

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 3 and 4 (January-Easter)

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

Subject	Spring Term Topics
English	<p>Half Term 3 and 4: The Murder of Roger Ackroyd</p> <p>Students will continue their study of the classic crime text <i>The Murder of the Roger Ackroyd</i> by Agatha Christie in preparation for the spring PPEs</p> <p>Half Term 3 and 4: When Will There Be Good News?</p> <p>Students will study the modern crime novel <i>When Will There Be Good News</i>, written by Kate Atkinson. During this section of the course students will:</p> <ul style="list-style-type: none"> - analyse the post-modern representation of crime - Identify, explore and critique the presentation of elements of crime in the novel - Debate, argue, and evaluate the way that the generic conventions of the crime genre have been manipulated by Atkinson
	<p>Students will be developing their understanding of:</p> <p><u>Pure Topics</u></p> <ul style="list-style-type: none"> - Numerical methods

<p>Maths</p>	<ul style="list-style-type: none"> - Integration - Vectors <p><u>Statistics Topics</u></p> <ul style="list-style-type: none"> - Regression - Correlation and hypothesis testing - Conditional probability - Normal distribution <p><u>Mechanics Topics</u></p> <ul style="list-style-type: none"> - Moments - Forces and friction - Projectiles - Applications of forces - Further kinematics
<p>Further Maths</p>	<p>Students will be developing their understanding of:</p> <p><u>Pure Topics:</u></p> <ul style="list-style-type: none"> - Proof by Induction - Volumes of Revolution - Vectors <p><u>Statistics:</u></p> <ul style="list-style-type: none"> - Hypothesis Testing - Chi-squared Tests <p><u>Decision:</u></p> <ul style="list-style-type: none"> - Algorithms - Graphs and Networks - Algorithms on Graphs - Route Inspection
<p>Core Maths</p>	<p>Students will be developing their understanding of:</p> <ul style="list-style-type: none"> - Critical Analysis <ul style="list-style-type: none"> • Correlation • Regression

	Students will also be introduced to preliminary examination materials.
BTEC Applied Science	<p>Students will be continuing Unit 3 – Science Investigation Skills</p> <p>Learners will cover the stages involved and the skills needed in planning a scientific investigation: how to record, interpret, draw scientific conclusions and evaluate.</p>
Biology	<p>Module 5: Homeostasis, plant responses and respiration</p> <p>Students will be learning that communication is also fundamental to homeostasis with control of temperature, blood sugar and blood water potential being studied as examples. Respiration is the process whereby energy stored in complex organic molecules is transferred to ATP. ATP provides the immediate source of energy for biological processes.</p> <p>Module 6: Manipulating Genomes and Biotechnology Some of the practical techniques used to manipulate DNA such as sequencing and amplification are considered and their therapeutic medical use. The use of microorganisms in biotechnology is also covered. Both of these have associated ethical considerations and it is important that learners develop a balanced understanding of such issues.</p>
Chemistry	<p>Students will be learning: Module 5: Physical Chemistry and Transition Elements: Enthalpy and Entropy, Redox and Electrode Potentials, Transition Elements</p> <p>This module extends the study of energy, reaction rates and equilibria, and the periodic table. The main areas of physical chemistry studied include:</p> <ul style="list-style-type: none"> • lattice enthalpy and Born–Haber cycles • entropy and free energy • electrochemical cells. <p>The main areas of inorganic chemistry studied include:</p> <ul style="list-style-type: none"> • redox chemistry • transition elements. <p>Module 6: Amine, Amides and Polymers, Organic Synthesis, Spectroscopy</p>

	<p>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.</p> <p>The main areas of organic chemistry studied include:</p> <ul style="list-style-type: none"> • aromatic compounds • carboxylic acids and esters • organic nitrogen compounds: amines and amino acids • polymerisation: addition polymers and condensation polymers • synthetic organic chemistry and further development of practical skills • the importance of modern analytical techniques in organic analysis.
Physics	<p>Students are learning:</p> <p>Module 6 – Particles and Medical Physics</p> <p>In this module, learners will learn about capacitors, electric field, electromagnetism, nuclear physics, particle physics and medical imaging.</p>
History	<p>Students are learning:</p> <p>Half Term 3: Knowledge: Unit 3 American Civil Rights 1865-1992. Skills: Long exam question. Analysis and evaluation of Secondary sources. NEA Draft</p> <p>Half Term 4: Knowledge: Unit 3 American Civil Rights 1865-1992. Skills: Long exam question. Analysis and evaluation of Secondary sources. NEA Draft</p>
Geography	<p>Students are learning:</p> <p>Half Term 3</p> <p>Knowledge: Completion of Units: Contemporary Urban Environments and Changing Places. Students will revise of prior learning and overview of course – there are synoptic links between units. Skills: Drawing conclusions and linking data together for their NEA</p> <p>Half Term 4</p> <p>Knowledge: Students will revise of prior learning and overview of course</p>

	Skills: Evaluation of NEA and submission of draft NEA
French	<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"> • Cultural identity and marginalisation • Cultural enrichment and celebrating difference • The cultural dimension in occupied France and 1945-1950 <p>Component 1: Students will choose a topic and question for their IRP and continue to conduct research before writing out their IRP</p> <p>Component 3: Students will develop their essay skills and continue to study the book 'No et moi' by Delphine de Vigan and the film 'Intouchables'</p>
Computer Science	<p>Students are learning:</p> <p>Half Term 3: Students will be bridging the Gaps of knowledge from Nov PPE. Students will also be completing and submitting their NEA Documentation.</p> <p>Half Term 4: Student will be practising on Past Exam Papers for both AS and A Level, simultaneously preparing for March PPE. Students will be focusing on applying their learnt exam techniques.</p>
IT	<p>Half Term 3/4: Coursework Focus Students will be working on the coursework requirements for Easter and Summer moderations during lessons, working with a variety of software packages and platforms.</p> <p>Unit 17 Internet of Everything LO1: Understand what is meant by the Internet of Everything (IoE) LO2: Be able to repurpose technologies to extend the scope of the IoE LO3: Be able to present concept ideas for repurposed developments</p> <p>Unit 8: Project Management Coursework LO1: Understand the project life cycle LO2: Be able to initiate and plan projects LO3: Be able to execute projects LO4: Be able to carry out project evaluations</p>

<p>Art</p>	<p>Half Term 3: Portfolio Work</p> <p>Students will be developing and improving their practical work for their portfolio. They will be responding to artists and using photography to enhance their ideas. They will finish their contextual essay by adding a conclusion and make any changes that are needed.</p> <p>Half Term 4: Portfolio Work</p> <p>Students will show their ideas for an outcome by producing a wide range of composition. They will experiment and demonstrate their skills in a wide range of media when developing their ideas and explore different colourways and painting techniques. More specific research may be needed to enable them to create a refined and fluent large-scale final outcome.</p>
<p>PE</p>	<p>Students are learning:</p> <p><u>Biomechanics</u> Linear motion Angular motion Fluid mechanics and projectile motion EAPI preparation Revision of Paper 1</p> <p><u>Skill Acquisition and Sport Psychology</u> Memory Models Attribution in Sport Confidence and self-efficacy in sports Performance Leadership in Sport Stress Management to Optimise Performance</p>
<p>Media</p>	<p>Half Term 3: Assassin's Creed</p> <p>Students will be studying gaming and in particular the video game Assassin's Creed 3 with a particular focus on audience and industry.</p> <p>Half Term 4: Exam revision</p> <p>Students will be spending the term revising prior learning and addressing an misconceptions picked up in their PPEs.</p>

Dance	<p>Half Term 3:</p> <p>Students will learn how to create an original piece of group/solo choreography which lasts for a minimum of 2-4 minutes, based on a question from AQA.</p> <p>Students will complete the following tasks;</p> <ul style="list-style-type: none"> • Researching, developing, and experimenting with dance ideas through studio and non-studio investigation • The rehearsal process <p>Half Term 4:</p> <p>Students are learning to develop their original piece of choreography through the choreographic process and respond to feedback.</p> <p>Students will rehearse and refine group quartet.</p>
Drama	<p>Half Term 3 & 4</p> <p>This term focuses predominantly on Component 3 where students explore, prepare and perform in a chosen text. This is an opportunity for students to perform a professional performance to an invited audience and examiner. Texts are chosen based on the nature of the group. Previous texts have included People Places Things, Dealers Choice & Beautiful Thing</p>
Music	<p>Half Term 3:</p> <ul style="list-style-type: none"> • Students will work on and improve their second composition • Students will rehearse for their Performance Recital • Students will revise Rock and Pop <p>Half Term 4:</p> <ul style="list-style-type: none"> • Students will complete their composition coursework • Students will complete their Performance Recital to a visiting examiner. • Students will continue to revise and complete exam style questions.

Health and Social Care	<p>Students are learning:</p> <p>Unit 14- Physiological Disorders and their care (Assignment based unit)</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. Students will learn physiological disorders associated with the main body systems and will learn about investigative and diagnostic tests to help students make an informed decision between two disorders required for your coursework assignment. Lesson time will be allocated to complete the assignment.</p>
Sociology	<p>Half Term 4:</p> <p>Students are learning about social distribution of crime and deviance. This includes:</p> <ul style="list-style-type: none">• Class• Ethnicity• Gender• Age patterns <p>Students will learning how to answer exam style questions with a focus on the Media (10 and 20 mark questions)</p> <p>Half Term 5:</p> <p>Students are learning about media and crime. This includes:</p> <ul style="list-style-type: none">• New crime• Globalisation• Green crime• Human rights• State crime <p>Students will learning how to answer exam style questions with a focus on the Theory (10 and 20 mark questions)</p>

Business

Students will be preparing for their Unit 3 Exam. This will include:

Personal Finance

- Functions & role of money
- Ways to pay
- Bank accounts
- Financial institutions
- Communicating with customers
- Consumer protection
- 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.