

## Year 10 Curriculum Overview

Subject	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
English Language	19th Century Non-fiction	Transactional writing	20 <sup>th</sup> Century Non-fiction	Transactional writing	Paper 1 skills – language, structure and critical analysis	Original writing	
English Literature	A Christmas Carol - links to History Year 9 Industrial Revolution	A Christmas Carol	An Inspector Calls - links to History Industrial Revolution: AU2 of Y8	An Inspector Calls	Romeo and Juliet	Romeo and Juliet	
Maths	Standard form (F) Calculating with percentages (F) Measures (F) Statistical measures (F) Calculating with percentages (H) Measures (H) Surd (H) Statistical measures (H)	Indices (F) Constructions and loc (F) Algebra recap and extension (F) Congruence and similarity (F) Indices (H) Properties of polygons (H) Number recap and review (H) Congruence and similarity (H)	Introduction to trigonometry (F) Further perimeter and area (F) Congruence and similarity (H) Pythagoras and basic trigonometry (H) Simultaneous equations (H)	Further circumference and area (F) Graphs recap and extension (F) Simultaneous equations (F) Probability (H) Statistics recap and review (H) Algebra - quadratics and rearranging formulae (H)	Properties of polygons (F) Real life graphs (F) Volume (H) Algebra a recap and review (H) Sketching graphs (H)	Review of basic probability (F) Probability (F) Linear and quadratic equations and graphs (H) Geometry and measures recap and review (H)	
Further Maths	Basic Number Basic Algebra Functions	Functions Surds Index laws Sequences	Sequences Algebraic Fractions Pythagoras' Theorem & Trigonometry Simultaneous Equations Manipulations & Proof	Manipulation & Proof Basic Geometry Linear & Quadratic Equations	Linear & Quadratic Equations Quadratic Simultaneous Equations Introduction to Coordinate Geometry	Graphs (H) Catch Up Introduction to Calculus	
Combined Science	Communicable disease, Preventing and treating disease Structure and bonding. States of matter, Ionic, Covalent and Metallic bonding. The properties of each structure and reasons. Including ionic lattices, Simple molecular, Giant covalent (diamond, graphite, silicon dioxide) and Giant Metallic. Electricity in the home, to include use of oscilloscope to show a.c. National Grid and power stations, along with transformers, (qualitative). Plugs and safety, to access mains electricity. Characteristics of mains electricity. Power of appliances, and electrical efficiency	Non Communicable disease, Photosynthesis Structure and bonding as per HT1 and Chemical calculations. Calculating Moles, Mass and Mr, atom economy and the expression of concentrations in 2 different forms. HT- Will look at Volumes of gases as an addition to this. Use of density. States of matter and changes associated with temperature. Internal energy, and what it means. Specific latent heat. Relate gas pressure to temperature and volume	Respiration aerobic and anaerobic; Human nervous system Nerves and their functions, reflex arc- system Chemical changes: The reactivity series linked to the extraction of metals and displacement reactions. Neutralisation and the pH scale. Acids and their reactions with bases including metals. Looking at why some acids are weaker than others. Rutherford and Thomson models of atom. The unstable nucleus, leading to stabilisation via nuclear decay. The three radiations as alpha, beta, and gamma radiations, and their effect on the nucleus. Activity and half life, including nuclear equations	Hormone control endocrine system, IYF, blood sugar control Electrolysis, Electrolysis of solutions, what happens at the electrodes, specifically looking at the production of aluminium. HT- Half equations (H). Introduce vectors and scalars. NilH as forces between objects. Idea that resultant force occurs because of vector nature of force. Moments and balance, in terms of centre of mass, as well as distance from CoM.	Rates of reaction, The effect of temperature, concentration, pressure, surface area and catalysts. Linked to required practical on investigating rates and graph work. Calculations of rates from data. Exam prep and mock exams. Equilibrium calculations using moments. Solving vector problems using scale diagrams and the parallelogram of forces	Earths Resources; Finite and Renewable resources, Water and it's treatment, the extraction of metals, life cycle assessments and the choices of reducing, reusing vs recycling; and upgrade (geography). Forces in balance Revision and upgrading	
Biology (Triple Award)	Communicable disease, Bacteria viruses and other pathogens Preventing and treating disease	Non Communicable disease, diabetes, heart disease, Photosynthesis, plant organs and functions	Respiration aerobic and anaerobic; Human nervous system Nerves and their functions, reflex arc (GCSE PE)	Hormone control, endocrine system, IYF, Blood sugar control (rat)	Homeostasis in action Kidney and temperature control, liver functions	Revision and upgrading areas of misconceptions and prep for mock exams	
Chemistry (Triple Award)	Structure and bonding, states of matter, Ionic, Covalent and Metallic bonding. The properties of each structure and reasons. Including ionic lattices, Simple molecular, Giant covalent (diamond, graphite, silicon dioxide) and Giant Metallic. Looking at nanoparticles and their application	Structure and bonding, Chemical calculations: Chemical calculations. Calculating Moles, Mass and Mr, atom economy and the expression of concentrations in 2 different forms. HT- Will look at Volumes of gases as an addition to this. Use of density. States of matter and changes associated with temperature. Internal energy, and what it means. Specific latent heat. Relate gas pressure to temperature and volume	Chemical changes: The reactivity series linked to the extraction of metals and displacement reactions. Neutralisation and the pH scale. Acids and their reactions with bases including metals. Looking at why some acids are weaker than others	Electrolysis; Electrolysis of solutions, what happens at the electrodes, specifically looking at the production of aluminium. HT- Half equations (H)	Rates of reaction, The effect of temperature, concentration, pressure, surface area and catalysts. Linked to required practical on investigating rates and graph work. Calculations of rates from data	Earths Resources; Finite and Renewable resources, Water and it's treatment, the extraction of metals, life cycle assessments and the choices of reducing, reusing vs recycling; Upgrading	
Physics (Triple Award)	Electricity in the home, to include use of oscilloscope to show a.c. National Grid and power stations, along with transformers, (qualitative). Plugs and safety, to access mains electricity. Characteristics of mains electricity. Power of appliances, and electrical efficiency	Use of density. States of matter and changes associated with temperature. Internal energy, and what it means. Specific latent heat. Relate gas pressure to temperature and volume	Rutherford and Thomson models of atom. The unstable nucleus, leading to stabilisation via nuclear decay. The three radiations as alpha, beta, and gamma radiations, and their effect on the nucleus. Activity and half life, including nuclear equations. Uses of nuclear radiation in medicine. Nuclear fission and fusion	Introduce vectors and scalars. NilH as forces between objects. Idea that resultant force occurs because of vector nature of force. Moments and balance, in terms of centre of mass, as well as distance from CoM.	Equilibrium calculations using moments. Solving vector problems using scale diagrams and the parallelogram of forces	Forces in balance Revision and upgrading	
GCSE PE	Engagement patterns Muscular System	Engagement Patterns and Commercialisation Skeletal System	Commercialisation Fitness	Ethics and deviance Fitness	Sport Psychology Cardiovascular System	Sport Psychology Respiratory System	
Sports Studies	R185: Performance Topic area 1: Key components of performance Topic area 2: Strengths and weaknesses of sports performance	R185: Performance Topic area 3: Organising and planning a sports activity session Topic area 4: Leading a sports activity session	R185: Performance Topic area 4: Leading a sports activity session Topic area 5: Reviewing your own sporting performance	R186: Sport and the media Topic area 1: Different source of media that cover sport Topic area 2: Positive effects of the media	R186: Sport and the media Topic area 2: Positive effect of the media Topic area 3: Negative effects of the media	R186: Sport and the media Topic area 3: Negative effects of the media	
Geography	Challenge of Natural Hazards Tectonics	Challenge of Natural Hazards Weather Hazards	The Urban World Global Urban Growth	The Urban World UK Cities and Sustainable Living	UK Landscapes - Rivers, Fluvial Fieldwork	UK Landscapes - Coasts	
History	Students examine the geography of North America and look in depth at the different groups who migrated across the continent. They will then examine the effect this had on themselves and the First Nation peoples. Concepts such as Manifest Destiny are examined alongside different historical interpretations	Conflict across America - Students explore the build up to the American Civil War, the aftermath of the Civil War and its social and political impact upon the reconstruction USA. Post Civil War Conflict between religious groups and Indian Nations, and the US Army.	CvT in Asia - Korean War - Students cover the global background of tensions in Korea, the events of the Korean War and the wider consequences	CvT in Asia - Vietnam War - Students explore the background to conflict in Indo-China, the development of American involvement, withdrawal of the French and the impact upon both Vietnam and the USA.	Health and the People - Medieval medicine - Students cover medical practices in the Ancient world and their lasting impact upon Medieval societies with reference to surgery, public health and the role of the church in society.	Health and the People - Renaissance medicine - Students examine the impact of the Renaissance upon medical developments, looking at key individuals such as Vesalius and their impact on medical practices and endorphanizing.	
RE	Component 1: Beliefs, teachings: Christianity	Component 1: Beliefs, teachings: Christianity	Component 2: Theme A: Relationships and Families (Licence: Year 10)	Theme C: God and Revelation	Component 1: Practices: Christianity	Component 1: Practices: Christianity	
Design and Technology	3.1.6 Materials and their working properties - Materials and Finishes (Wood, Metals, Polymers) 3.2.3 Common specialist technical principles - Improving functionality	3.1.3 Developments in new materials - 3.1.6 Materials and their working properties - Polymers and smart materials 3.1 Core technical principles	3.1.3 Mechanical devices - Mechanical devices - Motion, Cams, Linkages and Levers. 3.1.5 & 3.1.6 Mechanical devices - Mechanical devices - Motion, Cams, Linkages, Levers, Gears, Pulleys, Forces and Equations	3.1.3 Energy generation and storage - Methods of energy generation including renewable and non renewable sources and storage methods of energy 3.1.2 2.1 Core technical principles - Recap and go over the different materials and properties.	3.1.3 Developments in new materials including: Modern Materials - Graphene, Metal foams and Titanium, Liquid Crystal Displays (LCDs) and Nanomaterials. Smart Materials - controlled by external stimuli, such as stress, temperature, moisture, or pH eg shape memory alloys, thermochromic pigments and photochromic pigments. As well as Composite materials... Give out NEA Task for pupils to start research	3.1.1 New and emerging technologies - New and emerging technologies, robotics and automation, industry, different types of production. Careers talk by external guest speaker - NEA Task for pupils to continue research section (AO1)	
French	Myself, Family and Friends Describing yourself Describing family members Relationships with family members What makes a good friend? Describing what you do/ did with your friend How to form the perfect tense Talking about future relationships, news on marriage and partnership (links to component 2 Y10 RE) Time Activities Talking about sports Using 'devoir' to say how long doing a sport Saying what I do certain sports	Free Time Activities Talking about books and reading Talking about what I used to do. Talking about TV Talking about what free time activities I did last week. Technology Talking about use of technology and devices. Talking about the advantages of technology. Talking about the disadvantages of technology. Use of 3 time frames to talk about technology. (Contest and Feedback (links to RE)) Talking about celebrations. Talking about and about celebrations. Talking about different festivals and how they are celebrated in French-speaking countries.	Use of Cohesive devices Describing what you study and preferences Describing your school Giving your opinions about school rules. Comparing French and English school Talking about extra-curricular activities Talking about what you're going to do or school Talking about a past school trip. Health, (links to Y10 Health and Social) Discussing healthy and unhealthy living. (Healthy) Talking about health issues and solutions.	Home Town, Neighbourhood and Region Understanding and describing where someone lives. Saying what you can and can't do in town. Describing what there is and isn't in town. Giving directions Describing what there is in town. Describing where someone lives a region.	Travel and Tourism Where you go on holiday What you do on holiday Holiday accommodation Talk about past and future holidays (your ideal holidays) Staying in hotel accommodation (Ordering in a restaurant) Booking transport Buying souvenirs	Revision and Exam Skills, Trial exams Preparing for and practice for speaking mock exams.	
BTEC Business	Component 1A: Examine the characteristics of enterprises	Component 1B: Explore how market research helps enterprise meet customer needs and understand competitive behaviour	Component 1C: Investigate the factors that contribute to the success of an enterprise	Component 2A: Explore ideas and plan for a micro-enterprise activity	Component 2B: Pitch a micro enterprise activity	Component 2C: Review own pitch for a micro enterprise activity	
BTEC Health & Social Care	Component 1A1: Human growth and development across life stages	Component 1A2: Factors affecting growth and development	Component 1B1: Different types of life events.	Component 1B2: Coping with change caused by life events.	Component 2A1: Health and Social Care services	Component 2A2: Barriers to accessing services	
BTEC IT	Component 1 Learning Aim A Investigating user interface design for individuals and organization's	Component 1 Learning Aim A Investigating user interface design for individuals and organization's Learning Aim B Use Project Planning Techniques to plan and design a user	Component 1 Learning Aim C Use Project Planning Techniques to plan and design a user interface	Component 1 Learning Aim C Developing and review a user interface	Component 1 Learning Aim C Developing and review a user interface	Component 2 Learning Aim A Investigate the role and impact of Using data on individual's and organization	
BTEC Art & Design	Component 1 Learning Aim A Investigate art and design practice	Component 1 Learning Aim A Investigate art and design practice	Component 1 Learning Aim B Generate and communicate art and design ideas	Component 1 Learning Aim B Generate and communicate art and design ideas	Component 2 Learning Aim A Develop practical skills through application and review	Component 2 Learning Aim A Develop practical skills through application and review	
BTEC Performing Arts	Component 1 - Exploring Performing Arts Component 2 - Developing skills and techniques in the Performing Arts	Component 1 - Exploring Performing Arts Component 2 - Developing skills and techniques in the Performing Arts	Component 1 - Exploring Performing Arts Component 2 - Developing skills and techniques in the Performing Arts	Component 1 - Exploring Performing Arts Component 2 - Developing skills and techniques in the Performing Arts	Component 1 - Exploring Performing Arts Component 2 - Developing skills and techniques in the Performing Arts	Component 1 - Exploring Performing Arts Component 2 - Developing skills and techniques in the Performing Arts	
BTEC Music	Component 1: Exploring Music Products and Styles A & B: Music Makers	Component 1: Exploring Music Products and Styles A & B: Music Makers	Component 2: Exploring Music Products and Styles A & B: Music Makers	Component 2: Musical Skills Development LA A: Starting Out	Component 2: Musical Skills Development LA A: Starting Out LA B: And now presenting!	Component 2: Musical Skills Development LA B: And now presenting!	