

# The Academic Curriculum

The intent of our academic curriculum is to deliver **Powerful Knowledge** to our students. At Creative Education Trust this is not contextualised as ‘the knowledge of the powerful’, but specialised knowledge in a range of subject disciplines. This will include both disciplinary knowledge and substantive knowledge within each area of study. This curriculum is not only designed to endow children with the social assets, skills and cultural capital needed to succeed and achieve, but also to instil in our children the power and confidence to question, synthesise and scrutinise in a range of disciplines, a variety of social contexts and in their own lives. Beyond a range of academic qualifications, the intended impact of this curriculum is for our students to be able to integrate into any social, academic or professional environment, as well as to question, instigate change or lead within those environments.



Below you will find a detailed overview of what Year 13 students are learning in each of their subjects in Half Term 1 and 2 (September-December)

**Year 13 Curriculum – Autumn Term 2020-21 - To support parents and students.**

Subject	Autumn Term Topics
English	<p><b>Half Term 1 and 2: The Murder of Roger Ackroyd</b></p> <p>Students are learning about the crime genre and will be studying the classic crime text <i>The Murder of Roger Ackroyd</i>, written by Agatha Christie. During this section of the course students will be:</p> <ul style="list-style-type: none"> <li>- Studying and analysing the generic conventions of the crime genre</li> <li>- Exploring the nature of classic ‘whodunit’ crime fiction</li> <li>- Developing an understanding of characters and events from the novel</li> </ul> <p><b>Half Term 2: Unseen crime extracts</b></p> <p>Students will be studying and analysing a range of unseen crime extracts. There will be a range of unseen extracts from various crime novels which will be used to prepare students for the Unseen Crime section of their paper 2. During this section of the course students will be covering:</p> <ul style="list-style-type: none"> <li>- The history of crime fiction</li> <li>- The various sub-genres and types of crime fiction writing</li> <li>- Close analytical skills in application to unseen crime extracts</li> </ul>

<p>Maths</p>	<p>Students will be developing their understanding of:</p> <p><b><u>Pure Topics</u></b></p> <ul style="list-style-type: none"> <li>- Algebraic methods</li> <li>- Functions and graphs</li> <li>- Sequences and series</li> <li>- Binomial expansion</li> <li>- Radians</li> <li>- Trigonometric functions</li> <li>- Trigonometry and modelling</li> <li>- Parametric equations</li> <li>- Differentiation</li> </ul>
<p>Further Maths</p>	<p>Students will be developing their understanding of:</p> <p><b><u>Pure Topics:</u></b></p> <ul style="list-style-type: none"> <li>- Complex Numbers</li> <li>- Argand Diagrams</li> <li>- Series</li> <li>- Roots of Polynomials</li> <li>- Matrices</li> <li>- Linear Transformations</li> </ul> <p><b><u>Statistics</u></b></p> <ul style="list-style-type: none"> <li>- Discrete Random Variables</li> <li>- Poisson Distribution</li> </ul>
<p>Core Maths</p>	<p>Students will be developing their understanding of:</p> <ul style="list-style-type: none"> <li>- The Normal Distribution</li> <li>- Confidence Intervals</li> </ul>

<p>BTEC Applied Science</p>	<p><b>Unit 3 – Science Investigation Skills</b></p> <p>Students will cover the stages involved and the skills needed in planning a scientific investigation: how to record, interpret, draw scientific conclusions and evaluate. In this unit, students will develop the essential skills underpinning practical scientific investigations.</p> <p>As well as drawing on Unit 1 and Unit 2, these skills will be delivered through subject themes ranging from enzymes and diffusion to electrical circuits.</p>
<p>Biology</p>	<p>Students will be learning:</p> <p><b>Module 5: Neuronal and Hormonal Communication</b></p> <p>It is important that organisms, both plants and animals are able to respond to stimuli. This is achieved by communication within the body, which may be chemical and/or electrical. Both systems are covered in detail in this module.</p> <p><b>Module 6: Genetics</b></p> <p>This module covers the role of genes in regulating and controlling cell function and development. Heredity and the mechanisms of evolution and speciation are also covered.</p> <p><b>Complete and Sign off CPAC Qualification</b></p> <p>Students will show their skills in developing experimental methods and techniques for analysing empirical data. This will include skills in planning, implementing, analysing and evaluating will be assessed in the separate CPAC Qualification. This is also essential revision for practical elements in the exams.</p>
<p>Chemistry:</p>	<p>Students will be learning:</p> <p><b>Module 5: Physical Chemistry and Transition Elements: Rates of Reactions, Equilibrium, Acids, Bases and pH, Buffers and Neutralisation</b></p> <p>The content within this module assumes knowledge and understanding of the chemical concepts developed in Module 2: Foundations in Chemistry and Module 3: Periodic Table and Energy.</p> <p>This module extends the study of energy, reaction rates and equilibria and the periodic table.</p> <p>The main areas of physical chemistry studied include:</p> <ul style="list-style-type: none"> <li>• rate equations, orders of reaction, the rate determining step</li> <li>• equilibrium constants, Kc and Kp</li> </ul>

	<ul style="list-style-type: none"> <li>• acid–base equilibria including pH, Ka and buffer solutions</li> </ul> <p><b>Module 6: Aromatic Compounds, Carbonyl carboxylic acids</b>  This module introduces several new functional groups and emphasises the importance of organic synthesis. This module also adds NMR spectroscopy to the instrumentation techniques used in organic and forensic analysis. The main areas of organic chemistry studied include:</p> <ul style="list-style-type: none"> <li>• aromatic compounds</li> <li>• carboxylic acids and esters</li> </ul> <p><b>Complete and Sign off CPAC Qualification</b>  Students will show their skills in developing experimental methods and techniques for analysing empirical data. This will include skills in planning, implementing, analysing and evaluating will be assessed in the separate CPAC Qualification. This is also essential revision for practical elements in the exams.</p>
Physics:	<p>Students will be learning:</p> <p><b>(Continuing) Module 5 - Newtonian World and Astrophysics</b>  In this module, learners will learn about thermal physics, circular motion, oscillations, gravitational field, astrophysics and cosmology.</p> <p><b>Complete and Sign off CPAC Qualification</b>  Students will show their skills in developing experimental methods and techniques for analysing empirical data. This will include skills in planning, implementing, analysing and evaluating will be assessed in the separate CPAC Qualification. This is also essential revision for practical elements in the exams.</p>
History	<p>Students will be learning:</p> <p><b>Half Term 1:</b>  Knowledge: Unit 3 American Civil Rights 1865-1992  Skills: Long essay writing. Analysis and evaluation of secondary sources.  NEA: Introduction- or 1000 words.</p> <p><b>Half Term 2:</b>  Knowledge: Unit 3 American Civil Rights 1865-1992  Skills: Long essay writing. Analysis and evaluation of secondary sources.  NEA:2000 words.</p>

<p>Geography</p>	<p>Students will be learning:</p> <p><b>Half Term 1</b></p> <p>Knowledge: Continuation of the units: Contemporary Urban Environments and Changing Places  Skills: Continuation of NEA topics, literature review and methodology, data collection for NEA, synoptic links between units and evaluation skills</p> <p><b>Half Term 2</b></p> <p>Knowledge: Continuation of the units: Contemporary Urban Environments and Changing Places.  Skills: Presentation and analysis of field data collected for NEA</p>
<p>French</p>	<p>Students will continue to develop their skills in reading, listening, speaking and writing in the following topics (Components 1 and 2):</p> <ul style="list-style-type: none"> <li>• <b>Migration and integration in France</b></li> <li>• <b>Discrimination and diversity</b></li> <li>• <b>France between June 1940-May 1945</b></li> </ul> <p>They will continue their study of the film “Intouchables” and the novel “No et moi” by Delphine de Vigan (Component 3)</p> <p>They will be introduced to the Independent Research Project (IRP) part of Component 1 and start exploring ideas and researching topics they might be interested in</p>
<p>Computer Science</p>	<p>Students are learning:</p> <p><b>Half Term 1:</b>  Students will be working on their NEA Project.</p> <p>Students will be covering Unit 6:</p> <ul style="list-style-type: none"> <li>• Data Types: ASCII and Unicode</li> <li>• Binary Arithmetic</li> <li>• Floating Point arithmetic</li> <li>• Bitwise Manipulation and Masks</li> </ul>

	<p><b>Half Term 2:</b> Students will be working on NEA Project.</p> <p>Students will be covering:</p> <p>Unit 1: Components of Computer and their uses. Unit 2: Operating Systems.</p>
IT	<p><b>Unit 3 Cyber Security</b></p> <p>Students are developing theory knowledge focusing on cybersecurity in an individual and business context. They will be sitting an official exam after the Christmas break in the January series, using pre-released materials provided by the exam board.</p> <p>Students are learning the following:</p> <p><b>Half Term 1:</b></p> <ul style="list-style-type: none"> <li>• LO1: Understand what is meant by cyber security</li> <li>• LO2: Understand the issues surrounding cyber security</li> </ul> <p><b>Half Term 2:</b></p> <ul style="list-style-type: none"> <li>• LO3: Understand measures used to protect against cyber security incidents</li> <li>• LO4: Understand how to manage cyber security incidents</li> <li>• Exam Preparation using pre-release scenario</li> </ul>
Art	<p><b>Half Term 1: Personal Themes for Portfolio</b></p> <p>Students will continue exploring their chosen themes. They will be researching relevant artists and be responding to these through their practical work. They will be revisiting their contextual essay to make improvements.</p> <p><b>Half Term 2: Personal Themes for Portfolio</b></p> <p>Students will be developing ideas for an outcome by experimenting with inks, print and mixed media. They will produce work in a wide range of scales and complete more in-depth research to enable them to produce a refined large-scale final piece for this project. Students will be reviewing and refining their portfolio work.</p>

PE	<p>Students will be learning:</p> <p><b><u>Exercise Physiology</u></b></p> <ul style="list-style-type: none"> <li>• Injuries</li> <li>• Injury prevention</li> <li>• Injury response</li> <li>• Injury rehabilitation</li> </ul> <p><b><u>Applied Anatomy and Physiology</u></b></p> <ul style="list-style-type: none"> <li>• Energy for Exercise</li> <li>• Recovery, Altitude and Heat</li> </ul>
Media	<p><b>Half Term 1 and 2: Non - Exam assessment (NEA)</b></p> <p>Students will spend time completing their NEA section of the course. They will be completing the final stages of their products. Products that students may have chosen include:</p> <ul style="list-style-type: none"> <li>- Magazine front page and double page spread</li> <li>- Music Videos</li> <li>- TV</li> </ul> <p><b>Half Term 1 and 2: Online and partipatory media, including online magazines, blogs, YouTubers</b></p> <p>Students are learning about the world of online media. During this section of the course students will cover some of the following texts:</p> <ul style="list-style-type: none"> <li>- Zoella</li> <li>- Attitude magazine online</li> <li>- Gaming</li> <li>- TV</li> </ul>
Dance	<p><b>Half Term 1:</b></p> <p>Students are learning how to develop choreographic skills from a question Set by AQA.</p> <p>Students are consolidating and developing understanding of the following areas:</p> <ul style="list-style-type: none"> <li>• Rambert Dance Company 2966-2002</li> <li>• Rooster aural and physical setting</li> </ul>

	<p><b>Half Term 2:</b> Students are learning developing and structuring solo compositional ideas.</p> <p>Students will be consolidating and developing a deeper understanding of the Independent Dance scene 2000 – present day.</p> <p>They will be developing a deeper understanding of Sutra through the constituent features.</p>
Drama	<p><b>Half Term 1:</b></p> <p>Students will be recapping their initial research and understanding of the plays ‘The Glass Menagerie’ and ‘Antigone’ so far and how social, cultural and historical context can influence the way a performance is presented.</p> <p><b>Half Term 2:</b></p> <p>Students will explore this from aspects of a performer, director and designer (set, sound, lighting, costume) and begin to consider how their ideas can form their own interpretation whilst showing understanding of context.</p> <p>Note: This unit is worth 40% and therefore is taught all year round on allocated lessons.</p>
Music	<p><b>Half Term 1:</b></p> <ul style="list-style-type: none"> <li>• Students will start to look at their second composition – this will include researching the different briefs, deciding upon their choice and then starting to create their initial ideas.</li> <li>• Students will also start to practise and rehearse for their Performance Recital.</li> <li>• Students will revise the Development of the Symphony.</li> </ul> <p><b>Half Term 2:</b></p> <ul style="list-style-type: none"> <li>• Students will continue to work on and improve their composition</li> <li>• Students will continue to rehearse and improve their Performance</li> <li>• Students will revise the Set Work: Mendelssohn Italian Symphony.</li> </ul>

<p>Health and Social Care</p>	<p><b>Students are learning:</b></p> <p><b>Unit 14- Physiological Disorders and their care (Assignment based unit)</b></p> <p>Students will explore how the disorders affect the body's systems and how they function and the effects on health and wellbeing of an individual. They will learn physiological disorders associated with the main body systems and will learn about investigative and diagnostic tests to help you make an informed decision for choice of two disorders required for your coursework assignment. Lesson time will be allocated to complete the assignment.</p>
<p>Sociology</p>	<p><b>Half Term 1:</b></p> <p>Students are learning to understand the Sociology of Crime and Deviance and the Sociology of the Media, including:</p> <ul style="list-style-type: none"> <li>• Theory of crime and deviance</li> <li>• Functionalism</li> <li>• Stain</li> <li>• Sub-cultural</li> <li>• Marxism.</li> </ul> <p><b>Half Term 2:</b></p> <p>Students are learning to understand the Sociology of Crime and Deviance and the Media, including:</p> <ul style="list-style-type: none"> <li>• Theory of Interactionalism and labelling theory</li> <li>• Control, punishment and victimisation.</li> </ul>
	<p>Students will be preparing for their Unit 3 Exam. This will include:</p> <p><b>Personal Finance</b></p> <ul style="list-style-type: none"> <li>• Functions &amp; role of money</li> <li>• Ways to pay</li> <li>• Bank accounts</li> <li>• Financial institutions</li> <li>• Communicating with customers</li> <li>• Consumer protection</li> </ul>

Business

- Information guidance & advice
- Purpose of accounting
- Types of income
- Types of expenditure

**Sources of finance**

- Internal/External
- Advantages/disadvantages

**Breakeven & Cashflow Forecast**

- Cashflow forecasts
- Breakeven analysis

**Statement of comprehensive income & statement of financial position**

- Profitability
- Liquidity
- Efficiency ratios.