming services in industry. Finances. Regulation. Audience demographics and means of attraction. Structure of texts and differences between English language and non-English Language texts. Detailed knowledge of two set texts Stranger Things and Deutschland 83 Set theories/ theorists		LFTVD Industry. Positioning of streaming services in industry. Finances. Regulation. Audience demographics and means of attraction. Structure of texts and differences between English language and non-English Language texts. Detailed knowledge of two set texts Stranger Things and Deutschland 83 Set theories/ theorists		Conventions of production texts.	
Skills	ML & Representation Textual analysis of print texts and music videos. Use of appropriate terminology and developing connotative analysis.		LFTVD Textual analysis of moving image texts. Application of industry, audience and contextual knowledge to analysis of LFTVD set texts.		Application of understanding of issues regarding representation and media language Camera, sound, editing skills in creation of own cross-media product	
Key questions	How do texts use media language to communicate with audiences?	How are representations created in media texts?	How are representations and media language used in TV?	What place do LFTV dramas have in the TV industry?	How can I ensure that I have clear and sophisticated representations in my NEA	
Assessment	Advert Analysis	Magazine essay	Textual analysis TV	Representations TV	NEA	PPE - LFTVD, Magazines, Music Videos, Advertising
Cross Curriculum Connections	English Language - Y12 (HT2) Linguistic Methods					

Any questions? Please contact Miss M. Dughan, mdughan@george-spencer.notts.sch.uk

Our Year 12 Biology Curriculum

Exam board information- Edexcel (SNAB) Biology A

Resources for home study and revision-

<https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/biology-a-2015.coursematerials.html#%2FfilterQuery=category:Pearson-UK:Category%2FExam-materials>

We aim to develop all students into scientists who:

- Have opportunities to indulge their natural curiosity for science, leading to a lifelong passion;
- Are scientifically confident and skilled learners with potential for embarking upon STEM-based careers;
- Have a broad and deep knowledge of the sciences through immersion in our engaging spiral curriculum.

Big Ideas in Year 12 Biology

The 'code of life' is held within each and every cell of our bodies. It determines who we are, how we feel, what we can and cannot do, as well as having the ability to cause significant problems if it goes wrong. Over year 12 Biology, we will investigate how our genes and the environment interact, how the bodies of a variety of living things are perfectly adapted to sustaining life on Earth, and how our genes and the lifestyle choices we make can have both positive and negative consequences to our health and wellbeing.

Making Connections

Our Year 12 Biology Curriculum will build on the heart and blood vessels, coronary heart disease, non-communicable disease, exchange surface, transport across membranes, enzymes, DNA, protein synthesis, inheritance, mitosis, meiosis, stem cells, natural selection, ecology, classification, biodiversity, conservation, transport in plants.

Our Year 12 Biology Curriculum will build towards an understanding of how heart rate is initiated and controlled supported by anatomical knowledge gained in B1, an appreciation of the role of the polymerase chain reaction in DNA profiling based on fundamental understanding of DNA replication in B2, and detailed explanations of speciation building on the mechanism of natural selection studied in B4.

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	Lifestyle, health and risk (Teacher A) Genes and Health (Teacher B)	Lifestyle, health and risk (Teacher A) Genes and Health (Teacher B)	Biodiversity (Teacher A) Voice of the Genome (Teacher B)	Biodiversity (Teacher A) Voice of the Genome (Teacher B)	Biodiversity (Teacher A) Voice of the Genome (Teacher B) Revision PPE Prep	Global Warming Project (Introduction to Year 13)
Knowledge	Topic 1: The Heart - Cardiovascular system and disease - The role of blood clotting - Preventing CVD - Biological molecules Topic 2: Cell structure - Transport in cells - Proteins and their synthesis - DNA - Mutations - Cystic fibrosis	Topic 1: The Heart - Cardiovascular system and disease - The role of blood clotting - Preventing CVD - Biological molecules Topic 2: Cell structure - Transport in cells - Proteins and their synthesis - DNA - Mutations - Cystic fibrosis	Topic 3: Cell organelles and functions - Mitosis and Meiosis - Fertilisation - Sex-linkage - Inheritance - Stem cells - Epigenetics - cloning Topic 4: Biodiversity - Natural selection - Classification - Conservation - Plant structures and transport - Drug trials - Sustainability	Topic 3: Cell organelles and functions - Mitosis and Meiosis - Fertilisation - Sex-linkage - Inheritance - Stem cells - Epigenetics - cloning Topic 4: Biodiversity - Natural selection - Classification - Conservation - Plant structures and transport - Drug trials - Sustainability	Topic 3: Cell organelles and functions - Mitosis and Meiosis - Fertilisation - Sex-linkage - Inheritance - Stem cells - Epigenetics - cloning Topic 4: Biodiversity - Natural selection - Classification - Conservation - Plant structures and transport - Drug trials - Sustainability	Global warming - Climate change - Evidence for global warming - Predicting future models Retrieval of prior knowledge
Skills	Practical CPACs Practical 1, 3 Command words for examination questions A4 Maths skills (Geometry and trigonometry)	Practical CPACs Practical 4 A3 Maths skills (graphs and data interpretation)	Practical CPACs Practical 2	Practical CPACs Practical 5, 6, 7, 8, 9 Longer response questions A1 Maths skills (Handling data)	Practical CPACs A1, A3, A4 maths skills (Geometry and trigonometry, graphs, handling data)	Practical CPACs A2 Maths skills (algebra) Synoptic links
Key questions	Why do large organisms need transport systems?	Is it okay to alter our genes if it prevents life-limiting diseases?	Do regulatory authorities hinder scientific developments?	Have humans stopped evolving?	What is the Millennium Seed Bank Project?	Is anthropogenic climate change based upon scientific evidence
Assessment	Topic 1 and 2 mid-topic tests	Topic 1 and 2 end of topic tests	Topic 3 and 4 mid-topic tests	Required practical and Stats test	Topic 3 and 4 end of topic tests	AS Level Paper 1 and 2 PPEs
Cross Curriculum Connections	P.E (Y12 HT1) Cardiovascular	Core Maths (correlation and causation) - Y12 HT4	Psychology (Y12 term 1+2) Genotype, phenotype and the genetic basis of behaviour + evolution Geography Y12 Term 1 - Regenerating Places	Psychology - Y12 HT4 Application to human behaviour	Core Maths (stats) Y12 HT1	Geography (Y12 term 1) Plant succession, sand dunes and salt marshes

Any questions? Please contact Dr. C. Jones, cjones@george-spencer.notts.sch.uk

Our Year 12 Chemistry Curriculum

Exam board information- AQA GCE A level
Chemistry course code 7405

Resources for home study and revision-

<https://www.aqa.org.uk/subjects/science/as-and-a-level/chemistry-7404-7405/assessment-resources?f.Resource+type%7C6=Question+papers>

We aim to develop all students into scientists who:

- Have opportunities to indulge their natural curiosity for science, leading to a lifelong passion;
- Are scientifically confident and skilled learners with potential for embarking upon STEM-based careers;
- Have a broad and deep knowledge of the sciences through immersion in our engaging spiral curriculum.

Big Ideas in Year 12 Chemistry: The behaviour of all substances is determined by a number of crucial atomic features. In Year 12 Chemistry we study patterns and trends in the behaviour of matter, enabling a deeper appreciation of chemical reactivity. In our journey toward a sustainable future, understanding this will be of vital importance. In class, we arrive at answers to a wide variety of fundamental questions, including why are some reactions so quick to occur, whilst others never seem to, no matter how much we try to make them.

Making Connections

Our Year 12 Chemistry Curriculum will build on the ideas of atomic structure, bonding, organic, chemistry, rates of reaction, quantitative and qualitative chemistry. Practical and theoretical skills will enable you to question and investigate many of the ideas from GCSE.

Our Year 12 Chemistry Curriculum will build towards further study of the trends in the periodic table, links between organic compounds, thermodynamics and the behaviour of molecules in drug development. The use of analytical and practical techniques will continue to improve evaluative and problem-solving skills.

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	3.1.2 Amount of substance 3.1.1 Atomic Structure 3.3.1 Intro to Organic Chemistry 3.3.2 Alkanes	3.1.3 Bonding 3.3.3 Haloalkanes 3.3.4 Alkenes	3.1.4 Energetics 3.1.5 Kinetics 3.3.5 Alcohols 3.3.8 Aldehydes and Ketones	3.2.1 Periodicity 3.2.2 Group 2 3.1.7 Oxidation and Reduction 3.2.3 Group 7 3.3.7 Optical Isomerism 3.3.9 Carboxylic acids and Derivatives	3.1.6 Chemical Equilibria 3.3.6 Organic Analysis 3.3.10 Aromatic Chemistry 3.3.12 Polymers	PPE preparation Directed improvement of Lab Skills
Knowledge	Chemical amount Behaviour of the electron Organic Principles, including nomenclature and isomerism. Fractional distillation and Cracking	Material properties in relation to internal forces Reactivity of organic substances in relation to environmental chemistry Reaction Mechanisms	Measurement of heat movement and reaction speed by indirect and practical methods Fuels and their use Relationships between organic families	Periodic trends in physical properties. Trends in group 2 and 7 chemical properties. Redox Enantiomers and their properties Organic acids and their reactions	Expressing the balance of reversible processes. Identifying organic molecules. Evidence for and chemistry of organic ring structures. Polymerisation and the behaviour of polymers	Atomic and macroscopic chemical behaviours. Energy movement Reaction speed Chemical Balance Group 2,7 and Carbon Chemistry Redox Analytical Chemistry Retrieval of prior knowledge
Skills	Practical Competencies Required practical 1 Maths skills Units/ratios/standard form/equations/uncertainty	Required Practical 4 (part 2) Maths skills 2D and 3D geometry	Practical Competencies Required Practical 2/3/5 Maths skills Ratios/uncertainty	Practical Competencies Required Practical 4 Maths skills Equations	Practical Competencies Required Practical 6 Maths skills Translate data	Exam technique. CPAC Skills, including Analysis and interpretation of Scientific data. Using ICT to analyse situations and process data.
Key questions	What does amount of substance mean, in different practical settings?	How far does our GCSE model of the atom apply at A level?	How can the behaviour of alkanes be explained by their bonding?	How can our understanding of molecules help us to preserve our environment?	Is food full of chemicals?	Can carbon chemistry solve all our problems?
Assessment	3.1.1 assessment Required practical 1 3.3.1 and 3.3.2 assessment	3.1.2 and 3.1.3 Assessment 3.3.3 and 3.3.4 assessment	Required practical 2 and 3 Required practical 5 3.3.5 and 3.3.8 Assessment	3.2.1 / 3.2.2 / 3.1.7 / 3.2.3 Assessment Required Practical 4 3.3.7 and 3.3.9 Assessment	3.1.6 and 3.3.6 Assessment Required Practical 6 3.3.10 and 3.3.12 Assessment	Lab tasks assessed according to CPAC
Cross Curriculum Connections	Amount of substance. Multi Step calculations and application of quantitative science → link to physics.		Chemistry and Physics Energy at KS4		Chemical Equilibria. Processing equations at KS4	

Any questions? Please contact Dr. C. Jones, cjones@george-spencer.notts.sch.uk

Our Year 12 Physics Curriculum

Exam board information-

Edexcel GCE Physics - Concept Led Approach.

<https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/physics-2015.html>

Resources for home study and revision- Google Classroom

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- Have opportunities to indulge their natural curiosity for science, leading to a lifelong passion;
- Are scientifically confident and skilled learners with potential for embarking upon STEM-based careers;
- Have a broad and deep knowledge of the sciences through immersion in our engaging spiral curriculum.

Big Ideas in Year 12 Physics

The foundational building blocks for developing highly skilled Physicists are laid in Y12. Core concepts and models including mechanics, electric circuits, fluid dynamics and wave fundamentals are developed. This happens with the view to develop students' ability to grasp recent cutting-edge discoveries, such as wave-particle duality and particle physics research.

Making Connections

Our Year 12 Physics Curriculum will build on the rich knowledge students gain at GCSE in understanding electric circuits, analysing motion and applying principles of energy and momentum conservation. Students will routinely apply mathematical skills including rearranging equations, converting units and analysing straight line graphs.

Our Year 12 Physics Curriculum will build towards learning about cutting edge recent discoveries made, including quantum mechanics, space physics, nuclear radiation and the standard model of particles physics.

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	Topic 2 Mechanics Topic 4 Materials	Topic 2 Mechanics Topic 4 Materials Topic 5 Waves and the Nature of Light	Topic 3 DC Electricity Topic 4 Topic 5 Waves and the Nature of Light / Synopsis	Topic 3 DC Electricity Topic 4 Topic 5 Waves and the Nature of Light / Synopsis	Topic 7 Elec + Mag Fields (parts 1&3) Topic 6 Further Mechanics	PPEs and review Topic 7 (parts 1&3) Topic 6
Knowledge	Force and motion - including SUVAT, Newton's laws and Density and upthrust Fluid flow Terminal velocity and Stoke's law derivation	Projectiles Energy Momentum Hooke's law Stress, Strain and Young's Modulus Wave basics Superposition of waves	Electrical quantities (current, potential difference, resistance, resistivity) Conduction and semiconductors Wave properties: (Diffraction, Interference, Refraction, Polarisation) Lenses	Potential dividers EMF and internal resistance Wave-Particle duality Photoelectric effect Atomic energies and line spectra	Further momentum, impulse and 2d collisions. Electric fields, forces and potential. Magnetic fields and forces.	Circular motion, centripetal force and acceleration (including derivation). Generating electricity. Faraday's and Lenz's laws. Retrieval of prior knowledge
Skills	Working in standard form. Estimation. Practical measurement methods. Non-routine problem solving. CPAC 1: Follows written procedures CPAC 2: Applies investigative approaches and methods when using instruments and equipment	Dimensional analysis. Base and Derived unit. Linkage to learning in Maths (cross-curricular) Health and safety. CPAC 1. CPAC 4: Makes and records observations	Multi-stage calculations. Circuit building, troubleshooting and analysis. Linear analysis. Working with errors and uncertainties CPAC2, CPAC 3: Safely uses a range of practical equipment and materials and CPAC 4	Longer response skills. Communication and team-approach to success. CPAC 1, 2, 3, 4 and CPAC 5: Researches, references and reports	Limits to measurement. Complex algebraic derivations. Frontiers in physics.	Exam technique. Analysis and interpretation of Scientific data. Using ICT to analyse situations and process data. CPAC 2, and 5
Key questions	How are cars designed to spread the impulse over as long a time as possible, in the event of an accident?	How was Einstein's photoelectric effect discovery so important for modern Physics?	Why are superconductors so unusual?	In what ways has the Achimedes principle changed our lives?	The 'centrifugal force' doesn't exist; but why is it so easy to think it does?	How many examples of symmetry can you give within the standard model of particle physics?
Assessment	Materials end of topic test Mechanics Mid topic test	Mechanics end of topic test Waves Mid topic test	Mid topic tests	Electricity end of topic test Waves end of topic test	Y12 PPE (core Physics AS paper 1 and 2)	End of Y12 PPE assessments - Nuclear and Particle Physics end of topic test
Cross Curriculum Connections			Computer Science: Y12 HT4 Fundamentals of computer science			

Any questions? Please contact Dr. C. Jones, cjones@george-spencer.notts.sch.uk

Our Year 12 Spanish Curriculum

Exam board information- AQA A- level Spanish (7691)

Resources for home study and revision- Kerboodle, Seneca, Hodder guides, lesson notes

To develop all students into linguists who:

- Build upon their previous linguistic experience, developing the necessary linguistic skills to be able to communicate effectively in Listening, Speaking, Reading and Writing;
- Benefit from opportunities to use and manipulate a variety of key grammatical structures and patterns and develop and use a wide ranging and deepening vocabulary;
- Enjoy an opening to other cultures, fostering their curiosity and deepening their understanding of the world.

Big Ideas in Year 12 Spanish

Develop your knowledge of the people, cultures and attitudes of the Spanish speaking world. How do people in South America live versus Spain? Is life the same in rural Mexico as it is in rural Spain? In Year 12 you will become aware of and be able to discuss key issues such as: women in society, the Catholic church, cultural practices and world heritage. You will learn about the Franco dictatorship, its impact and how it has shaped the Spain of today.

Making Connections

Our Year 12 Spanish Curriculum will build on the grammar and vocabulary at GCSE with the topics of customs and festivals and technology being developed at a more complex level.

Our Year 12 Spanish Curriculum will build towards Year 13 by giving students the complex grammar and vocabulary needed to discuss the key issues in an academic fashion and by developing their knowledge of film and theatre techniques in readiness for Paper 2.

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	Los valores tradicionales y modernos El ciberespacio	Los valores tradicionales y modernos El ciberespacio Volver	La igualdad de los sexos La influencia de los ídolos Volver	La igualdad de los sexos La influencia de los ídolos Volver	La identidad regional en España El patrimonio cultural Volver	La identidad regional en España El patrimonio cultural Volver
Knowledge	<u>Vocabulary:</u> technology verbs and nouns, marriage/family verbs and nouns <u>Grammar:</u> ser vs estar, imperfect and imperfect continuous tenses, comparatives, superlatives, future tense, conditional tense, idiomatic expressions with impersonal verbs, preterite tense, <u>Phonics:</u> Mastery	<u>Vocabulary:</u> technology verbs and nouns, marriage/family verbs and nouns <u>Grammar:</u> ser vs estar, imperfect and imperfect continuous tenses, comparatives, superlatives, future tense, conditional tense, idiomatic expressions with impersonal verbs, preterite tense, <u>Phonics:</u> Mastery	<u>Vocabulary:</u> verbs and nouns linked to women at work, sexism, feminism, gay rights, musicians and stars of TV/cinema <u>Grammar:</u> indefinite adjectives and pronouns, perfect tense, pluperfect tense, future and conditional perfect tenses, indirect object pronouns, passive voice <u>Phonics:</u> mastery	<u>Vocabulary:</u> verbs and nouns linked to women at work, sexism, feminism, gay rights, musicians and stars of TV/cinema <u>Grammar:</u> indefinite adjectives and pronouns, perfect tense, pluperfect tense, future and conditional perfect tenses, indirect object pronouns, passive voice <u>Phonics:</u> mastery	<u>Vocabulary:</u> verbs and nouns linked to customs, traditions, art, and musical heritage <u>Grammar:</u> present subjunctive, perfect subjunctive, numerals, demonstrative and possessive adjectives, imperatives <u>Phonics:</u> mastery	<u>Vocabulary:</u> verbs and nouns linked to customs, traditions, art, and musical heritage <u>Grammar:</u> present subjunctive, perfect subjunctive, numerals, demonstrative and possessive adjectives, imperatives <u>Phonics:</u> mastery
Skills	Summarising listening and reading texts Grammar	Summarising listening and reading texts Grammar	Spontaneous speaking skills	Improving conversation style	Improving your listening skills	Examination and revision skills
Key questions (to be discussed in Spanish)	Can I discuss: -Changes in the family -Attitudes toward marriage/divorce -The influence of the Catholic church?	Can I discuss: -The influence of the internet -Women in the world of work/at home -Gay marriage in Spain and the Hispanic world	Can I discuss: -Positive and negative effects of musicians, actors, models on young people.	Can I discuss: - Spanish customs and traditions -Gastronomy and languages in Spain -Pre-colombian heritage -The role and diversity of art/architecture/music/dance in Spain and Latin America.	Can I: - Manage my time effectively in the listening section? - Apply grammar accurately? -Summarise effectively?	Can I discuss: -the different characters -the different themes -the different camera/stage techniques.
Assessment	Grammar	Reading, writing, listening, translation, speaking	Reading, writing, listening, translation, speaking	Reading, writing, listening, translation, speaking	Reading, writing, listening, translation, speaking	Timed essay
Cross Curriculum Connections	English Language Y12 – HT 1 Grammar					

Any questions? Please contact Miss K Chuter kichuter@george-spencer.notts.sch.uk or Miss J Webb. jwebb@george-spencer.notts.sch.uk

Our Year 12 Design and Technology Curriculum

Exam board information - AQA A-Level Design and Technology product Design - 7552
This qualification is linear.

Resources for home study and revision - Google Classroom/Student Hub and Design and technology Product Design textbook.

We aim to develop students of Design and Technology who:

- Have a coherent framework of knowledge about past and present design, understanding its impact on daily life and the world around them;
- Develop the skills needed to design and make prototypes that solve real and relevant contexts;
- Benefit from the opportunity to develop creative, technical and practical expertise.

Big Ideas in Year 12 Design and Technology

A level Design and Technology is a creative and thought-provoking qualification which gives students the practical skills, theoretical knowledge and confidence to succeed in a number of careers. Especially those in the creative industries. Students will gain a real understanding of what it means to be a designer, alongside the knowledge and skills sought by higher education and employers.

Making Connections

Our Year 12 Design and Technology curriculum will build upon the skills and knowledge developed through KS3 and 4. Students will continue to develop their theoretical understanding of design and manufacturing.

Our Year 12 Design and Technology Curriculum will build towards the students becoming independent thinking problem solvers who can apply a range of skills and knowledge to solve client based real problems.

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	Technical principles: Papers and boards, Polymers & Woods			Technical principles: Metals, Composites, Smart materials and Modern materials	Technical principles: Metals, Composites, Smart materials and Modern materials Designing and Making principles Non-Examined Assessment (NEA) - Section A	Technical principles Designing and Making principles Non-Examined Assessment (NEA) - Section A & B
Knowledge	Materials and their applications. Performance characteristics of Materials. Enhancement of materials Forming, redistribution and addition The use of finishes (Papers and boards, Polymers & Woods)			Materials and their applications. Performance characteristics of Materials. Enhancement of materials Forming, redistribution and addition The use of finishes (Metals, Composites, Smart materials and Modern materials)	Materials and their applications. Performance characteristics of Materials. Enhancement of materials Forming, redistribution and addition The use of finishes (Metals, Composites, Smart materials and Modern materials) Design methods and processes Design theory	Modern industrial and commercial practice Digital design and manufacture Requirements for product design and development Health and safety How technology and cultural changes can impact on the work of designers Design methods and processes Design theory
Skills	Working with materials Cutting, shaping, smoothing, finishing materials Deforming and reforming Working with surface finishes			Working with materials Cutting, shaping, smoothing, finishing materials Deforming and reforming Working with surface finishes	Working with materials Cutting, shaping, smoothing, finishing materials Deforming and reforming Working with surface finishes	Design processes Critical analysis and evaluation Selecting appropriate tools, equipment and processes
Key questions	Why are products manufactured in the way they are?	How are products brought to market?	Is material selection important?	Why do designers need to communicate their ideas?	Form follows Function?	How do products impact the environment?
Assessment	Past exam questions/ Internal assessments					
Cross Curriculum Connections	Cambridge Technical. Information Technology: Communication: Problem solving, Time management. Maths: Using Graphs.	Computer Science: Data Representation, communication. Information Technology: Communication, Decision making. Maths: Using Graphs. Geography: (HT2) - Globalisation.	Computer Science: Data Representation, communication, Problem Solving.	Computer Science: Data Representation, communication, Problem Solving. Information Technology, Communication, Problem solving, Time management Communication, Decision making.	Computer Science: Critical Evaluation & Testing, Design and Modelling. Y12 Core Maths: Perimeter. Circumference and area / Similarity and Pythagorean theorem / Surface area and similarity. Information Technology: Communication, Critical thinking, Team working, Communication, Decision making. Art: Design periods.	Computer Science: Critical Evaluation & Testing, Design and Modelling Information Technology: Communication, Critical thinking, Team working, Communication, Decision making. Maths: (HT4) - Y11 - Trig; recap & Extension.

Any questions? Please contact Mrs S. Juniper, sjuniper@george-spencer.notts.sch.uk

Our Year 12 Art Curriculum

Exam board information-

AQA - Fine Art
Component 1 - Portfolio - 60%
Component 2 - Externally set assignment - 40%

Resources for home study and revision-

AQA specification
<https://www.aqa.org.uk/subjects/art-and-design/as-and-a-level/art-and-design/specification-at-a-glance>
Subject/class specific Google classroom.

We aim to develop all students into artists who:

- Develop a practical skill base and enhance their use of digital media, literacy and numeracy within the Arts;
- Learn how to develop personal and highly creative ideas whilst displaying an understanding and connection to the work of others (artists and cultures);
- Unlock creative potential within determined, resourceful and respectful attitudes.

Big Ideas in Year 12 Art

How else can art be created? What can inspire us? Year 12 is all about risk-taking and trying out new ideas. Students have the opportunity to learn new skills and use new media, there is freedom to make mistakes and learn from everything they produce. In year 12 students will develop their own style and become practising 'artists'. Students will also learn how to create a sketch book and record their thought processes.

Making Connections

Our Year 12 Art Curriculum will build on the skills, media and techniques taught at GCSE. Students will use the GCSE course as a springboard onto the next level of study in Art and Design, they will bring with them confidence in their ability and a sound understanding of what media choices are successful for them.

Our Year 12 Art Curriculum will help students build a secure understanding of their own project intention whilst also giving students a range of new experiences with materials and techniques to ensure they have a thorough base of knowledge to build on in their project work. This experience will prepare students for the EST where their artistic skills and knowledge will be utilised to create an independent project with a personal and creative outcome.

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	Personal Portfolio running alongside Workshops. Workshop Topics - Skills	Personal Portfolio running alongside Workshops. Workshop Topics - Portraiture	Personal Portfolio running alongside Workshops. Workshop Topics - Perspective	Personal Investigation work		
Knowledge	Revisit range of media covered in KS4 and develop understanding and use How to use a range of new creative media/ techniques to develop work	Portraits -accurate drawing -highlights and shadows How to mix skin tones	Perspective -Foreshortening -Understanding 2 and 3 point perspective	Using contextual resources to inform work How to create a project with intent Observational drawing and use of a range of media Colour theory/themes to express intention Compositional choices		
Skills	Material techniques including drawing, printing, textiles and observational drawing techniques.	Painting techniques including brushwork, palette choice, Oil and acrylic paint leading into stylistic development.	Perspective techniques including vanishing points, distortion, compositional tools, lino printing and charcoal drawing skills.	In-depth project that allows for independent ideas, depth of knowledge to enhance ideas, quality skills and personal outcomes - - Observation of Subjects using observational techniques. - Investigation of contextual sources to help refine material use and inspire new ways of working. - Development of ideas and the production of personal responses.		
Key questions	What other materials and techniques are there beyond painting and drawing?	How do you create accurate portraiture?	How do you create an accurate and interesting perspective in larger scenes.	How can I work like an artist?		
Assessment	Personal Project Piece	Gestural Portrait	Compositional work	Portfolio	Portfolio	PPE outcome
Cross Curriculum Connections				Drama - Y12 HT1 - Practical Exploration		

Any questions? Please contact Mr J. Solly, jsolly@george-spencer.notts.sch.uk

Our Year 12 PE Curriculum

Exam board information - AQA

Resources for home study and revision - The Everlearner - <https://theeverlearner.com/>

We aim to develop students who:

- Use Physical Education to enhance knowledge and skills in a range of sports and activities so that students may be able to expertly and competently demonstrate and apply new techniques and a greater understanding of the use of tactics and strategies to overcome opponents;
- Develop a range of life and employability skills in order to be effective members of society;
- Benefit from a range of opportunities to develop a lifelong love for Physical Education and embed the importance of leading a healthy and active lifestyle.

Big Ideas in Year 12 PE - Why do some people run faster than others? How technology can help you in sport? A Level Physical Education in Year 12 will give you a fantastic insight into the amazing world of sports performance.

Making Connections

Our Year 12 PE Curriculum will build on the student's depth of understanding of anatomy and physiology, skill acquisition and sport and society.

Our Year 12 PE Curriculum will build towards Year 13 by providing students the skills needed to analyse and evaluate key physiological, psychological and social issues in sport.

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	Physiological Factors - The musculo-skeletal system Cardiovascular system Respiratory systems Skill Acquisition Characteristics of skill Skill Continua Justification of placement of skills on continua Transfer of Learning	Physiological Factors - Neuromuscular systems Energy systems Skill Acquisition Methods of Presenting Practice Types of Practice Understanding how knowledge of skill classification informs practice structure	Sociocultural Studies Pre-industrial (pre-1780) Industrial and post-industrial (1780–1900) Skill Acquisition Principles and theories of learning Stages of learning Learning plateau	Sociocultural Studies Industrial and post-industrial (1780–1900) Skill Acquisition Guidance & Feedback General information processing model	Sociocultural Studies Post World War II (1950 to present) Skill Acquisition Efficiency of information processing model Memory models Reaction Time	Written - NEA Skill Acquisition Anticipation Schema Theory Strategies to improve information processing speed
Knowledge	Students develop knowledge and understanding of the changes within the body systems prior to exercise, during exercise of differing intensities and during recovery.		Students develop knowledge and understanding of the interaction between, and the evolution of, sport and society. Students should be able to understand, interpret and analyse data and graphs relating to participation in physical activity and sport.			
	Knowledge of how skill is acquired and the impact of psychological factors on performance. Knowledge and understanding of the principles required to optimise learning of new, and the development of existing, skills in a range of physical activities. Understand and interpret graphical representations associated with skill acquisition theories.					
Skills	Apply knowledge and understanding of the factors that underpin performance and involvement in physical activity and sport. Analyse and evaluate the factors that underpin performance and involvement in physical activity and sport. interpret data and graphs relating to changes within the body systems and the use of energy systems during different types of physical activity and sport, and the recovery process.					
Key questions	How does the body work?	What are the different ways to practice a skill?	What sports were played in the UK in 1780?	What type of feedback is most effective in sport?	What impact do the media have on sport?	Can you explain the technical errors in your performance?
Assessment	Paper 1 - assessment point 1 test	Paper 1 - assessment point 2 PPE	Paper 1 - extended answers	Paper 1 - assessment point 3 PPE	Paper 1 - extended answers	Paper 1 - assessment point 4 test
Cross Curriculum connections	Biology HT1 Cholesterol/Biology HT1- The respiratory system		Psychology HT3/4 Behaviourism		Psychology HT2 - Baddeley and Hitch's Working Memory Model	

Any questions? Please contact Mr M Powell, mpowell@george-spencer.notts.sch.uk

Our Year 12 BTEC Sport Curriculum

Exam board information - Edexcel / Pearson

Resources for home study and revision- Videos and tests available to all students on Everlearner - <https://www.theeverlearner.com/> Revise BTEC National Sport Units 1 & 2 Revision Workbook, Revise BTEC National Sport Units 1&2 Revision Guide.

We aim to develop students who:

- Use Physical Education to enhance knowledge and skills in a range of sports and activities so that students may be able to expertly and competently demonstrate and apply new techniques and a greater understanding of the use of tactics and strategies to overcome opponents;
- Develop a range of life and employability skills in order to be effective members of society;
- Benefit from a range of opportunities to develop a lifelong love for Physical Education and embed the importance of leading a healthy and active lifestyle.

Big Ideas in Year 12 BTEC Sport - This year allows students to feel what it is like to work in the fitness industry by developing and creating training programs for clients. It allows students to explore the process required to screen clients and assess their individual needs. Students will also have the opportunity to look at the possible job roles and possible careers with the sports industry to prepare them for the progression to a career in the industry either directly or through higher education.

Making Connections

Our Year 12 BTEC Sport Curriculum will build on prior knowledge developed through KS4 Physical Education & Exam courses. This allow students to apply this knowledge to the sports industry and fitness training and programming.

Our Year 12 BTEC Sport Curriculum will build towards the knowledge and understanding of anatomy and physiology and the psychological factors that impact sports performance.

	HT1	HT2	HT3	HT4	HT5	HT6
Topics Covered	Unit 2: Fitness Training and Programming for Health, Sport and Well -being		Unit 2: Fitness Training and Programming for Health, Sport and Well -being Unit 3: Professional Development in the Sports Industry	Unit 3: Professional Development in the Sports Industry	Preparation for Unit 2: Fitness Training and Programming for Health, Sport and Well-being (Second attempt)	Unit 3: Professional Development in the Sports Industry
Knowledge	Knowledge and understanding of client screening and lifestyle assessment, fitness training methods and fitness programming to support improvements in a client's health and well-being.			Knowledge and understanding of the skills required for different career pathways in the sports industry. Understand a personal skills audit, career action plan and practical interview assessment activities.		
Skills	Apply knowledge and understanding of fitness principles and theory, lifestyle modification techniques, nutritional requirements and training methods to an individual's needs and goals Analyse and interpret screening information relating to an individual's lifestyle questionnaire and health monitoring tests Evaluate qualitative and quantitative evidence to make informed judgements about how an individual's health and well-being could be improved Be able to develop a fitness training programme with appropriate justification					
Key questions	How do you assess a client and interpret that information? How can ensure the correct training methods has been applied to my clients training programme,	How can I ensure I am meeting the demands of the client?	What skills are required for an interview?	How do I write a career development action plan?	What are my strengths and areas for improvement in Units 2?	What roles and job opportunities are available to me within the sports industry?
Assessment	External assessment	External assessment	Internal assessment	Internal assessment	External assessment	Internal assessment
Cross Curriculum Connections	A-Level PE Year 13 HT5 Training methods for different components of fitness					

Any questions? Please contact Mr M Powell, mpowell@george-spencer.notts.sch.uk

Our Year 12 Computer Science Curriculum

Exam board information- AQA A-Level Computer Science - 7517

Resources for home study and revision-
Issac Computer Science - <https://isacc.computerscience.org/>

We aim to develop all students into successful and competent programmers who:

- Have the desire to develop and apply their analytical, problem-solving, design, and computational thinking skills within programming and Computing as a whole;
- Become digitally literate – able to use, and express themselves and develop their ideas through information and communication technology – at a level suitable for the future workplace and as active participants in a digital world;
- Understand the impacts of digital technology to the individual and to wider society.

Big Ideas in Year 12 Computer Science

Develop an advanced understanding of programming including: Python, SQL & Pygame. Understand the consequences and uses of computing in a wider society. Students will also learn how to implement systems that can be used in industry such as simulations and databases.

Making Connections

Our Year 12 Computer Science Curriculum will build on: Python Programming, Systems Architecture, Programming and Computer Systems.

Our Year 12 Computer Science Curriculum will build towards: Games Design, Databases and Functional Programming.

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	4.5 Data Representation 4.1 Fundamentals of Programming	4.2 Fundamentals of Data Structures 4.8 Consequences of using Computers 4.1.2 Programming Paradigms 4.1.2.3 Object-oriented programming	4.1 Fundamentals of Programming 4.9 Fundamentals of Communications and Networking	4.6 Fundamentals of Computer Systems 4.1 Fundamentals of Programming	4.10 Fundamentals of Databases 4.1 Fundamentals of Programming	4.7 Organisation and Architecture 4.14 Non Exam Assessment - Analysis
Knowledge	4.5 - Data Representation Number systems Understand and convert between different number bases. Units of information binary number systems and arithmetic information coding system e.g. ASCII Image representation, sound and other data compression. Encryption methods 4.1 Fundamentals of Programming Data types, Programming concepts Arithmetic operations in a programming language, Relational operations in a programming language, Boolean operations in a programming language Constants and variables in a programming language, String-handling operations in a programming language, Random number generation in a programming language Exception handling, Subroutines (procedures/functions), Parameters of subroutines, Returning a value/value from a subroutine, Local variable in subroutines Global variables in a programming language,	4.2 - Data Structures Data structures and abstract data types Graphs, Trees, Dictionaries, Hash Tables, Queues and stacks and vectors. 4.8 Consequences of using Computers Moral, Ethical, Legal, Social and Cultural implications of: <i>Surveillance</i> <i>Right to privacy</i> <i>Legal and ethical issues relating to the Internet</i> <i>Access to encryption keys</i> <i>Big Data: Impact on society</i> <i>Data protection</i> <i>Digital footprint</i> <i>Legislation</i> 4.1.2 Programming Paradigms 4.1.2.3 Object-oriented programming programming paradigms procedural and OOP programming in Systems Development.	4.1 Fundamentals of Programming (Please see HT1) 4.9 Fundamentals of Communications and Networking Communication methods and basics Network topologies, types of networking between hosts. Wireless networking including: <i>Purpose of WIFI</i> <i>Components of a Network</i> <i>Wireless Security</i> <i>CSMA</i> <i>RTS/CTS</i> <i>SSID</i>	4.1 Fundamentals of Programming (Please See HT1) 4.6 Fundamentals of Computer Systems relationship between hardware and software system software and application software. Role of the operating system, programming languages and their classification into low- and high-level languages. Role of each of and assembler, Compiler and interpreter. Logic gates, boolean expressions, full adder and half adders f Boolean identities and De Morgan's laws to manipulate and simplify Boolean expressions.	4.1 Fundamentals of Programming (Please See HT1) 4.10 Fundamentals of Databases conceptual data models and entity relationship modelling Relational databases Database design and normalisation techniques Program with Structured Query Language (SQL) Client server databases	4.7 Organisation and Architecture Internal hardware components of a computer, Stored program concept, Understand the processor and its components, Fetch-Execute cycle and the role of registers within it, Processor instruction sets, Compare addressing modes, machine-code/assembly language operations, Interrupts, Factors affecting processor performance, Input and output devices, secondary storage devices 4.14 Non Exam Assessment Produce a programming project and apply the following: produce a clear statement that describes the problem area and specific problem that is being solved/investigated. Outline how they researched the problem state for whom the problem is being solved/investigated. Provide background in sufficient detail for a third party to understand the problem being solved/investigated. Produce a numbered list of measurable, "appropriate" specific objectives, covering all required functionality of the solution or areas of investigation. Report any modelling of the problem that will inform the Design stage, for example a graph/network model of Facebook connections or an E-R model.
Skills	Number Systems Number Bases Binary Number System Information Coding Systems	Programming Data Manipulation Problem Solving Ethics	Communication Networking Programming	Hardware and Software Classifications of Programming Languages Problem Solving	Problem Solving Programming Languages	Hardware and Software Classifications of Programming Languages Problem Solving
Key questions	What is OOP programming? How can OOP programming be used to make programming more efficient?	What case studies have you explored which focus on the consequences of using Computers? What game have you been developing?	What is subnet masking? How does the internet work? What are the different types of networking?	Explain De-Morgan's Law and the different types of logic gates.	What have you been creating in SQL? What does it mean when databases have been normalised?	What is functional programming and how is it used in industry? Can you explain the FDE cycle?
Assessment	4.5 Data Representation Mid & EOT 4.1 Programing Fundamentals EOT	4.2 Fundamentals of Data Structures 4.1.2 Programming Paradigms 4.8 Consequences and Uses of Computers 4.2.2.3 OOP Project	4.9 Fundamentals of Communication and Networking - EOT 4.1 Programing Project - Maze Project	4.6 Computer Systems EOT 4.1 Programming Project - Solar System 4.1 Defold Games Programming Project (Group 12C Only)	4.10 Databases 4.10 & 4.1 Programming Project - Database Design	4.7 Organisation and Architecture 4.14 - NEA - CW - Analysis
Cross Curriculum Connections		Personal Development - Media Literacy and Digital Resilience in Y12 HT6. Links to 4.8 Consequences of using Computers. Cross-curricular links Further Maths: Autumn 1 - Complex Numbers, Further Maths: Spring 1 - Vectors		A-Level Physics - Electricity and circuit building in Year 12 HT3. Links to 4.6 Fundamentals of Computer Systems.		Design and Technology - Critical evaluation and testing in HT5/6. Links to 4.14 Non Exam Assessment - Analysis.

Any questions? Please contact Miss L. Fell, lfell@george-spencer.notts.sch.uk

Our Year 12 Business Studies Curriculum

Exam board information: AQA

<https://filestore.aqa.org.uk/resources/business/specifications/AQA-7131-7132-SP-2015.PDF>

The course is assessed by three examinations with equal weighting

Resources for home study and revision-

- Google classroom - course resources, exam papers, exemplar answers, revision material, up-to-date news, suggested books to read, calculation practice, course companion, personalised learning checklists, independent guided study links, exam technique and MCQ practice
- Recommended Revision guide - Pearson REVISE AQA A level Business Revision Guide and Workbook: (with free online Revision Guide and Workbook) for home learning, 2021 assessments and 2022 exams (REVISE AS/A level AQA Business)

We aim to develop future entrepreneurs and leaders who:

- Are provided with the appropriate knowledge and skills needed to develop their employability and identify business problems and opportunities;
- Have a greater understanding and awareness of the world they live in, but more specifically how individuals and businesses work within an economy;
- Have a broad and deep knowledge of the legal, political, social and environmental context of business

Big ideas in Year 12 Business Studies

Through Business Studies A-level, students will engage with the world of business through the context of current business developments and real business situations. Students will learn how management, leadership and decision-making can improve performance in marketing, operational, financial and human resources. Students will also explore the interrelated nature of business activities and how they affect businesses, be they large or small, UK or internationally focussed and in different sectors such as service or manufacturing.

Making Connections

Our Year 12 Business Studies Curriculum will build on developing key topic areas from GCSE Business Studies, whilst encouraging students to make decisions with justifications based on business scenarios. Students will build their knowledge of Marketing, Finance, Operations and Human Resources. Although there is no prerequisite for students to have studied Business Studies at GCSE level.

Our Year 12 Business Studies Curriculum will build towards students thinking strategically about business decisions; such as strategic positioning, sustaining a competitive advantage and managing change. Students will also consider a business' wider responsibilities involving CSR and The Triple Bottom Line.

		HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	T1	Understanding management, leadership and decision making Understanding Management Decision Making	Understanding the role and importance of stakeholders Setting Marketing Objectives Understanding Markets and Customers	Understanding Markets and Customers Making Marketing Decisions STP	Making Marketing Decisions The Marketing Mix	Setting Operational Objectives Operational objectives Analysing Operational Performance Making operational decisions to improve performance: increasing productivity and efficiency	Making operational decisions to improve performance: improving quality Making operational decisions to improve performance: managing inventory and supply chains Strategic direction: choosing which markets to compete in and what products to offer
	T2	Understanding the nature and purpose of business Understanding different business forms Understanding that businesses operate within an external environment	Setting Financial Objectives Analysing financial performance	Making financial decisions: sources of finance Making financial decisions: improving cash flow and profits	The value of setting human resource objectives Analysing HR Performance Making human resource decisions: improving organisational design and managing the human resource flow	Making human resources decisions: improving motivation and engagement Making human resource decisions: improving employer-employee relations	Strategic methods: how to pursue strategies
Knowledge		The measurement and importance of profit Shareholders Types of management and leadership styles Sole trader and partnerships	Stakeholders External and internal influences on marketing objectives Cash flow, break-even, budgeting	Sources of finance Ways of improving cash flow Primary and secondary research YED and PED	Marketing mix (7 p's) The value of digital marketing Human resource data Job design Delegation, centralisation	External and internal influences on operational objectives and decisions Calculations of labour productivity and unit costs Capacity Employer-employee communications	Improving quality Inventory control Factors influencing which markets to compete in and which products to offer The reasons why businesses grow or retrench
Skills		Quantitative skills: Interpret index numbers, calculation of decision trees, ratios, averages, percentages and fractions Interpret, apply and analyse information in written, graphical and numerical forms.		Quantitative skills: Interpret values of price and income elasticity of demand and analyse information in written, graphical and numerical forms Calculate cost, revenue, profit and break-even		Quantitative skills: Interpret index numbers, calculation of decision trees Interpret, apply and analyse information in written, graphical and numerical forms.	
Key questions		How do managers make key business decisions?	How do managers arrive at decisions regarding finance?	How do managers arrive at decisions regarding marketing?	How do managers arrive at decisions regarding human resources?	How do managers arrive at decisions regarding operations?	How a business chooses its strategic position
Assessment		What is business end of unit assessment? Managers, leadership and decision-making mid-point assessment	Managers, leadership and decision-making end of unit assessment Financial decision-making mid-point assessment	Financial decision making of end unit assessment Marketing Decisions mid-point assessment	Human Resource decision making mid-point assessment Marketing decisions end of unit assessment	Human Resource decision making end of unit assessment Operational decision-making mid-point assessment	PPE
Cross Curriculum Connections		Economics - Y12 HT1 - demand and supply, total revenue, profit, Objectives of firms - survival, growth, market share, profit maximisation	Economics - Y12 HT1 Micro-economics 3.1.2 Calculation and understanding of PED and YED Economics - Y12 FC and VC, TR and profit Psychology - data interpretation and the use of questionnaires interviews within data collection	Psychology - data interpretation and the use of questionnaires interviews within data collection	Economics - Y13 HT3 Specialisation, division of labour, use of resources	Design and Technology - Y13 HT1 invention and innovation, production, efficiency Psychology - Maslow's Hierarchy of Needs humanistic approach in the Psychological Approaches topic for paper 2 Economics - Economies and Diseconomies of scale	Design and Technology - Y13 technology/cultural changes and the impact on designers Economics - trade unions

Any questions? Please contact Mrs S. Crawford, scrawford@george-spencer.notts.sch.uk

Our Year 12 Economics Curriculum

Exam board information- AQA Economics (7136)
The course is assessed by three examinations with equal weighting

Resources for home study and revision-
<https://www.tutor2u.net/economics/reference/as-microeconomics-study-notes-topic-listing>
<https://www.tutor2u.net/economics/reference/as-macroeconomics-study-notes-topic-listing>

We aim to develop all students into economists who:

- have opportunities to indulge their natural curiosity for economics leading to a lifelong passion;
- are economically confident and have understanding of a range of economic concepts, models and theories and appreciate that economic behaviour can be studied from a range of perspectives;
- have an enquiring, critical and thoughtful approach to the study of economics and develop an ability to think like an economist, developing both analytical and quantitative skills.

Big Ideas in Year 12 Economics

How to solve the economic problem and achieve economic performance. Microeconomics in Year 12 explores the concept of the economic problem of scarcity, the impact this has on economic decision making, the possible need for government intervention without the unintended consequence of further market failure and government failure. Macroeconomics investigates the economic performance of the economy and policy instruments to aid the achievement of the macroeconomic objectives.

Making Connections

Our Year 12 Economics Curriculum will build on key concepts from the study of GCSE Business for example: demand and supply; costs, revenues and profits; taxation; and international trade. It also reuses key calculation and logic skills acquired in Mathematics.

Our Year 12 Economics Curriculum will build towards students using their underpinning knowledge from year one microeconomics and macroeconomics and continue to develop their economic in all areas. For example, the labour market, market structures, financial markets and the international economy.

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	Micro: Price determination in a competitive market. Economic methodology and the economic problem. Macro : The measure of macroeconomic performance	Micro: Production, costs and revenue. Competitive and concentrated markets. Macro : How the macro economy works	Micro: Competitive and concentrated markets. The market mechanism, market failure and government intervention. Macro: Economic performance	Micro: The market mechanism, market failure and government intervention. Macro: Economic performance and macroeconomic policy	Micro: The market mechanism market failure and government intervention Macro: Macroeconomic policy	Micro: Individual economic decision making Macro: The measurement of macroeconomic performance
Knowledge	Positive & normative statements Scarcity PPC PED, XED, YED, PES Macroeconomic indicators Index numbers	Division of labour Specialisation Costs of production Market structures Objectives of firms Circular flow AD and AS	Monopoly & monopoly power Competitive market process Market failure Economic growth Employment and unemployment	Public and private goods Positive and negative externalities Merit and demerit goods Inflation and deflation Balance of payments Conflict macro objectives	Distribution of income and wealth Government intervention Government failure Monetary policy Fiscal policy Supply-side policy	Consumer behaviour Imperfect information Behavioural economics The use of national income data
Skills	Quantitative skills including: constructing and interpreting graphs, calculating and interpreting index numbers, elasticities, profit, costs and revenues..		Quantitative skills including: constructing and interpreting graphs, and providing logical chains of analysis and evaluation.		Quantitative skills including: constructing and interpreting graphs and calculating income in real terms.	
Key questions	How does the law of demand impact price and quantity?	What is the economic problem?	What is the difference between a monopoly and monopoly power?	What market failures exist that may require government intervention?	How might government intervention lead to government failure?	How does behavioural economics differ from neoclassical economics?
Assessment	Micro and Macro Half Term 1 assessment	Micro and Macro Half Term 2 assessment	Micro and Macro Half Term 3 assessment	Micro and Macro Half Term 4 assessment	Micro and Macro Half Term 5 assessment	PPE
Cross Curriculum Connections	Business Y12 - Demand and supply Maths - Percentage changes	Business 3.5 Calculating revenue, costs and profit	Business -3.9 Monopoly structures & 3.7 Economic growth	Business -3.7 Business cycle	Business - 3.7 The impact of government policy	Business - 3.7 Economic growth /GDP

Our Year 12 Cambridge Technical ICT Curriculum

Exam board information- OCR Cambridge Technicals

Resources for home study and revision- Google Classroom

We aim to develop all students into effective practitioners in the workplace who:

- Gain an insight into technological change, global IT infrastructure and legal and security considerations;
- Acquire a range of relevant IT and generic skills, including decision-making, communication, problem solving and research and analytical skills that universities and employers demand;
- Have a framework that ensures pupils become digitally literate – able to use, and express themselves and develop their ideas through information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Big Ideas in Year 12 CamTech ICT - Are to introduce the students to the professional avenues open to the students through their topics. They will gain an in-depth understanding of computer systems, software design and the uses and value of data/information. During each of the unit's students will be introduced to key technologies used/supported in the IT industry, paving the way for them to develop into an individual suited for entry level positions. In doing so we will be developing key skills such as critical thinking and problem solving.

Making Connections

Our Year 12 CamTech ICT Curriculum will build on developing systems using a structured approach learned during KS4 IT and Computer Science. We will also be developing on theoretical knowledge learned during KS4 such as networking, hardware, software and data/information.

Our Year 12 CamTech ICT Curriculum will build towards developing an application based on an identifiable need to a client. This will require students to plan, initiate, execute and evaluate the solution. We will also be investigating and exploring the different mobile technologies used in society, ranging from hand-held devices to systems used in nautical environments.

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	Unit CC Cloud Computing Unit 13 Social media and digital marketing Unit 15 Games design and prototyping Unit 24 Enterprise Computing Unit 12 Mobile Technology	Unit CC Cloud Computing Unit 13 Social media and digital marketing Unit 15 Games design and prototyping Unit 24 Enterprise Computing	Unit CC Cloud Computing Unit 3 Cyber Security Unit 23 Cognitive computing Unit 24 Enterprise Computing Unit 14 Software engineering for business	Unit CC Cloud Computing Unit 3 Cyber Security Unit 23 Cognitive computing Unit 24 Enterprise Computing Unit 14 Software engineering for business Unit 8 Project management	Unit 23 Cognitive computing Unit 24 Enterprise Computing Unit 14 Software engineering for business Revision of Unit 3, CC and any Unit 1 and Unit 2 resits	Complete unit 12 and unit 9
Knowledge	Unit CC Cloud Computing Demonstrate knowledge and understanding of cloud technologies and how this infrastructure supports IT-related activities Unit 13 Social media and digital marketing The stages of the digital marketing life cycle Unit 15 Games design and prototyping Key considerations that support games design; Compare and contrast the features of games for different audiences Unit 24 Enterprise Computing The concept of enterprise computing systems Unit 12 Mobile Technology Present solutions for the use of mobile technologies	Unit CC Cloud Computing Identify the organisational roles involved in using cloud services, as well as explain the responsibilities of each role Unit 13 Social media and digital marketing how data is used as part of social media digital marketing Unit 15 Games design and prototyping Build a prototype using core programming techniques and test for functionality Unit 24 Enterprise Computing Investigate business requirements for an enterprise computer solution	Unit CC Cloud Computing Businesses must consider a number of factors before implementing cloud services. Why are businesses obliged to make these considerations? Identify the different benefits and explain how these are advantageous to businesses. Unit 13 Social media and digital marketing The use of identified social media channels in the digital marketing campaign. The impact of digital marketing on an identified product Unit 15 Games design and prototyping Present the prototype to stakeholders to obtain feedback on the games concept Unit 23 Cognitive Computing How cognitive computing is used in business. Investigate opportunities for the positive application of cognitive computing Unit 24 Enterprise Computing Investigate business requirements for an enterprise computer solution. Unit 14 Software engineering for business Universal programming constructs Investigate business requirements for programming solutions.	Unit 23 Cognitive Computing Generate business proposals for an identified application of cognitive computing Unit 14 Software engineering for business Develop software solutions to meet business requirements Propose software solutions to meet business requirements		
Skills	Communication Problem solving Time management	Decision making Negotiation Team working	Critical thinking Communication Decision making Team working	Problem solving Time management Communication Decision making Investigating	Critical thinking, Team working Communication, Decision making	
Key questions	What are the main components of a computer and can you state their benefits?	What are the advantages of application software?	What are the main characteristics of a peer-peer network?	What are the main types of communication skills used in an IT employability environment?	What are the different ethical issues that impact the workplace, how can these be addressed?	
Assessment	Understand computer hardware	Understand computer software	Understand business IT systems	Understand employability and communication skills used in an IT environment	Understand ethical and operational issues in computer systems	
Cross Curriculum Connections						

Any questions? Please contact: Miss H Whalley, hwhalley@george-spencer.notts.sch.uk

Our Year 12 Personal Development Curriculum

We aim to develop students who:

- Have the knowledge, understanding, attitudes and practical skills to live safe, healthy, and productive lives;
- Can demonstrate important life skills such as empathy, compassion and communication whilst being able to showcase discussion, debating and presenting skills;
- Become responsible, tolerant, positive global citizens who will make positive contributions to life in modern Britain.

Big Ideas in Year 12 Personal Development

We learn about concepts and topics that are hugely important in developing confident, responsible and tolerant global citizens who can make positive contributions to society.

Specific topics under the umbrellas of 'Living in the wider world', 'relationships', and 'health and wellbeing' are explored and provide opportunities for students to express their thoughts, views and opinions in these areas

Making Connections

Our Year 12 Personal Development Curriculum will build on knowledge developed in Year 11 and provide opportunities to enable deeper exploration and discussion linked to mental health, emotional well-being, maintaining respectful relationships, choices and pathways and many other important topics.

Our Year 12 Personal Development Curriculum will build towards Year 13 content by highlighting, developing and evaluating strategies to support independence in the wider world to help prepare students to live and contribute to life in modern Britain.

	HT1	HT2	HT3	HT4	HT5	HT6
Topic Covered	<p>Personal Development: Professionalism conduct and online safety</p> <p>Health and Wellbeing Self-Concept - transitional life stage <i>RE link to expression of identity</i></p> <p>Professionalism conduct and online safety Rights and responsibilities in part-time jobs Professional conduct & boundaries Challenging online content</p>	<p>Personal Development: Health and Wellbeing Drugs, alcohol and tobacco</p> <p>Relationships Forming and maintaining respectful relationships, including online</p>	<p>Personal Development: Relationships: Relationships, abuse and marriage <i>- RE link influence of Christianity on UK marriage</i></p> <p>Health and Wellbeing Contraception STIs</p>	<p>Personal Development: Relationships: Consent Sexual Abuse</p> <p>Health and Wellbeing Body Image</p> <p>Living in the WiderWorld Radicalisation <i>- RE link to perspectives of others & misunderstood nature of religion; to sources of wisdom and authority, historical, cultural and social contexts; to critically evaluating varied perspectives, world views; to sources of wisdom and authority, cultural and social contexts; moral issues</i></p>	<p>Living in the Wider World: Life and work Interviewing Post 18 Consumer information Health and Wellbeing Monitoring health Reliable sources</p>	<p>Relationships Cultural diversity Prejudice and discrimination <i>- RE link to sources of wisdom and authority, cultural and social contexts</i></p> <p>Health and wellbeing Mental Health</p>
Knowledge	How to demonstrate professional conduct, including following health and safety and online presence	How to assess and manage risk and personal safety in new independent situations, including online	How to identify the signs of abuse, exploitation and assault or rape	How to seek and assertively give, not give or withdraw consent, in all contexts	How to manage work-life balance, including study, leisure, exercise, sleep and time online	How to safely challenge prejudice and discrimination, including online
Skills	Reflection, self-awareness	Discussion, reflection, agency and decision making, strategies to manage influence	Reflection, empathy, assertive communication, support seeking skills, risk management	Reflection, empathy, compassion, communication	Reflection, discussion, empathy Discussion, application, risk management	Reflection, discussion, empathy Discussion, application, risk management
Key questions	What are the skills and strategies to confidently manage transitional life phases?	How alcohol and drug use impact decision making and personal safety and how do we manage its use in relation to our health	How do we recognise and manage different forms of abuse and what are the sources of support exit strategies for unhealthy relationships?	What are the moral and legal responsibilities that someone seeking consent has?	How are British Values being discussed and debated in current affairs?	What should we consider when setting and maintaining clear boundaries around personal privacy?
Cross Curriculum Connections	Psychology Y10 HT 5 Defining mental health. History - Y9 (HT5) Holocaust Civil Rights Movement 1950-1970 History - Y9 HT6 History of Terrorism History - Y11 HT2 Weimar and Nazi Germany		Science Y10 Biology HT4 Homeostasis Topic B11			

Any questions please contact Ms H Randall hrandall@george-spencer.notts.sch.uk