

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 12 students are learning in each of their subjects in Half Term 3 and 4 (January – Easter)



Year 12 Curriculum – Spring Term 2020-21 - *To support parents and students.*

Subject	Spring Term Topics
English	<p>Half Term 3 and 4: The Taming of the Shrew</p> <p>Students are continuing with their study of the classic Shakespearian comedy The Taming of the Shrew. In this section of the course students will:</p> <ul style="list-style-type: none"> - prepare for sections A and B of the English Literature paper 1 exam - Annotate and analyse key sections of the play - Write both analytical and argumentative exam responses with the play as a focus point <p>Half Term 3 and 4: Emma</p> <p>Students will be studying the classic comedy Emma by Jane Austen. During this section of the course they will:</p> <ul style="list-style-type: none"> - Annotate and analyse key scenes from the novel - Develop an understanding of characters and events in the novel - Explore how the novel presents aspects of comedy - Begin to create arguments and debates surrounding the nature of the comedy present in the novel

<p>Maths</p>	<p>Students will be developing their understanding of:</p> <p><u>Pure Topics:</u></p> <ul style="list-style-type: none"> - Algebraic Methods - Trigonometric ratios - Trigonometric identities and equations - Differentiation - Integration - Exponentials and logarithms <p><u>Statistics Topics</u></p> <ul style="list-style-type: none"> - Hypothesis testing <p><u>Mechanics Topics</u></p> <ul style="list-style-type: none"> - Modelling in mechanics - Constant acceleration - Forces
<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>Optional units:</p> <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

Core Maths	<p>Students will be developing their understanding of:</p> <ul style="list-style-type: none"> - Financial Maths <ul style="list-style-type: none"> • Tax • National insurance • Student loans - Sampling Methods
BTEC Applied Science	<p>Students will be learning about (Continuing) Unit 1 – Principles and Applications of Science</p> <p>They will also learn: Unit 2 Practical Scientific Procedures and Techniques</p> <p>Learners will be introduced to quantitative laboratory techniques, calibration, chromatography, calorimetry and laboratory safety which are relevant to the chemical and life science industries.</p> <p>This unit introduces students to standard laboratory equipment and techniques, including titration, colorimetry, calorimetry, chromatography, calibration procedures and laboratory safety. Through the practical tasks in the unit, students will develop proficiency in the quantitative analytical techniques of titration and colorimetry, including learning to calculate the concentration of solutions.</p> <p>They will use measurement of temperature to study cooling curves and be introduced to paper and thin-layer chromatography (TLC). They will also have the opportunity to calibrate equipment and will be encouraged to be aware of the safety aspects of given laboratory procedures and techniques.</p> <p>Students will develop practical competence, the discussion and analysis of group results will allow you to understand your progress in relation to that of others and also to gain an understanding of the reliability, repeatability and reproducibility of various procedures and techniques. They will have the opportunity to use problem-solving skills when you undertake calorimetry work. There is scope throughout the unit to reflect on the skills they have gained and how you may develop further.</p>
Biology	<p>Students are learning:</p> <p>Module 2: Membranes and Cell Differentiation</p> <p>Membranes form barriers within and at the surface of, cells. This module also considers the way in which the structure of membranes relates to the different methods by which molecules enter and leave cells and organelles.</p> <p>The division and subsequent specialisation of cells is studied, together with the potential for the therapeutic use of stem cells.</p> <p>Learners are expected to apply knowledge, understanding and other skills developed in this module to new situations and/or to solve related problems.</p> <p>Module 4: Evolution, Classification and Disease</p>

	<p>In this module the students study the biodiversity of organisms; how they are classified and the ways in which biodiversity can be measured. It serves as an introduction to ecology, emphasising practical techniques and an appreciation of the need to maintain biodiversity. The learners also gain an understanding of the variety of organisms that are pathogenic and the way in which plants and animals have evolved defences to deal with disease. The impact of the evolution of pathogens on the treatment of disease is also considered.</p>
Chemistry	<p>Students are learning:</p> <p>Module 3: Periodic Table and Energy: Periodicity, Reactivity Trends The focus of this module is inorganic and physical chemistry, the applications of energy use to everyday life and industrial processes, and current environmental concerns associated with sustainability.</p> <p>This module provides learners with a knowledge and understanding of the important chemical ideas that underpin the study of inorganic and physical chemistry:</p> <ul style="list-style-type: none"> • the periodic table: periodic and group properties <p>This module allows learners to develop important qualitative practical skills, especially observational skills required for analysis, and accurate quantitative techniques involved in determination of energy changes and reaction rates. There are opportunities for developing mathematical skills when studying enthalpy changes and reaction rates and when carrying out quantitative practical work.</p> <p>Module 4: Core Organic Chemistry and Analysis: Alkanes, Alkenes, Alcohols This module introduces organic chemistry and its important applications to everyday life, including current environmental concerns associated with sustainability.</p> <p>The module provides learners with a knowledge and understanding of the important chemical ideas that underpin the study of organic chemistry:</p> <ul style="list-style-type: none"> • nomenclature and formula representation, functional groups, organic reactions and isomerism • aliphatic hydrocarbons • alcohols <p>This module also provides learners with an opportunity to develop important organic practical skills, including use of Quickfit apparatus for distillation, heating under reflux and purification of organic liquids.</p>

<p>Physics</p>	<p>Students are learning: Module 4 – Electrons, Waves and Photons In this module, students will learn about electrons, electric current, electrical circuits, wave properties, electromagnetic waves and, of course, quantum physics.</p> <p>Students have the opportunity to appreciate how scientific ideas of quantum physics developed over time and their validity rested on the foundations of experimental work.</p>
<p>History</p>	<p>Students are learning:</p> <p>Half Term 3: Knowledge: Units 1 & 2: Democracy & Dictatorship. The Mid-Tudor Crisis. Skills: Short and Long essay writing. Analysis & evaluation of primary and secondary sources. NEA preparation referencing, assessment objectives</p> <p>Half Term 4: Knowledge: Units 1 & 2: Democracy & Dictatorship. The Mid-Tudor Crisis. Skills: Short and Long essay writing. Analysis & evaluation of primary and secondary sources. NEA question proposal.</p>
<p>Geography</p>	<p>Students are learning:</p> <p>Half Term 3: Knowledge: Completion of Units 1 and 2 (Water and Carbon and Natural Hazards then moving on to Units 3 and 4 – Global Systems and Global Governance and Coasts as Natural Systems) Skills: Examining synoptic links between elements of the course. NEA formulation of study proposals</p> <p>Half Term 4: Knowledge: Continuation of units Global Governance and Coasts as Natural Systems Skills: Continuation of NEA proposals and lessons on structuring Geographical Enquiries</p>

French	<p>Students are learning about:</p> <p>The Media in France and the French speaking world. Grammar: Present and past participles, the negative form, recognising the past historic of irregular verbs.</p> <p>Youth trends and personal identity Grammar: Revising reflexive verbs, recognising the past historic of regular verbs, understanding of inversion of subject and verb after adverbs.</p> <p>These themes will be studied in all skills (listening, reading, speaking and writing)</p>
Computer Science	<p>Students are learning:</p> <p>Half Term 3: Algorithms</p> <ul style="list-style-type: none"> • Analysis Design of algorithms • Searching & Sorting Algorithms • Graph Traversal Algorithms • Optimisation Algorithm. <p>Half Term 4: Software Development</p> <ul style="list-style-type: none"> • SDLC Software development Life Cycle • Methods of Analysis • Writing and following Algorithms • Programming Paradigms • Assembly Language. <p>Students will also be practising skills on the software platform they want to develop their NEA project.</p>
IT	<p>Unit 2 Global Information Students will begin their second examination unit of the year, examined in May. Students will be developing an understanding of how individuals and organisations use information.</p> <p>Half Term 3: LO1: Understand where information is held globally and how it is transmitted LO2: Understand the styles, classification and the management of global information</p>

	<p>LO3: Understand the use of global information and the benefits to individuals and organisations</p> <p>Half Term 4: LO4: Understand the legal and regulatory framework governing the storage and use of global information LO5: Understand the process flow of information LO6: Understand the principles of information security</p>
Art	<p>Half Term 3 and 4: Identity Students will be researching their personal theme by collecting imagery, taking photographs and doing work from direct observation. They will find a wide range of artists to link with their ideas. They will produce in depth analysis of their chosen artists. Students will respond to the different artist styles using different materials such as collage, oil pastel charcoal and paint.</p> <p>Students will then start planning an outcome by sketching compositions and practising specific elements within their ideas that they may find challenging.</p>
Graphics	<p>Theme: Myths and Legends Students are continuing to develop a coherent, in-depth study that demonstrates their ability to construct and develop a sustained line of reasoning from an initial starting point to a final realisation. Their projects are personalised and therefore their progression is informed by individual ideas and teacher tuition. Their project is in the development and refinement stages. The investigation must show clear development from initial intentions to the final outcome or outcomes. It must include evidence of the student's ability to research and develop ideas and relate their work in meaningful ways to relevant critical/contextual materials. The investigation will be informed by an aspect of contemporary or past practice of artists, photographers, designers or craftspeople.</p> <p>Students will be exploring advertising, illustration, branding and information design, whilst being inspired by contemporary and historical artists and designers. Students will spend ample time experimenting with a range of media though will start to refine their choices and usage of materials as their skills develop.</p>
PE	<p>Students are learning:</p> <p><u>Biomechanics</u></p> <ul style="list-style-type: none"> • Newtons Laws • Motion and force • Technology <p><u>Exercise Physiology</u></p> <ul style="list-style-type: none"> • Diet and Nutrition and their effect on physical activity and performance • Preparation and Training Methods

	<p><u>Sport Psychology</u></p> <ul style="list-style-type: none"> • Personality • Attitudes • Motivation • Arousal
Media	<p>Half Term 3 and 4: Music Videos, Media Language and Representation</p> <p>Students will be studying music videos, media language and representation. During this section students will look at and analyse key aspects of media texts by:</p> <ul style="list-style-type: none"> - Dizzee Rascal - Vance Joy <p>Half Term 3 and 4: Newspapers, magazines and TV Huck, Humans</p> <p>Students will be studying a range of newspapers, magazines and TV which includes the texts Huck and Humans. During this section of the course students will be analysing aspects of representation, genre, audience, media language and institutions</p>
Dance	<p>Half Term 3:</p> <p>Students are learning how to answer exam questions in response to the following two topics</p> <ul style="list-style-type: none"> • Rambert Dance company 1966-2000 • Independent Dance scene 2000- current <p>Students will also be developing own technique through structured classes.</p> <p>Half Term 4:</p> <p>Students are learning how to develop choreographic skills in response to an AQA Question. Students will learn the choreographic process and complete a mock exam</p>

Drama	Students will participate in a range of practitioner workshops and start to explore their style and techniques and how these can be used to create devised performances. Students will also explore aspects of design and select appropriate forms to complement and enhance their devised performance. (Comp 2)
Music	<p>Half Term 3:</p> <ul style="list-style-type: none"> • Students will study Movement 2 of the set work: Mendelssohn Italian Symphony • Students will work on and improve their “Free” Composition. <p>Half Term 4:</p> <ul style="list-style-type: none"> • Students will start to look at “Rock and Pop” Music. • Students will work on and improve their “Free” Composition
Health and Social Care	<p>Students will complete their Exam Unit 2: Working in Health & Social Care</p> <p>Students will be looking at the roles and responsibilities of health and social practitioners and the organisations they work for. They will be looking at how a wide range of roles such as doctors, nurses, physiotherapists, occupational therapists, social workers, youth workers, care workers and other professionals work together (Multi-disciplinary team) to ensure that they meet the individual needs of vulnerable people. Students will be looking at how standards in this area are set and monitored and reflect on the role of the professionals, CQC, NICE, PHE, Ofsted, The Equality Act, The Human Rights Act, Health and Safety, Protection of Data. Whistleblowing,</p>
Sociology	<p>Half Term 3:</p> <p>Students are learning to understand differential achievement in the education system. This includes:</p> <ul style="list-style-type: none"> • Gender • Ethnicity including processes in school. <p>Students will practise exam style questions and will focus on method in context (20 and 30 mark questions)</p>

	<p>Half Term 4:</p> <p>Students are learning to understand:</p> <ul style="list-style-type: none"> • Significance of educational policy. • Globalisation and social policy. • Consensus, conflict, structural and social action theories. <p>Students will practise exam style questions and will focus on method in context (20 and 30 mark questions)</p>
Business	<p>Students are completing their controlled assessment. This includes developing a marketing campaign:</p> <p>Unit 2:</p> <ul style="list-style-type: none"> • Introduction to principles of marketing • Purposes of marketing • Understanding rationale for marketing campaign • Researching previous campaigns • Planning & developing a marketing campaign <p>Unit 1</p> <ul style="list-style-type: none"> • Investigating the role of innovation • Potential problems caused
Psychology	<p>Students are learning about Attachment. This includes:</p> <ul style="list-style-type: none"> • Caregiver-infant interactions in humans • Animal studies of attachment: Lorenz and Harlow. • Explanations of attachment • Ainsworth's 'Strange Situation' • Bowlby's theory of maternal deprivation • The influence of early attachment on childhood and adult relationships. <p>Students are learning about Biopsychology. This includes:</p> <ul style="list-style-type: none"> • The divisions of the nervous system • The structure and function of sensory, relay and motor neurons. • The function of the endocrine system • The fight or flight response including the role of adrenaline.

- | | |
|--|--|
| | <ul style="list-style-type: none">• Localisation of function in the brain and hemispheric lateralisation• Plasticity and functional recovery of the brain after trauma.• Ways of studying the brain• Biological rhythms: circadian, infradian and ultradian |
|--|--|