Year 10 Curriculum Overview

Subject	Winter term skills & knowledge	Spring term skills & knowledge	Summer term skills & knowledge	Enrichment opportunities
English	 Animal Farm: analysing language and understanding the context of the novel. English Language Paper 1: finding information, analysing language and structure, evaluating, organising your writing, writing imaginatively and writing with technical accuracy. Power and Conflict (Human Power) - Developing knowledge of the content of each poem, analysing the use of 	Macbeth – Learning the plot and characters of the play, analysing language, structure and stagecraft, understanding the context of the play. I Know Why the Caged Bird Sings: English Language Paper 2: finding and summarising information, Comparing texts, analysing language and writing for audience and purpose.	Power and Conflict (Individual Experiences) - Developing knowledge of the content of each poem, analysing the use of language and structure, understanding the context of each poem. English Language Writing Skills: viewpoint writing, writing to describe and narrate, organising your writing and technical accuracy.	Theatre Trip – An Inspector Calls Debating Club
	language and structure, understanding the context of each poem.		Speaking and listening	
Maths	Knowledge: Solving Equations and Inequalities, Simultaneous Equations, Gradients and Lines, Non-linear Graphs. Revision of Summer Term Y9 and Autumn Term Y11 for Y10 Exam Skills: numeracy, calculator use, mathematical reasoning, problem solving	Knowledge: Angles and bearings, circles and related shapes, vectors Ratios and fractions, percentages and interest, probability, collecting, representing and interpreting data* Skills: numeracy, calculator use, mathematical reasoning, problem solving	Knowledge: Non-calculator methods of calculation*, types of number and sequences, indices and roots, manipulating expressions Skills: numeracy, calculator use, mathematical reasoning, problem solving	Intermediate Maths Challenge (Targeted) Times Tables Rock Stars (All) Maths Clinic (All)
Science	Knowledge:Homeostasis, energy change, Electricity Skills: Recall and explain methods, conclusions and evaluations for required practical's, can recall and use correct formula, can use correct terminology	Knowledge:Ecology, Rates of reaction, organic chemistry, Forces Skills: Recall and explain methods, conclusions and evaluations for required practical's, can recall and use correct formula, can use correct terminology, can introvert units	Knowledge:Inheritance and variation, Chemical analysis, waves Skills: Recall and explain methods, conclusions and evaluations for required practical's, can recall and use correct formula, can use correct terminology	
Science (Synergy)	Knowledge: forces and motion, magnetism, waves Skills: Recall and explain methods, conclusions and evaluations for required practical's, can recall and use correct formula, can use correct terminology	Knowledge:Lifestyle and health, forces and energy, preventing and curing disease Skills: Recall and explain methods, conclusions and evaluations for required practical's, can recall and use correct formula, can use correct terminology	Knowledge:Ecosystem and biodiversity, Inheritance, Electricity Skills: Recall and explain methods, conclusions and evaluations for required practical's, can recall and use correct formula, can use correct terminology	Drop in sessions
3D Design	 Sustained study projects Chair design- CAD- 3D print, laser cutting, maquettes, using the work of others to influence design choices- Teacher input Lamp Project- sustained independent project 	 Sustained study projects Chair design- CAD- 3D print, laser cutting, maquettes, using the work of others to influence design choices- Teacher input Lamp Project- sustained independent project 	Lamp Project- sustained independent project	
Art	Theme: Structures Knowledge:- Expected content, approach and presentation for AO2 of a GCSE project. Expectations for AO4- final piece Skills:- Presentation, annotation, research, making links with others*, drawing to test and explain ideas, techniques with chosen materials, processes/approach with chosen materials, development of ideas, working sequentially, working independently, self-evaluation. Time management. Meeting deadlines. Organizing appropriate materials.	Start of Coursework 2 Theme: own choice or given, depending on previous progress. Knowledge:- Expected content and desirable approaches to learning for AO3 of a GCSE project. Skills:- Observational, imagined and secondary source work produced in a range of materials, with the focus on technique. Topic research. Presentation and annotation skills.	Coursework 2 continued. Knowledge:- Expected content, approach and presentation for AO1 of a GCSE project. Skills:- Artist research and analysis. * Exploration of artists' techniques Response to the artists.	Curriculum Days, if applicable. Access to the department on given lunchtimes/after school. Use resources, such as YouTube, to expand knowledge of the subjects/artist covered e.g. virtual gallery tours. External competitions and college competitions will be advertised as applicable.
	[GCSE] Units • The units of data storage: • How data needs to be converted into a binary format to be processed by a computer • Data capacity and calculation of data capacity requirements [GCSE] Architecture of the CPU • The purpose of the CPU: • The fetch-execute cycle • Common CPU components and their function:	[GCSE] Data storage Numbers Characters Images Sound	 [GCSE] Computational thinking Principles of computational thinking: [GCSE] Designing, creating and refining algorithms Identify the inputs, processes, and outputs for a problem Structure diagrams Create, interpret, correct, complete, and refine algorithms using: Identify common errors Trace tables 	

- •
- Computer Science
- [GCSE] CPU performance • How common characteristics of

Von Neumann architecture:

CPUs affect their performance:

[GCSE] Embedded systems

function:

- The purpose and characteristics of embedded systems
- Examples of embedded systems

[GCSE] Primary storage (Memory)

- $\circ \quad \ \ {\rm The \ need \ for \ primary \ storage}$
- The difference between RAM and ROM
- The purpose of ROM &RAM in a computer system
- Virtual memory

[GCSE] Secondary Storage

- $\circ \quad \ \ {\rm The \ need \ for \ secondary \ storage}$
- Common types of storage:

[GCSE] Compression

- The need for compression
- Types of compression:

[GCSE] Boolean logic

- Simple logic diagrams using the operators AND, OR and NOT
- o Truth tables
- Combining Boolean operators using AND, OR and NOT
- Applying logical operators in truth tables to solve problems

[GCSE] Searching and sorting algorithms

- Standard searching algorithms:
- Standard sorting algorithms:

[GCSE] Languages

- Characteristics and purpose of different levels of programming language:
- The purpose of translators
- The characteristics of a compiler and an interpreter

[GCSE] The Integrated Development Environment (IDE)

- Common tools and facilities available in an Integrated
- Development Environment (IDE): [GCSE] Programming fundamentals
- The use of variables, constants, operators, inputs, outputs and assignments

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	• Suitable storage devices and storage		• The use of the three basic	
	media for a given application		programming constructs used to	
	• The advantages and disadvantages		control the flow of a program:	
	of different storage devices and		• The common arithmetic operators	
	storage media relating to these		• The common Boolean operators	
	characteristics:		AND, OR and NOT	
			[GCSE] Data Types	
			 The use of data types: 	
	Unit 3- (One lesson per fortnight)	Unit 3- (One lesson per fortnight)	Unit 3- (One lesson per fortnight)	
	Scientific and Mathematical applications	Scientific and Mathematical applications	Scientific and Mathematical applications	
	for construction	for construction	for construction	
	Understand the effects of forces	Understand the effects of forces	Understand the effects of forces	
	and temperature changes on	and temperature changes on	and temperature changes on	
	materials used	materials used	materials used	
	• Use mathematical equipment to	• Use mathematical equipment to	• Use mathematical equipment to	
	solve construction problems	solve construction problems	solve construction problems	
-				
Construction	Unit 7- (3 lessons per fortnight) Exploring	Unit 7- (3 lessons per fortnight) Exploring	Unit 7- (3 lessons per fortnight) Exploring	
	brick work and block work principles and	brick work and block work principles and	brick work and block work principles and	
	techniques	techniques	techniques	
	• Understand tools, materials and	• Understand tools, materials and	• Understand tools, materials and	
	equipment used for brick and	equipment used for brick and	equipment used for brick and	
	blockwork	blockwork	blockwork	
	• Develop practical skills and safe	 Develop practical skills and safe 	Develop practical skills and safe	
	techniques to construct	techniques to construct	techniques to construct	
	brickwork and blockwork	brickwork and blockwork	brickwork and blockwork	
		Mock NEA- Sustainable living-		
	Bag project, modelling and making	Making iterative models- draping on	 Mock NEA- Sustainable living- 	
	Bag project- modelling and making final prototype up to half term.	the stand and pattern cutting,	Making iterative models- draping on	
		Manipulating and joining materials,	the stand and pattern cutting,	
	CAD- learning 2 & 3D design- laser cutter , 3D printer	ensuring accuracy and structural	Manipulating and joining materials,	
D & T Textiles	Theory- Core principles- Design	integrity	ensuring accuracy and structural	
Darrextiles	thinking and communication,	Theory- In-depth principles- physical	integrity	
	characteristic properties of	and working properties of materials,	 NEA- contexts released 1st June 	
	materials, categories of materials	sources and origins, factors that	• Theory- Finishes, digital design tools,	
	Making iterative models	influence selection, commonly	manufacturing methods and scales	
	• Making iterative models	available forms and standard units	of production, costs and availability	
		of measurement.		
	Physical skills, technical skills, Expressive	Physical skills, technical skills, Expressive	Physical skills, technical skills, Expressive	
	skills, mental skills and attributes,	skills, mental skills and attributes,	skills, mental skills and attributes,	
	knowledge of action, dynamic, spatial	knowledge of action, dynamic, spatial	knowledge of action, dynamic, spatial	
	and relationship content, choreographic	and relationship content, choreographic	and relationship content, choreographic	
	processes, structuring devices,	processes, structuring devices,	processes, structuring devices,	Dance club, performance
	choreographic devices, aural setting,	choreographic devices, aural setting,	choreographic devices, aural setting,	opportunities in Christmas
	performance elements, evaluative,	performance elements, evaluative,	performance elements, evaluative,	showcase, Dance Show,
Dance	analytical, interpretative skills, critical	analytical, interpretative skills, critical	analytical, interpretative skills, critical	Shakespeare Festival, Whole
	skills. Students will engage with tasks	skills. Students will engage with tasks	skills. Students will engage with tasks	school production, industry trips,
	that will allow them to employ the above	that will allow them to employ the above	that will allow them to employ the above	theatre trips, workshop with
	knowledge and skill sets that link to Performance, Choreography and	knowledge and skill sets that link to Performance, Choreography and	knowledge and skill sets that link to Performance, Choreography and	visiting industry profs. * #
	appreciation of professional works. The	appreciation of professional works. The	appreciation of professional works. The	
	professional works from the theory exam	professional works from the theory exam	professional works from the theory exam	
	will be introduced in this term and then	will be introduced in this term and then	will be introduced in this term and then	
	studied throughout year 10 and 11	studied throughout year 10 and 11	studied throughout year 10 and 11	
		Revision of devising techniques with	Component 1 GCSE Devising Exam +On-	
		short devising practical SOL and	going work on AIC for Comp 3 exam	
	An Inspector Calls and Devising tasks.	portfolio practice questions. Ongoing	#Knowledge: Characteristics of dramatic	
	Section B - Review of a live	work on An Inspector Calls and start of	work, including genre, structure,	
	performance. * # Knowledge:	work on Performance from a text.	character, form, style, language. How	
	Understanding practices used in twenty-	#*Knowledge: Understanding practices	meaning is communicated through	
	first century theatre-making,	used in twenty-first century theatre-	performance conventions, use of space,	
	understanding production elements and	making, understanding production	relationships between performer and	
	theatrical conventions, understanding	elements and theatrical conventions,	audience. Skills: research, developing	
	the roles of theatre makers including	understanding the roles of theatre	ideas and intentions, rehearsing, refining	
	performers, directors and designers.	makers including performers, directors	and amending work. Use of explorative	
	Understanding social, historical and or	and designers. Understanding social,	strategies: improvisation, tableaux, hot	
	cultural context including theatre	historical and or cultural context	seating, physical movement,	
	conventions of a period. Understand	including theatre conventions of a	soundscapes. Vocal and physical skills.	Visit to a live theatre production.
	characteristics of dramatic work	period. Understand characteristics of	Analyse and evaluate their own work and	The opportunity to take on role o
	including genre, structure, character,	dramatic work including genre, structure,	that of others. 2000 word Component 1	Drama Captain and assist in

form, style, and language. Understand how meaning is communicated through performance conventions, use of space and relationships between performers and the audience.Understand themes and issues and character development. Skills: analyse and evaluate the work of theatre-makers. Recognise specific challenges for performers, directors and designers, Use subject specific terminology in discussing the work of theatre makers. Research skills. Rehearsing and line learning, vocal skills, physical skills, developing ideas and intentions, refining and amending work. Performing to an audience.

dramatic work including genre, structure, character, form, style, and language. Understand how meaning is communicated through performance conventions, use of space and relationships between performers and the audience. Understand themes and issues, character development Skills: analyse and evaluate the work of theatre-makers. Recognise specific challenges for performers, directors and designers, Use subject specific terminology in discussing the work of theatre makers. Research skills. Rehearsing and line learning, vocal skills, physical skills, developing ideas and intentions, refining and amending work. Performing to an audience.

that of others. 2000 word Component 1 portfolio theory work.Understanding practices used in twenty-first century theatre-making, understanding production elements and theatrical conventions, understanding the roles of theatre makers including performers, directors and designers. Understanding social, historical and or cultural context including theatre conventions of a period. Skills: analyse and evaluate the work of

theatre-makers. Recognise specific challenges for performers, directors and designers, Use subject specific terminology in discussing the work of theatre makers. Drama Captain and assist in running drama clubs for KS3. Performance or production opportunities in school productions. Industry visit and workshops. #*

Drama

				1
French	Knowledge: Festivals: Cultural customs Types of festivals and how they are celebrated Perfect tense – describing a festival or celebration they have been to Life at School: School uniform, school rules, ideal school and how you would choose to improve your school Skills: Listening, reading, speaking, writing, translation Photocard Role Play	Knowledge: Healthy and Unhealthy Living: Food vocabulary and categories of food Exercise and sport Dangers of smoking, alcohol and drugs Using the imperfect tense to compare your health when younger to now Health resolutions Education Post-16: Plans for education post GCSE – college, 6 th form, university, apprenticeships and training Skills: Listening, reading, speaking, writing, translation Photocard Role Play	Knowledge: Marriage and Partnership: Descriptions of boyfriends/girlfriends Ideal Partner Marriage and future plans (accommodation, relationships, children) Environment: Environmental problems and how we can try to reduce or prevent these Skills: Listening, reading, speaking, writing, translation Photocard Role Play	February – Presentation and Q+A about studying A Level Languages at Hills Road June – Why Not Languages at A Level? Cambridge University taster day for 10 students Intercollege European Day of Languages competition
Geography	Note Flay 2.3 Weather and Climate Why is the UK climate so variable?Circulation of atmospheric pressure.Weather hazard patternsCause, consequences and responses oftwo contrasting weather events(Hurricane Katrina and the CaliforniaDrought)Climate Change- cause and effectHow has climate changed in theQuaternary period? Causes of climatechange. Consequences of climatechange. How and why do attitudes varytowards climate change? What canindividuals do in the UK to reduce therisk of climate change?Sustainability, human and physicalprocesses, risk, inequality, globalisationand interdependent, developmentSkills:Map skills (location, scale, changes overtime), enquiry DME), writing and oracy(real texts and guided reading),numeracy and data skills (rate oferosion).AO1,2,3 and 4	2.1 Coasts Distinctive landscapes in the UK? How are coastlines managed? Why is coastal management often controversial? Predicted impacts of climate change on coastal landscapes and communities? Sustainability, human and physical processes, risk, globalisation and interdependent, development Skills: AO1,2,3 and 4 Map skills (location, scale, changes over time), enquiry DME Holderness), writing and oracy (real texts and guided reading), numeracy and data skills (rate of erosion).	2.2 Rivers Distinctive river landscapes in the UK. Why do rivers flood? What are the consequences of flooding? How can rivers be managed to reduce risk of flooding? Why is river flood management often controversial? Links to coasts and climate change. Sustainability, human and physical processes, risk, globalisation and interdependent, development Skills: AO1,2,3 and 4 Map skills (location, scale, changes over time), enquiry DME River Management), writing and oracy (real texts and guided reading), numeracy and data skills (rate of change).	Summer fieldwork
Health & Fitness	Knowledge (Health and Fitness): Body systems, energy systems, short and long term effects of exercise, Components of fitness, methods of training, principles of training Skills (Core PE): Outwitting opponents, replicating movements	Knowledge (Health and Fitness): Fitness testing, normative data, methods of training, training zones, activity level and diet, lifestyle questionnaires Skills (Core PE): Replicating movements, outwitting, net/wall	Knowledge (Health and Fitness) : Training programmes, warming up and cooling down, SPORT, FITT, Goal Setting, Training sessions, mock synoptic project Skills (Core PE): performing at maximum levels, striking and fielding	Extra curricular clubs Intra school sport Inter school sport Leadership Academy Officiating courses Sports Captains
History	Knowledge: Weimar and Nazi Germany c1918 – 1939 – Germany and WW1, T of V, Weimar government, Weimar culture, development of Nazi Party, role of Skills: evidence, investigation, causation, change and continuity, significance and interpretations	Knowledge: This term includes the completing of the Germany unit and then the following: Medicine in GB c1100 to date, including a depth study of the British section of the Western Front in WW1 – medieval medicine, Renaissance changes, hospitals, key figures, development of science, 20 th C medicine, NHS and modern techniques Skills: evidence, investigation, causation, change and continuity, significance and interpretations	Knowledge: Medicine unit continued (see Spring details) Skills: evidence, investigation, causation, change and continuity, significance and interpretations	Possible Trip: Battlefields Berlin IWM Films: The Wave Pain, Pus and Poison 1917 They shall not grow old
Hospitality & Catering	 Practical skills- recap knife skills, medium to high complexity savoury dishes and accompaniments, medium to high skilled desserts and accompaniments Recap food safety and hygiene legislation, personal safety, HACCP and the role of the EHO Cambridge Latin Course book 2. Language (knowledge): complex structures including: 	 Plating and presentation techniques- spun sugar, chocolate. Garnishes- vegetable and fruit Prom pudding project. UNIT 2 Theory- AC1.1- AC1.4, nutrients and their function in the body, nutrition needs of specific groups, effects of poor nutrition, how to cook/ store foods to preserve nutrients. Longer reading texts from Ashley Carter book Language (knowledge): complex structures including: 	 'Gastropub' Mock NEA Full mock NEA covering all assessment objectives Longer reading texts from Ashley Carter book Language (knowledge): complex atmatures including. 	
Latin	 genitive case Imperative tense 'ut' clauses Civilisation (knowledge): The beginnings of Rome Different areas of Rome (the Hills, Subura, Ostia etc) Life in the City of Rome (houses, water supply) Skills:	 Participles Indirect questions Civilisation (knowledge): Buildings and monuments in Rome The fora Skills: Translation & comprehension. Describing Roman life, essay writing. 	structures including: • Passive <u>Civilisation (knowledge)</u> : Revision of topics <u>Introduction to Literature (knowledge)</u> : Two texts from set texts: read and analyse for content and style <u>Skills</u> : Translation & comprehension.	Residential trip to Pompeii open to all year 10 and 11 students Day visit to the Museum of London for a 'handling session' of Roman artefacts.

	Translation & comprehension. Describing		Analysis of literature for content and	
	Roman life, essay writing.		style. Essay writing	
Music Technology	Composing Music Genres – looking at core genres of music (pop, rock, blues, soul, jazz, disco, RnB, Hip Hop, EDM) Understanding key signature, harmony, and chord construction, melody, structure and technical features. Discussing how technology has changed the genre and should be explored. Outcome Assessment 1 – to be completed and to pass at least to a Level 2 Merit outcome. Outcome Assessment 2 - to be completed and to pass at least to a Level 2 Merit outcome.	Sound Design Review of the subject area from Year 9. Consider methods of sound creation/design and develop ideas around capturing and creating sound. Editing sounds from libraries/loops to create original content. Using editing tools to manipulate the audio from a library. Cut, copy, paste, flex, glue and plug-ins to create original content. Creating special FX. Planning and testing of sounds. Using layering techniques to create realistic and useable sounds. Audio and synthetic sounds layered together. Interleaving microphone techniques. Outcome 1 Assessment Outcome 2 Assessment	Operating a DAW Review of the subject area from Year 9. Hardware and theory of sampling – discuss the hardware components in detail, building on the knowledge learnt from Year 9. A-D conversion and sample theory explained, noting sample rates, aliasing and nyquist equation. Synths and samplers, highlighting the difference between the two and how they work. Discuss ADSR explored in detail with attention to ADSR to change the timbre of an instrument.	Band Music Technology Club Song writing Club
				Extra curricular clubs
PE	Skills (Core PE): Outwitting opponents, replicating movements	Skills (Core PE): Replicating movements, outwitting, net/wall	Skills (Core PE): performing at maximum levels, striking and fielding	Intra school sport Inter school sport Leadership Academy Officiating courses Sports Captains
	Topic 1 – World of Work:		Topic 5 – Personal Safety / Wellbeing:	
PSHE	 Online reputation Post-16 research Personal Skills Resilience Topic 2 – My Money Matters: Cost of leaving school What is involved when being 	 Topic 3 – Healthy Relationships: Domestic Abuse Child Sexual Exploitation Grooming Topic 4 – Family Planning:	 Adult Wellbeing STIs and STDs Recap of laws surrounding and consequences of sharing indecent images and videos 	Apprenticeships talk
	 paid, e.g. Income tax, National Insurance, pension etc. Budgeting Debt and mental health 	 Abortion Harassment and consent Contraception 	Topic 6 – Risk: • Gambling • Violence • Cannabis debate	
RE	Sikhism beliefs # The nature of God God as the creator Nature of human life Karma, rebirth and mukti 5 stages of liberation Importance of being God-centred The oneness of humanity and the quality of all Equality and Guru Nanak, Guru Gobind Singh and Guru Granth Sahib Sewa Role of the Sangat Skills: Ao1: 1: Demonstrate knowledge and understanding of religion and beliefs including: AO1:2 beliefs, practices and sources of authority (Bible) AO1: 3 influence on individuals, communities and societies AO1:4 similarities and differences within and/or between religions and beliefs AO2:Analyse and evaluate aspects of religion and belief, including their significance and influence. Sikhism Practices # The gurdwara Guru Granth Sahib Langar Prayer in the home and mediating in God's name Festivals	 Sikhism Practices continued Pilgrimage Birth and naming ceremony The initiation ceremony Skills: Ao1: 1: Demonstrate knowledge and understanding of religion and beliefs including: AO1:2 beliefs, practices and sources of authority (Bible) AO1:3 influence on individuals, communities and societies AO1:4 similarities and differences within and/or between religions and beliefs AO2:Analyse and evaluate aspects of religion and belief, including their significance and influence. There will be questions throughout the lessons, looking at 4 and 5 mark questions and understanding how to answer. At the end of the Topic there will be a full skill test, with a full exam for Sikhism beliefs 	Religion and life # Origins of the universe Value of the world Use and abuse of the environment Use and abuse of animals Abortion, Euthanasia, death and the afterlife The existence of God and revelation# the design argument the first Cause argument the arguments from miracles further arguments against the existence of god Special revelation and enlightenment General revelation Different ideas about the divine the value of revelation and enlightenment Skills: Ao1: 1: Demonstrate knowledge and understanding of religion and beliefs including: AO1:2 beliefs, practices and sources of authority (Bible) AO1: 3 influence on individuals, communities and societies AO1:4 similarities and differences within and/or between religions and beliefs AO2:Analyse and evaluate aspects of religion and belief, including their significance and influence.	St Peter and St Paul Church Walsingham pilgrimage trip
Spanish	FestivalsKnowledge:Festivals:Cultural customsTypes of festivals and how they arecelebratedPerfect tense – describing a festival orcelebration they have been toLife at School:School uniform, school rules, ideal schooland how you would choose to improveyour schoolSkills:Listening, reading, speaking, writing,translationPhotocardRole Play	Knowledge: Healthy and Unhealthy Living: Food vocabulary and categories of food Exercise and sport Dangers of smoking, alcohol and drugs Using the imperfect tense to compare your health when younger to now Health resolutions Education Post-16: Plans for education post GCSE – college, 6 th form, university, apprenticeships and training Skills: Listening, reading, speaking, writing, translation Photocard	Knowledge: Marriage and Partnership: Descriptions of boyfriends/girlfriends Ideal Partner Marriage and future plans (accommodation, relationships, children) Environment: Environmental problems and how we can try to reduce or prevent these Skills: Listening, reading, speaking, writing, translation Photocard Role Play	February – Presentation and Q+A about studying A Level Languages at Hills Road June – Why Not Languages at A Level? Cambridge University taster day for 10 students Intercollege European Day of Languages competition

	Role Play	