

Year 13 Curriculum Map 2026/2027

Click a subject title to view the detailed Curriculum information for that subject.

Art	English Literature	Media	Sport
Biology	Forensic Science	Photography	Travel and Tourism
Business Studies	Geography	Psychology	Further Maths
Chemistry	Health and Social Care	Physics	
Computer Science	History	Product Design	
Criminology	Maths	Sociology	

Art

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
Autumn	<u>Exam specification:</u> https://www.eduqas.co.uk/media/a3ndenvr/eduqas-a-level-art-and-design-spec-from-2015-e-090119.pdf COMPONENT 1: <u>PORTFOLIO 60%-</u> The Personal Investigation consists of two integrated constituent parts: 1. a major in-depth critical, practical and theoretical investigative project/portfolio and outcome/s based on themes and subject matter that have personal significance; 2. An extended written element of 1000 words minimum, which may contain images and texts and must clearly relate to practical and theoretical work using an	The components for this specification have been devised to demonstrate knowledge and understanding of: - Relevant materials, processes, technologies and resources how ideas, feelings and meanings can be conveyed and interpreted in images and artefacts. - how images and artefacts relate to the time and place in which they were made and to their social and cultural contexts - continuity and change in different genres, styles and traditions	The components equally require learners to develop the skills to: - Record experiences and observations, in a variety of ways using drawing or other appropriate visual forms; undertake research; and gather, select and organise visual and other appropriate information. - Explore relevant resources; analyse, discuss and evaluate images, objects and artefacts; and make and record independent judgements	Learners will be assessed on the following: <u>Assessment Objective 1</u> Develop ideas through investigations, demonstrating critical understanding of sources. <u>Assessment Objective 2</u> Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes. <u>Assessment Objective 3</u> Record ideas, observations and insights relevant to intentions as work progresses. <u>Assessment Objective 4</u> Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language.	<u>SMSC:</u> <u>Spiritual:</u> Use imagination and creativity, to explore ideas and feelings in works of Art and express themselves through their own art. <u>Moral:</u> Pupils projects often investigate and offer reasoned views about moral and ethical issues and how artists represent this through their work. <u>Social:</u> Respect each other's ideas and opinions when talking about pieces of art and design including the work of others in the class during group critiques. Recognise the need to consider the views of others. Develop collaborative,

	appropriate working vocabulary and specialist terminology. Both the practical/theoretical work and the written element will be assessed together using the assessment objectives. Learners will be required to select, evaluate and present their work for assessment. The Personal Investigation will be determined by the learner and teacher, assessed by the teacher and externally moderated. No time limit: duration to be determined by the centre.	a working vocabulary and specialist terminology	- Use knowledge and understanding of the work of others to develop and extend thinking and inform own work - Generate and explore potential lines of enquiry using appropriate media and techniques - Apply knowledge and understanding in making images and artefacts; review and modify work; and plan and develop ideas in the light of their own and others' evaluations - Organise, select and communicate ideas, solutions and responses and present them in a range of visual, tactile and/or sensory forms. Learners can work	<u>Formative assessment</u> throughout the term: Questioning during lesson Group critiques Peer, self and teacher assessment WOWO board responses <u>Summative assessment</u> Feedback will be recorded using the following marksheets and against the exam board mark scheme ks5 Marksheet templates	cooperative and teamwork skills. <u>Cultural:</u> learn to appreciate a wide range of cultural influences, history and values. Through their personal investigations, they will research and explore the religious and non-religious beliefs adopted by a variety of cultures from around the world. Students are encouraged to independently go to galleries and exhibitions to develop their cultural capital and use their inspiration to influence their own work.
--	--	---	--	---	---

			entirely in digital media or entirely in non-digital media, or in a mixture of both, provided the aims and assessment objectives are met.		
<u>Spring</u>	<u>The Externally Set Assignment consists of two parts:</u> <u>Part 1: Preparatory study period</u> The externally set assignment materials are to be released to learners from 1 February (in the second year of the course) and will consist of a series of visual	As above	As above	<u>Jan/Dec:</u> <u>15 hour mock exam-</u> producing A04 Final outcome for personal investigation, in exam conditions. <u>Internally teacher assessed</u> and a final CWK grade given, marked against the mark scheme and grade boundaries. Standardised with other teachers. <u>Externally Set Assignment materials</u> set by WJEC are to be released to the students no earlier than 1 February Both the preparatory work and sustained focus work will be assessed together using the assessment objectives: <u>Assessment Objective 1</u> Develop ideas through investigations, demonstrating	<u>BRITISH VALUES</u> <u>Democracy:</u> Take into account the views and ideas of others personal projects. <u>Cultural:</u> Develop ideas that are informed by investigative, contextual and cultural studies of historical and contemporary art, craft and design and other sources relevant to their selected areas of study in their own and other societies (through gallery/exhibition visits, online resources,books, blogs,podcasts,films, magazines).

	and written stimuli, which are to be presented to the learner at the start of the preparatory study period. One of the stimuli is to be selected by the learner and used as a starting point from which to elicit a personal response. Responses are developed during the preparatory study period. They should take the form of critical, practical and theoretical preparatory work/supporting studies which inform the resolution of ideas in the 15 hours sustained focus study. The start of the preparatory study period is defined as the date upon which the externally set assignment materials are presented to the learner. The preparatory study period may commence on or after 1 February. The preparatory study period finishes upon commencement of the sustained focus work. Start and finish dates of the			critical understanding of sources. <u>Assessment Objective 2</u> Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes. <u>Assessment Objective 3</u> Record ideas, observations and insights relevant to intentions as work progresses. <u>Assessment Objective 4</u> Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language. <u>Formative assessment</u> throughout the term: Questioning during lesson Group critiques Peer, self and teacher assessment WOWO board responses	
--	---	--	--	--	--

	preparatory study period to be determined by the centre, taking into account the May deadline for the submission of internally assessed marks to WJEC. <u>Part 2: 15 hour period of sustained focus work</u> The resolution of learners' ideas from the preparatory work must be completed during the designated 15 hours and they must show how their planning relates to the outcome/s. The period of sustained focus work must be completed under supervised conditions. Centres determine the scheduling of the supervised sustained focus sessions, taking into account the May deadline for the submission of internally assessed marks to WJEC. Both the preparatory work and sustained focus work will be assessed together, using the assessment objectives. Learners will be required to select, evaluate and present their work for			<u>Summative assessment April:</u> <u>ESA 15 hour exam-</u> Supervised sustained focus time (3 days), invigilated in exam conditions.	
--	--	--	--	--	--

	assessment. The Externally Set Assignment will be set by WJEC, assessed by the teacher and externally moderated.				
Summer	All work submitted by the end of May.			<u>Summative assessment</u> <u>May:</u> Deadline for the submission of internally assessed marks to WJEC. <u>June:</u> Work externally moderated by the exam board.	

[\(click here to go back to main menu\)](#)

Biology

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
Autumn	Chapter 15 Homeostasis Chapter 16 - Plant responses Chapter 17 - Energy for biological processes Chapter 18 Respiration	• The principles of homeostasis • Thermoregulation in ectotherms • Thermoregulation in endotherms • Excretion, homeostasis, and the liver • The structure and function of the mammalian kidney • The kidney and osmoregulation • Urine and diagnosis • Kidney failure • Plant hormones and growth in plants • Plant responses to abiotic stress • Plant responses to herbivory • Tropisms in plants • Commercial uses of plant hormones • Energy cycles	Module 1 of the specification content relates to the practical skills learners are expected to gain throughout the course, which are assessed throughout the written examinations and also through the Practical Endorsement Practical activities are embedded within the learning outcomes of the course to encourage practical activities in the classroom which contribute to the achievement of the Practical Endorsement as well as enhancing learners' understanding of biological theory and practical skills.	Assessment point to include; levelled response questions for extended writing, timed MCQ's, analytical questions that include maths skills.	

		• ATP synthesis • Photosynthesis • Factors affecting photosynthesis • Glycolysis • The link reaction • Krebs cycle • Oxidative phosphorylation • Respiratory substances • Aerobic respiration			
Spring	Chapter 19 - Genetics of living systems Chapter 20 - Patterns of inheritance and variation Chapter 21 - Manipulating genomes Chapter 22 - Cloning and biotechnology Chapter 23 - Ecosystems Chapter 24 - Populations and sustainability	• Mutations and variation • Control of gene expression • Body plans • Variation and inheritance • Monogenic inheritance • Dihybrid inheritance • Phenotypic ratios • Evolution • Speciation and artificial selection • DNA profiling • DNA sequencing and analysis • Using DNA sequencing • Genetic engineering • Gene technology and ethics • Natural cloning in plants • Artificial cloning in plants	Module 1 of the specification content relates to the practical skills learners are expected to gain throughout the course, which are assessed throughout the written examinations and also through the Practical Endorsement Practical activities are embedded within the learning outcomes of the course to encourage practical activities in the classroom which contribute to the achievement of the Practical Endorsement as well as enhancing learners' understanding of biological theory and practical skills.	Assessment point to include; levelled response questions for extended writing, timed MCQ's, analytical questions that include maths skills.	

		● Cloning in animals ● Microorganisms and biotechnology ● Microorganisms, medicines and bioremediation ● Cultural microorganisms in the laboratory ● Cultural microorganisms on an industrial scale ● Using immobilised enzymes ● Ecosystems ● Biomass transfer through an ecosystem ● Recycling within ecosystems ● Measuring distribution and abundance of organisms ● Population size ● Competition ● Predator - Prey relationships ● Conservation and preservation ● Sustainability ● Ecosystem management - Masai mara ● Ecosystem management - terai region of Nepal ● Ecosystem management - Peat bogs			
--	--	---	--	--	--

		• Environmentally sensitive ecosystems			
Summer	PAG 12 Revision and exam preparation.		Module 1 of the specification content relates to the practical skills learners are expected to gain throughout the course, which are assessed throughout the written examinations and also through the Practical Endorsement Practical activities are embedded within the learning outcomes of the course to encourage practical activities in the classroom which contribute to the achievement of the Practical Endorsement as well as enhancing learners' understanding of biological theory and practical skills.	Assessment point to include; levelled response questions for extended writing, timed MCQ's, analytical questions that include maths skills.	

[\(click here to go back to main menu\)](#)

Business Studies

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
Autumn	Mission, corporate objectives, functional objectives and strategy. Analysing the existing internal position of a business to assess	• To learn about influences on the mission of a business. • To learn about internal and external influences on corporate objectives and decisions. • To learn about the links between mission, corporate objectives and strategy. • To understand the distinction between strategy and tactics. • To learn about the impact of strategic decision making on functional decision making. • To learn about internal and external influences on functional objectives and decisions.	Influences on corporate objectives should include the pressures for short termism, business ownership, the external and internal environment. • Financial ratio analysis to include:	Students will be assessed formatively and summatively throughout the term. Formative assessment will include: • Low stake retrieval quizzes • Multiple choice questions • Questioning during lesson • WOWO board responses • Short answer responses and definition tests. • Seneca learning Summative assessment will include: • Case study responses • Data response	Protected characteristics including: Age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation. Are covered throughout using the following methods: Case studies to include business leaders from different backgrounds Discussions on business decisions and how they affect minority groups and those with protected characteristics. <u>SMSC</u>

	strengths and weaknesses: financial ratio analysis. Analysing the existing internal position of a business to assess strengths and weaknesses: overall performance. Analysing the external environment to assess opportunities and threats: political and legal change	● To understand the value of SWOT (strengths, weaknesses, opportunities, threats) analysis. ● To learn about how to assess the financial performance of a business using balance sheets, income statements and financial ratios. ● To understand the value of financial ratios when assessing performance. ● To learn about how to analyse data other than financial statements to assess the strengths and weaknesses of a business. ● To understand the importance of core competences. ● To learn about assessing short- and long-term performance.	○ profitability (return on capital employed) ○ liquidity (current ratio) ○ gearing ○ efficiency ratios: payables days, receivables days, inventory turnover. ● Data other than financial statements should include operations, human resource and marketing data. ● Data may be analysed over time or in comparison with other businesses. ● Methods of assessing overall business performance to include: ○ Elkington's Triple Bottom line (profit, people, planet). ● The political and legal environment should include a broad understanding of the scope and effects of laws related to competition, the labour market and environmental legislation.	● Synoptic assessment ● Mock exams	Spiritual - reflecting on and having a clear understanding of how a business actions and purpose can be inclusive and how that is promoted, students use their imagination to apply business theory to creative business ideas. Moral - students will have a clear understanding on business ethics and the consequences of business decisions. Students will challenge the idea of autocratic leadership, capitalism and exploitation through a range of different case studies and scenarios. As well as keeping up to date with world business news. Social - students will be encouraged to use a range of social skills in different contexts, such as problem solving in groups, debating with each other whilst having acceptance and engagement of the fundamental British values of democracy, the rule of law, individual liberty and
--	---	---	--	---	---

	Analysing the external environment to assess opportunities and threats: economic change. Analysing the external environment to assess opportunities and threats: social and technological	• The value of different measures of assessing business performance. To learn about the impact of changes in the political and legal environment on strategic and functional decision making. To learn about the impact of changes in the UK and the global economic environment on strategic and functional decision making.	• The impact of government policy related to enterprise, the role of regulators, infrastructure, the environment and international trade. • Economic factors to include: - o GDP - o taxation - o exchange rates - o inflation - o fiscal and monetary policy - o more open trade vs protectionism. • You should be able to understand economic data, interpret changes in economic data for the UK and globally, and consider the implications of such changes for business. • Social changes to include demographic changes and population movements such as: - o migration		mutual respect and tolerance of those with different faiths and beliefs Cultural - In addition to the above students will develop their culture capital and social mobility through trips and experiences such as talks from Business leaders. Overseas trips will be available during the course as well as UK based visits.
--	---	---	---	--	--

	Analysing the external environment to assess opportunities and threats: the competitive environment..	● To learn about the impact of the social and technological environment on strategic and functional decision making. ● To learn about the pressures for socially responsible behaviour.	○ changes in consumer lifestyle and buying behaviour ○ the growth of online businesses. ● The social environment to include corporate social responsibility (CSR) and: ○ the reasons for and against CSR ○ the difference between the stakeholder vs shareholder concept ○ Carroll's Corporate Social Responsibility Pyramid. Technological change should include the impact of technological change on functional areas and strategy.		
	Analysing strategic options: investment appraisal.				

		To learn about Porter's five forces, how and why these might change, and the implications of these forces for strategic and functional decision making and profits. - To understand financial methods of assessing an investment. - To learn about the factors influencing investment decisions.	- An understanding of the five forces to include: - entry threat (barriers to entry) - buyer power - supplier power - rivalry - substitute threat. - You should consider how the five forces shape competitive strategy. Investment appraisal to include the calculation and interpretation of payback, average rate of return and net present value.		
Spring	Strategic direction: choosing which markets to compete in and what products to offer.	To understand factors influencing which markets to compete in and which products to offer.	- Strategic direction to include the Ansoff Matrix and value of: - market penetration - market development - new product development - Diversification	Students will be assessed formatively and summatively throughout the term. Formative assessment will include: - Low stake retrieval quizzes - Multiple choice questions	Protected characteristics including: Age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation. Are covered throughout using the following methods:

	Strategic positioning: choosing how to compete. Assessing a change in scale.	● To understand the reasons for choosing and the value of different options for strategic direction. ● To learn about how to compete in terms of benefits and price. ● To learn about influences on the choice of a positioning strategy. ● To learn about the value of different strategic positioning strategies. ● To understand the benefits of having a competitive advantage. ● To understand the difficulties of maintaining a competitive advantage. ● To understand the reasons why businesses grow or retrench. ● To understand the difference between organic and external growth. ● To learn about how to manage issues caused by growth and retrenchment ● To learn about the impact of growth or retrenchment on	● Strategic positioning to include: ○ Porter's low cost, differentiation and focus strategies. ● Types of growth to include organic and external. ● Issues with growth should include: ○ economies of scale (including technical, purchasing and managerial) ○ economies of scope ○ diseconomies of scale ○ synergy ○ overtrading. ● Methods of growth to include mergers, takeovers, ventures, franchising. ● Types of growth, to include vertical (backward and forward), horizontal and conglomerate integration.	● Questioning during lesson ● WOWO board responses ● Short answer responses and definition tests. ● Seneca learning Summative assessment will include: ● Case study responses ● Data response ● Synoptic assessment ● Mock exams	Case studies to include business leaders from different backgrounds Discussions on business decisions and how they affect minority groups and those with protected characteristics. <u>SMSC</u> Spiritual - reflecting on and having a clear understanding of how a business actions and purpose can be inclusive and how that is promoted, students use their imagination to apply business theory to creative business ideas. Moral - students will have a clear understanding on business ethics and the consequences of business decisions. Students will challenge the idea of autocratic leadership, capitalism and exploitation through a range of different case
--	--	---	--	---	---

	Assessing innovation. Assessing globalisation and internationalisation.	the functional areas of the business. ● To assess methods and types of growth ● To learn about the pressures of innovation. ● To understand the value of innovation. ● To learn about ways of becoming an innovative organisation. ● To learn about how to protect innovation and intellectual property. ● To learn about the impact of an innovation strategy on the functional areas of the business. ● To learn about reasons for greater globalisation of business. ● To understand the important of globalisation for business. ● To understand the importance of emerging economies for business.	● Types of innovation should include product and process innovation. ● Ways of becoming innovative include: - o kaizen - o research and development - o intrapreneurship - o benchmarking. ● Ways of protecting intellectual property include patents and copyrights. ● Methods of entering international markets include: - o export - o licensing - o alliances - o direct investment. ● Decisions regarding producing overseas include off-shoring and re-shoring. ● Targeting overseas markets may include being a multinational. ● Managing international business should include: - o pressures for local responsiveness - o pressures for cost reduction.	studies and scenarios. As well as keeping up to date with world business news. Social - students will be encouraged to use a range of social skills in different contexts, such as problem solving in groups, debating with each other whilst having acceptance and engagement of the fundamental British values of democracy, the rule of law, individual liberty and mutual respect and tolerance of those with different faiths and beliefs Cultural - In addition to the above students will develop their culture capital and social mobility through trips and experiences such as talks from Business leaders. Overseas trips will be available during the course as well as UK based visits.
--	---	--	--	---

	Assessing greater use of digital technology. Managing change. Managing organisational culture.	● To learn about reasons for targeting, operating in and trading with international markets. ● To understand factors influencing the attractiveness of international markets. ● To learn about reasons for producing more and sourcing more resources abroad. ● To learn about ways of entering international markets and the value of different methods. ● To learn about influences on buying, selling and producing abroad. ● To learn about managing international business. ● To learn about the pressures to adopt digital technology. ● To understand the value of digital technology. ● To learn about causes of pressures for change. ● To understand the value of change. ● To understand the value of a flexible organisation.	Digital technology should include automation, e-commerce, big data and data mining. ● Types of change include: - o internal change - o external change - o incremental change - o disruptive change. ● Managing change should include: - o Lewin's force field analysis. ● Flexible organisations include: - o restructuring - o delayering - o flexible employment contracts - o organic structures vs mechanistic		
--	---	---	---	--	--

Managing strategic implementation.	● To understand the value of managing information and knowledge. ● To learn about barriers to change. ● To learn how to overcome barriers to change.	- o knowledge and information management. ● Kotter and Schlesinger's four reasons for resistance to change. ● Cultural models should include: - o Handy's task culture - o role culture - o power culture and - o person culture.	
Problems with strategy and why strategies fail.	● To understand the importance of organisational culture. ● To learn about the influences on organisational culture. ● To learn about the reasons for and problems of changing organisational culture. ● To learn how to implement strategy effectively. ● To understand the importance of organisational structure in strategic implementation.	● Implementing strategy effectively to include: - o The value of leadership in strategic implementation - o The value of communications in strategic implementation. ● Network analysis to include: - o understanding and interpreting network diagrams - o amendment of network diagrams - o identifying the critical path and the total float	

		● To understand the value of network analysis in strategic implementation. ● To learn about difficulties of strategic decision making and implementing strategy. ● To learn about planned vs emergent strategy. ● To understand reasons for strategic drift. ● To evaluate strategic performance. ● To understand the value of strategic planning. ● To learn about the value of contingency planning and crisis management.			
Revision in preparation for final exams.					

[\(click here to go back to main menu\)](#)

Chemistry

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
Autumn	Chapter 18 - Rates of reactions Chapter 19 - Equilibrium Chapter 20 - Acids, bases, and pH Chapter 21 - Buffers and neutralisations Chapter 22 - Enthalpy and entropy Chapter 23 - Redox and electrode potentials Chapter 24 - Transition elements	• Orders, rate equations and the rate constant • Concentration time graphs • Rate - concentration graphs and initial rates • Rate determining step • Rate constants and temperature • The equilibrium constant K_c • The equilibrium constant K_p • Controlling the position of equilibrium • Bronsted Lowry acids and bases • The pH scale and strong acids • The acid dissociation constant K_a • The pH of weak acids • pH of strong bases • Buffer solutions • Buffer solutions in the body • Neutralisation	Module 1 of the specification content relates to the practical skills learners are expected to gain throughout the course, which are assessed throughout the written examinations and also through the Practical Endorsement Practical activities are embedded within the learning outcomes of the course to encourage practical activities in the classroom which contribute to the achievement of the Practical Endorsement as well as enhancing learners' understanding of biological theory and practical skills.	Assessment point to include; levelled response questions for extended writing, timed MCQ's, analytical questions that include maths skills.	

		• Lattice enthalpy • Enthalpy changes in solution • Factors affecting lattice enthalpy and hydration • Entropy • Free energy • Redox reactions • Manganate redox titration • Iodine/ thiosulfate redox titration • Electrode potentials • Predictions from electrode potentials • Storage and fuel cells • D-block elements • The formation and shapes of complex ions • Stereoisomerism in complex ions • Ligand substitution and precipitation • Redox and qualitative analysis			
Spring	Chapter 25 - Aromatic chemistry Chapter 26 - Carbonyl and carboxylic acids	• Introducing benzene • Electrophilic substitution reactions of benzene • The chemistry of phenol	Module 1 of the specification content relates to the practical skills learners are expected to gain throughout the course, which are	Assessment point to include; levelled response questions for extended writing, timed MCQ's,	

	Chapter 27 - Amines, amino acids, and polymers Chapter 28 - Organic synthesis Chapter 29 - Chromatography and spectroscopy.	• Directing groups • Carbonyl compounds • Identifying aldehydes and ketones • Carboxylic acids • Carboxylic acid derivatives • Amines • Amino acids and chirality • Condensation polymers • Carbon - carbon bond formation • Further practical techniques • Further synthetic routes • Chromatography and functional group analysis • Nuclear magnetic resonance spectroscopy • Carbon 13 NMR spectroscopy • Proton NMR spectroscopy • Interpreting NMR spectra • Combined techniques.	assessed throughout the written examinations and also through the Practical Endorsement Practical activities are embedded within the learning outcomes of the course to encourage practical activities in the classroom which contribute to the achievement of the Practical Endorsement as well as enhancing learners' understanding of biological theory and practical skills.	analytical questions that include maths skills.	
Summer	Revision and exam preparation.		Module 1 of the specification content relates to the practical skills learners are expected to gain throughout the course, which are assessed throughout the written	Assessment point to include; levelled response questions for extended writing, timed MCQ's, analytical questions that include maths skills.	

			examinations and also through the Practical Endorsement Practical activities are embedded within the learning outcomes of the course to encourage practical activities in the classroom which contribute to the achievement of the Practical Endorsement as well as enhancing learners' understanding of biological theory and practical skills.		
--	--	--	--	--	--

[\(click here to go back to main menu\)](#)

Computer Science

Year 13 end of year goals:

- Students are competent with python coding and completed their NEA.
- Students will understand the fundamentals of networks, data structures and architecture of computers.
- Students can competently use SQL to search databases and create new databases.

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
Autumn Mr Kirkman	NEA Students create their own project. Their task is to solve a problem. They will need to find a client, discover their problem and create a solution for it.	Students will know What their problem is and what the solution is.	Students will be able to Create a problem and solve it. Develop computational thinking skills and problem solving abilities.	Regular marking sessions and feedback on their progress throughout the NEA.	Building on their ability to solve a problem that is presented to them. Allowing them to build resilience in working through a problem.
Autumn Mr Gould	Recap services provided by IT Students will learn about the hardware and software of computer systems. Students will be able to describe the	Students will know The correct terminology to use when looking at computer systems. They will be able to explain the difference between high level and low level	Students will be able to Deconstruct the software and will be able to demonstrate machine code and assembly language.	Students will be assessed with a variety of exam style questions. Students will be given components of computers to name and explain their use. They will need to explain how the	This topic will cover the main components of a computer. Students can see how computers are built and how components fit together. Students look at the basis of computing, how they are used

	main components of a computer and their uses. Students will also examine the relationships and classification of system components. They will explore the programming language and program translator.	language. Students will know the different types of storage available and the principle operations of those storage devices.	Students will be able to identify the components of a computer, describe the use of it and explain the software needed to ensure that it runs correctly.	component fits together with other components and what the purpose of working together is.	and how they fit together. This will help in a variety of areas throughout their lives as technology continues to grow and shape the world around us.
Spring Mr Kirkman	NEA Students create their own project. Their task is to solve a problem. They will need to find a client, discover their problem and create a solution for it.	Students will know What their problem is and what the solution is.	Students will be able to Create a problem and solve it. Develop computational thinking skills and problem solving abilities.	Regular marking sessions and feedback on their progress throughout the NEA.	Building on their ability to solve a problem that is presented to them. Allowing them to build resilience in working through a problem.
Spring Mr Gould	Recap networks and stored program concepts Students will look at the different types of network topologies and protocols used to transfer data.	Students will know The different types of topologies used in networking. They will be able to identify the topologies and how more than one type of topology can work with another.	Students will be able to Students will also be able to identify the benefits and drawbacks of different types of connectivity.	Students will be assessed with a variety of exam style questions. Students will also be given opportunities to practise their coding skills in order to develop these ready for the non exam component.	Understanding connections and how to transfer data in a safe and secure manner will support students in later life to ensure they follow certain protocols.

	Students will also look at the different types of encryption and how to ensure data is safe. They will also look at the architecture of systems and what is needed to ensure networks are able to securely transfer data. Students will explore the process involved in the fetch-execute cycle.	Students will need to understand the fetch-execute cycle and what this process does in order for programs to operate.	Identify the different areas of the fetch-execute cycle. Students will be able to explain the process using the correct terminology for each stage.		
Summer Mr Kirkman	Paper 1 skeleton code Students will focus on their skeleton code ready for their exam. They will practice questions and run simulations for potential scenarios which could appear on their exam.	Students will know How to solve simple problems and how these can be related to the upcoming exam.	Students will be able to Transfer the solutions used in their NEA and apply the same skills to solve the problems in their exam.	Regular marking sessions and feedback on their progress throughout the NEA.	Building on their ability to solve a problem that is presented to them. Allowing them to build resilience in working through a problem.
Summer Mr Gould	Paper 2 exam preparation Students will focus on paper 2 and look at past paper questions.	Students will know The style of questions which appear on the exam so they are prepared to answer them in the best manner.	Students will be able to Answer exam questions efficiently and effectively.	Students will examine case studies and answer exam style questions. They will also sit an end of year mock exams which will	Within life there are regular assessments and opportunities to complete tests. This method will give students the skills to prepare for future exams.

				cover all the topics they have studied this academic year.	
--	--	--	--	--	--

[\(click here to go back to main menu\)](#)

Criminology

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
Autumn & spring	Unit 3 controlled assessment - Crime Scene to Courtroom. - Understand the process of criminal investigations - personnel, investigative techniques, processing of evidence, rights of individuals. - Understand the process for prosecution of suspects - CPS, trial process, use of evidence in trials, influences upon trial outcomes, lay people in trials. - Review criminal cases - examine information for validity, draw conclusions from information.	An understanding of the process of criminal investigations from crime report to trial.	An understanding of positive and negative consequences of legal processes, including when processes are incorrectly followed. The ability to analyse information in order to assess its validity and to draw conclusions.	Controlled assessment November	Culture capital - an understanding of the criminal justice system of England and Wales. Culture capital - an understanding of society and how it works as an entity to maintain social order and prevent social collapse. Equality and diversity - an understanding of how the criminal justice system has contributed towards systemic racism in England and Wales.
	Unit 4 exam - Crime and Punishment	An understanding of the criminal justice system in England and Wales and how it is used to	An understanding of how society exists as an entity; how it is policed and how it polices itself.	Exam June	

	• Understand the criminal justice system in England and Wales - processes used for law making, organisation of the criminal justice system, models of criminal justice. • Understand the role of punishment in a criminal justice system - forms of social control, aims of punishment, how forms of punishment meet the aims of punishment • Understand measures used in social control - agencies of social control, their contribution to, limitations of and effectiveness of achieving social control.	achieve and maintain social control.			
Spring & summer	Unit 4 Crime & Punishment - as above Targeted exam preparation and revision of Units 1, 2 and 3 for synaptic links	As above, plus revision of Units 1, 2 and 3 (see year 12 curriculum map for Units 1 & 2)	As above, plus revision of exam skills	Exam June	As above

[\(click here to go back to main menu](#)

English Literature

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
Autumn - Texts in Shared Contexts - modern times	In this term, students will continue their study of the Paper 2 exam in order to prepare them for their mocks. They will: - Study 'Feminine Gospels' and consider how this can be linked to 'A Streetcar Named Desire' - Consider how to respond to the unseen prose element of the exam - Prepare for a full Paper 2 mock exam in January - Revise the plot and key themes / ideas in 'The Handmaid's Tale'	Key knowledge: - Key themes and ideas in 'Feminine Gospels' and 'Street Car' and how these can be linked - The social, historical , autobiographical, literary context of 'Feminine Gospels and 'Street Car' - Evaluation of writers' intention and success in unseen texts - The social, historical , autobiographical, literary context of 'The Handmaid's Tale'	Key skills: - Ability to compare texts across time and themes - Analysis of language - Ability to explore texts through a range of critical lenses	Students will be given a range of tasks to complete each week for additional study. These may include: - Pre reading and preparation - Wider reading to broaden their contextual knowledge and literary debate - Wider watching of lectures to deepen their analysis and debate - An essay to write, consolidating their knowledge from the lessons They will also sit their formal mock exams as part of the Year	Women's rights and laws of equality are explored alongside mental health issues across the texts studied for the Paper 2 exam.

				13 A-Level mock exam series. This will be a 2.5 hour mock paper on Texts in Modern Contexts: ○ Section A: 'Handmaid's Tale' ○ Section B: Unseen prose ○ Section C: Comparison of an aspect of 'Streetcar' and 'Feminine Gospels'	
Spring	This term, students will revise for all aspects of the Paper 1 and Paper 2 exams.	Students must be secure in their knowledge of all texts and contexts across both exam papers.	Key skills: ● Ability to compare texts across time and themes ● Analysis of language ● Ability to explore texts through a range of critical lenses	Students will continue to receive regular feedback, followed by sitting their final A-Level exams in May.	See previous notes for Year 12 and 13.
Summer	N/A	N/A	N/A	N/A	N/A

[\(click here to go back to main menu\)](#)

Forensic Science

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
Autumn	Unit 3: Science Investigation Skills	A Planning a scientific investigation A1 Developing a hypothesis for an investigation A2 Selection of appropriate equipment, techniques and standard procedures A3 Health and safety associated with the investigation A4 Variables in the investigation A5 Method for data collection and analysis	• Be able to formulate a hypothesis or a null hypothesis based on relevant scientific ideas. • Be able to select and justify the use of equipment/techniques/standard procedures for quantitative and/or qualitative investigations. • Understand risks and hazards associated with the investigation • Be able to produce a clear, logically ordered method to obtain results. • Be able to select relevant measurements and the range of measurements to be recorded. • Understand the importance of obtaining data accurately/reliably and to appropriate levels of precision.	This unit will be assessed through a written task (Part B) worth 60 marks. The task is set and marked by Pearson and will be completed in one sitting, within a supervised assessment session timetabled by Pearson. The assessment task will assess learners' ability to plan, record, process, analyse and evaluate scientific findings, using secondary information/data from scientific investigations related to the unit content. In order to complete the written task in Part B, learners will be provided with Part A. Part A will outline the method/materials used to generate	

		B Data collection, processing and analysis/interpretation B1 Collection of quantitative/qualitative data B2 Processing data	• Understand how variables can be controlled/measured/monitored. • Understand how the data/information can be analysed. • Be able to collect data accurately/reliably and to appropriate levels of precision. • Be able to tabulate data in a clear and logical format using correct headings with units where appropriate. • Be able to identify anomalous data and take appropriate action. • Be able to recognise when it is appropriate to take repeats. • Be able to make qualitative observations and draw inferences. • Be able to carry out relevant calculations where appropriate, involving: - o mean and standard deviation - o use and interpretation of error bars - o measuring gradients of a line and/or curve	results/observations from a practical investigation. Learners will have 45 minutes to review Part A before they complete Part B. Part B will be one session lasting one hour and 30 minutes. Both Part A and B will be under supervised conditions. Part A and B are taken in a single session timetabled by Pearson in January with the opportunity to retake in June. <u>Assessment Objectives:</u> AO1 Demonstrate knowledge and understanding of scientific concepts, procedures, processes and techniques and their application in a practical investigative context AO2 Interpret and analyse qualitative and quantitative scientific information to make reasoned judgements and draw	
--	--	---	---	--	--

		C Drawing conclusions and evaluation C1 Interpretation/analysis of data C2 Evaluation	- o use of statistical tests, including t-test, chi-squared and correlation analysis - o use of formulae - o transposition of formulae - o conversion of units - o use of standard form - o percentage error of measuring equipment. • Be able to display data in an appropriate format, including: - o choosing an appropriate graph/chart/tables - o correct plotting/labelling/scales. • Be able to identify trends/patterns in data. • Be able to compare primary and secondary data. • Be able to use data to draw conclusions that are valid and relevant to the purpose of the investigation. • Interpretation of statistical tests using tables of critical values and a 5% significance level, with reference to the null hypothesis.	conclusions based on evidence in a practical investigative context AO3 Evaluate practical investigative procedures used and their effect on the qualitative and quantitative scientific information obtained to make reasoned judgements AO4 Be able to make connections between different scientific concepts, procedures, processes and techniques to make a hypothesis and write a plan for a practical investigation	
--	--	---	--	---	--

		D Enzymes in action D1 Protein structure D2 Enzymes as biological catalysts in chemical reactions D3 Factors that can affect enzyme activity E Diffusion of molecules E1 Factors affecting the rate of diffusion	• Be able to make any recommendations for improvements to the investigation. • Be able to explain anomalous data. • Be able to determine quantitative and discuss qualitative sources of error. • Be able to discuss evidence of the reliability of the data collected during the investigation. • Be able to identify strengths and weaknesses within method/techniques/standard procedures/equipment used. • Be able to suggest improvements to an investigation.		
--	--	---	--	--	--

		E2 Arrangement and movement of molecules F Plants and their environment F1 Factors that can affect plant F2 Sampling techniques F3 Sampling sizes G Energy content of fuels G1 Fuels G2 Hazards associated with fuels G3 Units of energy H Electrical circuits H1 Use of electrical components in series and parallel circuits H2 Equations	• Understand the importance of random sampling in collecting reliable and valid data for analysis. • Select appropriate ecological sampling techniques to investigate the effect of abiotic factors on plant populations, including: - o transects - o quadrats (open and gridded) - o point frames. • Select sample sizes for investigation with regards to practical constraints and the need to collect sufficient data to make valid conclusions. • Define – joules, kilojoules, calories, kilocalories. • Calculate heat energy supplied by a fuel to water using: - o $\text{heat energy} = \text{mass of water} \times \text{specific heat capacity of water} \times \text{temperature rise}$		
--	--	---	---	--	--

		H3 Energy usage	of water. • Calculate heat energy released from a fuel in kJ mol ⁻¹ .		
Spring/Summer	Unit 8: Physiology of Human Body Systems	A Understand the impact of disorders of the musculoskeletal system and their associated corrective treatments B Understand the impact of disorders on the physiology of the lymphatic system and the associated corrective treatments	A1 Structure of the musculoskeletal system A2 Function of the musculoskeletal system A3 Health matters and treatments related to the musculoskeletal system B1 Structure of the lymphatic system B2 Function of the lymphatic system B3 Health matters and treatments related to the lymphatic system	Learners would use information gained from research, visits, dissections/videos, models and simulations to produce an illustrated report explaining and analysing the structure and function of the musculoskeletal system. An evaluation of a related disorder/dysfunction of the system and associated treatments must be included. Research work using the internet and TV documentaries to help learners to create a presentation that describes and explains the structure and function of the lymphatic system in promoting a healthy body. An evaluative case study of the effect of a disorder/dysfunction of the system and possible treatments must be included.	

		C Explore the physiology of the digestive system and the use of corrective treatments for dietary-related diseases.	C1 Structure of the digestive system C2 Function of the digestive system C3 Health matters and treatments related to the digestive system	A lab book/record of investigations modelling the functioning of the various parts of the digestive system. Photographs and information from the investigations will be used to create an information leaflet that explains the role and location of organs and evaluates dietary disorder in the system and possible treatments. Observation records of practical work undertaken to assess the nutrient content of food will be required. Evidence and conclusions from the investigations will be incorporated into the information leaflet. Research on stages and processes of taphonomy and entomology for presentation, with supporting observation form completed by assessor.	
	Unit 9: Environmental Forensics	A Understand how concepts in taphonomy and entomology contribute to forensic investigation	A1 Stages and processes of decomposition (taphonomy) A2 Factors affecting decomposition A3 Entomology, species identification and life cycles		

		B Carry out investigative techniques for taphonomy and entomology that are used to estimate time of death in forensic investigation C Carry out techniques used to examine soil, pollen and diatom evidence in forensic investigation. C Carry out techniques used to examine soil, pollen and diatom evidence in forensic investigation	A4 Insect succession and effects on succession A5 Uses in forensic investigation B1 Scene recording and collection techniques B2 Laboratory entomological techniques B3 The post-mortem interval (PMI) and use of taphonomy and entomology in time of death (TOD) estimation C1 Use of soil, sampling and analytical techniques C2 Use of pollen, sampling and analytical techniques C3 Use of diatoms, sampling and analytical techniques C4 Safety and authentication of sampling techniques for soil, pollen and diatoms	A written report with a vocational aspect on the effects of the environment and burial on decomposition and entomology. Scenario-led examination of taphonomy and entomological evidence. A written report with method, results and evaluation of analysis. Scenario-led questions on TOD estimation calculations, supported with worksheets. A report explaining the scientific techniques and the value of this type of evidence. Observation sheet for practical assessment.	
--	--	--	---	--	--

[\(click here to go back to main menu\)](#)

Geography

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
Autumn	Hazards (Paper 1: Section C)	Hazards This optional section of our specification focuses on the lithosphere and the atmosphere, which intermittently but regularly present natural hazards to human populations, often in dramatic and sometimes catastrophic fashion. The concept of hazard in a geographical context Nature, forms and potential impacts of natural hazards (geophysical, atmospheric and hydrological). Hazard perception and its economic and cultural determinants. Characteristic human responses – fatalism, prediction, adjustment/adaptation,	Case study of a multi-hazardous environment beyond the UK to illustrate and analyse the nature of the hazards and the social, economic and environmental risks presented, and how human qualities and responses such as resilience, adaptation, mitigation and management contribute to its continuing human occupation. Case study at a local scale of a specified place in a hazardous setting to illustrate the physical nature of the hazard and analyse how the economic, social and political character of its community reflects the presence and impacts of the hazard and the community's response to the risk.	Paper 1: Section C Hazards •Written exam: 2 hours 30 minutes •120 marks •40% of A-level •Section C: answer either question 5 or 6 (36 marks)	Global Issues and challenges Current Affairs Global Development

		mitigation, management, risk sharing – and their relationship to hazard incidence, intensity, magnitude, distribution and level of development. The Park model of human response to hazards. The Hazard Management Cycle. Plate tectonics Earth structure and internal energy sources. Plate tectonic theory of crustal evolution: tectonic plates; plate movement; gravitational sliding; ridge push, slab pull; convection currents and sea-floor spreading. Destructive, constructive and conservative plate margins. Characteristic processes: seismicity and vulcanicity. Associated landforms: young fold mountains, rift valleys, ocean ridges, deep sea trenches and island arcs, volcanoes. Volcanic hazards	Study of this section offers the opportunity to exercise and develop observation skills, measurement and geospatial mapping skills, together with data manipulation and statistical skills, including those associated with and arising from fieldwork.		
--	--	--	--	--	--

		The nature of vulcanicity and its relation to plate tectonics: forms of volcanic hazard: nuées ardentes, lava flows, mudflows, pyroclastic and ash fallout, gases/acid rain, tephra. Spatial distribution, magnitude, frequency, regularity and predictability of hazard events. Impacts: primary/secondary, environmental, social, economic, political. Short and long-term responses: risk management designed to reduce the impacts of the hazard through preparedness, mitigation, prevention and adaptation. Impacts and human responses as evidenced by a recent volcanic event. Seismic hazards The nature of seismicity and its relation to plate tectonics: forms of seismic hazard: earthquakes, shockwaves, tsunamis,			
--	--	---	--	--	--

		liquefaction, landslides. Spatial distribution, randomness, magnitude, frequency, regularity, predictability of hazard events. Impacts: primary/secondary; environmental, social, economic, political. Short and long-term responses; risk management designed to reduce the impacts of the hazard through preparedness, mitigation, prevention and adaptation. Impacts and human responses as evidenced by a recent seismic event. Storm hazards The nature of tropical storms and their underlying causes. Forms of storm hazard: high winds, storm surges, coastal flooding, river flooding and landslides. Spatial distribution, magnitude, frequency, regularity, predictability of hazard events.			
--	--	--	--	--	--

		Impacts: primary/secondary, environmental, social, economic, political. Short and long-term responses: risk management designed to reduce the impacts of the hazard through preparedness, mitigation, prevention and adaptation. Impacts and human responses as evidenced by two recent tropical storms in contrasting areas of the world. Fires in nature Nature of wildfires. Conditions favouring intense wild fires: vegetation type, fuel characteristics, climate and recent weather and fire behaviour. Causes of fires: natural and human agency. Impacts: primary/secondary, environmental, social, economic, political. Short and long-term responses; risk management designed to reduce the impacts of the hazard through preparedness,			
--	--	---	--	--	--

		mitigation, prevention and adaptation. Impact and human responses as evidenced by a recent wild fire event.			
Spring	Global Systems & Global Governance (Paper 2: Section A)	Global systems and global governance This section of our specification focuses on globalisation – the economic, political and social changes associated with technological and other driving forces which have been a key feature of global economy and society in recent decades. Increased interdependence and transformed relationships between peoples, states and environments have prompted more or less successful attempts at a global level to manage and	Students engage with important dimensions of these phenomena with particular emphasis on international trade and access to markets and the governance of the global commons. Students contemplate many complex dimensions of contemporary world affairs and their own place in and perspective on them. Study of this section offers the opportunity to exercise and develop both qualitative and quantitative approaches to gathering, processing and interpreting relevant information and data including, those	Section A: Global Systems and Global Governance Paper 2 How it's assessed •Written exam: 2 hours 30 minutes •120 marks •40% of A-level •Section A: answer all questions (36 marks) •Question types: short answer, levels of response, extended prose	Geopolitics Current Affairs and Issues Equality and Diversity Sustainability Global Issues and challenges Global Development

		govern some aspects of human affairs. Globalisation Dimensions of globalisation: flows of capital, labour, products, services and information; global marketing; patterns of production, distribution and consumption. Factors in globalisation: the development of technologies, systems and relationships, including financial, transport, security, communications, management and information systems and trade agreements. Global systems Form and nature of economic, political, social and environmental interdependence in the contemporary world. Issues associated with interdependence including how:	associated with and arising from fieldwork Antarctica as a global common An outline of the contemporary geography, including climate, of Antarctica (including the Southern Ocean as far north as the Antarctic Convergence) to demonstrate its role as a global common and illustrate its vulnerability to global economic pressures and environmental change. Threats to Antarctica arising from: ● climate change ● fishing and whaling ● the search for mineral resources ● tourism and scientific research. Critical appraisal of the developing governance of Antarctica. International government organisations to include United Nations (UN) agencies such as United Nations Environment		
--	--	---	--	--	--

		• unequal flows of people, money, ideas and technology within global systems can sometimes act to promote stability, growth and development but can also cause inequalities, conflicts and injustices for people and places • unequal power relations enable some states to drive global systems to their own advantage and to directly influence geopolitical events, while others are only able to respond or resist in a more constrained way. International trade and access to markets Global features and trends in the volume and pattern of international trade and investment associated with globalisation.	Programme (UNEP) and the International Whaling Commission. The Antarctic Treaty (1959), the Protocol on Environmental Protection to the Antarctic Treaty (1991); IWC Whaling Moratorium (1982) – their purpose, scope and systems for inspection and enforcement. The role of NGOs in monitoring threats and enhancing protection of Antarctica. Analysis and assessment of the geographical consequences of global governance for citizens and places in Antarctica and elsewhere to specifically consider how global governance underlies and impacts on students’ and other people's lives across the globe.		
--	--	--	--	--	--

		Trading relationships and patterns between large, highly developed economies such as the United States, the European Union, emerging major economies such as China and India and smaller, less developed economies such as those in sub-Saharan Africa, southern Asia and Latin America. Differential access to markets associated with levels of economic development and trading agreements and its impacts on economic and societal well-being. The nature and role of transnational corporations (TNCs), including their spatial organisation, production, linkages, trading and marketing patterns, with a detailed reference to a specified TNC and its impacts on those countries in which it operates.			
--	--	---	--	--	--

		World trade in at least one food commodity or one manufacturing product. Analysis and assessment of the geographical consequences of global systems to specifically consider how international trade and variable access to markets underlie and impact on students' and other people's lives across the globe. Global governance The emergence and developing role of norms, laws and institutions in regulating and reproducing global systems. Issues associated with attempts at global governance, including how: • agencies, including the UN in the post-1945 era, can work to promote growth and stability but may also exacerbate inequalities and injustices			
--	--	---	--	--	--

		• interactions between the local, regional, national, international and global scales are fundamental to understanding global governance. The 'global commons' The concept of the 'global commons'. The rights of all to the benefits of the global commons. Acknowledgement that the rights of all people to sustainable development must also acknowledge the need to protect the global commons.			
Summer	Revise for final exams				

[\(click here to go back to main menu\)](#)

Health and Social Care

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge/Key Questions</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
Autumn	Unit 2: Human Biology Students explore the organisation, structure and normal physiological functioning of the human body, and the effect on health of common disorders of the body system Students explore the organisation, structure and normal physiological functioning of the human body, and the effect on health of common disorders of the body system Students will have the opportunity to re-sit the unit 1 exam during this term if necessary	Unit 2: The structure of animal cells and the function of the organelles to include: membrane; nuclear; ribosomes; mitochondria The structure, location in organs and organ systems, and function of the main tissue types: epithelial (simple and compound) ; connective (blood, cartilage, bone, areolar and adipose) ; muscle (striated, non-striated, cardiac) ; nervous (sensory and motor neurones, neuroglia). Students are expected to develop an awareness of energy metabolism, cellular respiration and uses of energy in the body. catabolism – the breakdown of complex molecules into numerous simple ones. Anabolism – the process of using the energy released by catabolism to synthesise complex molecules from numerous simple ones.	Unit 2: Demonstrate knowledge of the structure, organisation and function of the human body and common disorders that affect it. Demonstrate application of knowledge and understanding of the structure and function of body systems to the primary and secondary effects of common disorders on those body systems. Make connections between the primary and secondary effects of common disorders and how they affect interlinked body systems.	Unit 2: The unit will be assessed through one examination of 80 marks lasting 1 hour and 30 minutes. Students will be assessed through multiple-choice, short- and long-answer questions. The questions will assess knowledge and understanding of the structure, organisation and function of the human body and common disorders that affect it; application of knowledge on the structure and function of body systems to the primary and secondary effects of common disorders on those body systems; and connections between the primary and secondary effects of common disorders and how they affect interlinked body systems. External examination in January of year 13.	Unit 2: The importance of positive behaviour choices on improving health outcomes.

		Cellular respiration: Takes place in all living cells. The process by which cells derive energy from glucose through catabolism Uses of energy within the body Homeostatic mechanisms Students will know and understand how disorders can affect various body systems, including the primary and secondary effects on those systems, including a wide range of conditions.			
Spring	Unit 5: Promoting Health Education Students explore the purpose of health education, models and approaches to educating the public and encouraging behaviour change in the population.	Unit 5: Understand the purpose of health education, including; Purpose of health education; The role of health education; Organisations influencing health education; Legislation and regulations impacting on health education; Monitoring the health of the nation; Explore key issues and priorities for health and the factors that affect health and wellbeing Explore key issues and priorities for health and the factors that affect health and wellbeing, to include; Health issues and priorities; Factors affecting health and wellbeing	Unit 5: A.P1 Explain the purpose and role of health education. A.P2 Explain organisations and legislation involved in health education. A.M1 Discuss how the health of the nation is monitored through organisations and legislation. B.P3 Explain one health and wellbeing issue affecting the health and wellbeing of individuals at a local and national level. B.P4 Explain factors affecting the health and wellbeing of individuals and wider society in relation to chosen health issue	Unit 5: Assessment will be based on the assignment created by the examination board and changed yearly. Three tasks are given in total, each with a range of subtopics within it. The evidence produced will be provided through coursework, using the format requested by the assignment brief. Task 1 and 2 will be completed this term, with learners achieving either a Pass, Merit or Distinction requirement. The minimum level gained across the three tasks is the one awarded to the learner.	Unit 5: Understanding the role of health education in the UK, and the many services that deliver this through a wide range of media Using data to evaluate the success of National Programmes designed to improve the health of the nation

			B.M2 Discuss the impact of factors affecting health and wellbeing on individuals, their holistic health and wider society. AB.D1 Justify the need for health education, monitoring, and responses in relation to factors that affect health and wellbeing at a local and national level.		
Summer	Unit 5: Promoting Health Education Students will have the opportunity to re-sit the unit 2 exam during this term if necessary	Unit 5: Examine approaches to health education campaigns and their impact on health and wellbeing, to include; Current and ongoing health education; Models and approaches used in health education to promote health and wellbeing; Planning a health education event	Unit 5: C.P5 Explain models and approaches used in health education campaigns. C.P6 Plan a small-scale health education event for a health and wellbeing issue. C.M3 Assess the effectiveness of models and approaches used in health education campaigns, with reference to data. C.M4 Assess the effectiveness of planning a small-scale health education event with reference to one health and wellbeing issue. C.D2 Justify the proposed plan for health education event with reference to the health and wellbeing issue, models and approaches used.	Unit 5: Assessment will be based on the assignment created by the examination board and changed yearly. Three tasks are given in total, each with a range of subtopics within it. The evidence produced will be provided through coursework, using the format requested by the assignment brief. Task 3 will be completed this term, with learners achieving either a Pass, Merit or Distinction requirement. The minimum level gained across the three tasks is the one awarded to the learner.	Unit 5: The complexities of delivering a campaign to a diverse community, with consideration to strategies to overcome obstacles to success. The importance of evidence based practice in planning and reviewing national programmes. Awareness of the changes in society and the effects this has on the changing levels of need.

[\(click here to go back to main menu\)](#)

History

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
	Link to specification with more specific detail: https://qualifications.pearson.com/content/dam/pdf/A%20Level/History/2015/Specification%20and%20sample%20assessments/9781446914366-gce-2015-a-hist.pdf				

Autumn	Mrs Wood - continuation of coursework preparation and writing Ms Young: The witch craze in Britain, Europe and North America, c1580–c1750	Interpretations of the Holocaust Witchcraft: challenges to the witch craze, c1580–c1750: Changing attitudes to witchcraft in Britain The wider intellectual context: the coming of the age of science and reason persecuting witches The North Berwick witches in Scotland, 1590–91 and the aftermath to 1597 The Lancashire witches of 1604–13 The Great Witch Hunt, in Bamberg, Germany, 1623–32 Matthew Hopkins and the East Anglian witch craze, 1645–47 Cotton Mather and the Salem witch hunt, 1692–93	AO1 Demonstrate, organise and communicate knowledge and understanding to analyse and evaluate the key features related to the periods studied, making substantiated judgements and exploring concepts, as relevant, of cause, consequence, change, continuity, similarity, difference and significance 55 AO2 Analyse and evaluate appropriate source material, primary and/or contemporary to the period, within its historical context 20 AO3 Analyse and evaluate, in relation to the historical context, different ways in which aspects of the past have been interpreted	Assessments in class for witchcraft Mock exams	The Witchcraze unit touches on a variety of cultural elements and how they have been perceived in our past. It considers the issue of the control of a small elite, as well as the uses and importance of the justice system. It also discusses the key aspects of changing of mindset, with the development of scientific understanding and the need to ask and answer questions. For the coursework, students study the causation of the Holocaust. This gives students a clear insight into some of the worst events that link to the developments in European cultural history. The extremes of the Third Reich an important area for students to extend their knowledge to make sure history is not repeated.
Spring	Completion of above	As above	As above		

Summer	Revision for final exams				
--------	--------------------------	--	--	--	--

[\(click here to go back to main menu\)](#)

Maths

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>

Autumn	1.1 Algebraic Methods 1.2 Graphs and Functions 1.3 Sequences and Series 1.4 Binomial Expansion 1.5 Radians 1.6 Trigonometric Functions 1.7 Trigonometry and Modelling 1.8 Parametric Equations 1.9 Differentiation 1.11 Integration	<u>Overarching theme 1:</u> Mathematical argument, language and proof <u>Overarching theme 2:</u> Mathematical problem solving <u>Overarching theme 3:</u> Mathematical modelling	A Level Mathematics students must use the mathematical notation and be able to recall the mathematical formulae and identities. OT1 Construct and present mathematical arguments through appropriate use of diagrams; sketching graphs; involving the correct use of symbols and connecting language, including the following: constant, coefficient, expression, equation, function, identity, index, term, variable. OT1 Comprehend and critique mathematical arguments, proofs and justifications of methods and formulae, including those relating to applications of mathematics. OT2 Recognise the underlying mathematical structure in a situation and simplify an abstract concept appropriately to enable problems to be solved.	4 formal exam style assessments based on taught chapters (1 hour each) 1.1, 1.2 and 1.5 1.3 and 1.4 1.6 and 1.7 1.8	
----------------------	---	---	--	---	--

			OT3 Translate a situation in context into a mathematical model, making simplifying assumptions.		
Spring	1.10 Numerical Methods 1.11 Integration 1.12 Vectors 2.1 Regression and Correlation 2.2 Conditional Probability 2.3 Normal Distribution 2.4 Moments 2.5 Forces and Friction 2.6 Projectiles 2.7 Applications of Forces	<u>Overarching theme 1:</u> Mathematical argument, language and proof <u>Overarching theme 2:</u> Mathematical problem solving <u>Overarching theme 3:</u> Mathematical modelling	OT1 Understand and use mathematical language and syntax as set out in the content. OT1 Understand and use language and symbols associated with set theory, as set out in the content. Apply to solutions of inequalities and probability. OT2 Understand, interpret and extract information from diagrams and construct mathematical diagrams to solve problems, including in mechanics. OT3 Use a mathematical model with suitable inputs to engage with and explore situations (for a given model or a model constructed or selected	3 formal exam style assessments (1 hour each) 1.9 1.11 All Statistics (2.1 – 2.3) Mock exams (2 pure, 1 stats and mechanics)	

			by the student).		
Summer	2.8 Further Kinematics Revision and recap of previous topics before exams	<u>Overarching theme 1:</u> Mathematical argument, language and proof <u>Overarching theme 2:</u> Mathematical problem solving <u>Overarching theme 3:</u> Mathematical modelling	OT1 Accurately recall facts, terminology and definitions. OT1 Select and carry out routine procedures. OT2 Translate problems in mathematical and non-mathematical contexts into mathematical processes. OT3 Interpret the outputs of a mathematical model in the context of the original situation (for a given model or a model constructed or selected by the student). OT3 Understand and use modelling assumptions.	1 formal exam style assessment (1 hour) All Mechanics (2.4 – 2.8) Revision assessments in preparation for the final A level exams	

[\(click here to go back to main menu\)](#)

Media studies

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
-------------	------------------------------------	------------------	---------------	-------------------	--

Autumn	Teacher 1 Component 3 NEA Cross media coursework production - Television Brief, Respond to a set brief provided by the Eduqass exam board - Create your own crime drama and associated print promotional products Re-shooting, redrafting, editing of production started in Summer Term as necessary . TEACHER REVIEW and moderation. FINAL SUBMISSION XMAS HOLS	• responding to the requirements of the brief, including using conventions appropriate to the chosen form, genre and industry context and engaging the intended target audience • completing all tasks detailed in the chosen set brief • creating an appropriate cross-media production of products that are clearly interrelated • using media language to communicate meanings • using media language to construct representations of particular events/issues/groups and individuals	.AO1 Demonstrate knowledge and understanding of: • the theoretical framework of media • contexts of media and their influence on media products and processes. AO2 Apply knowledge and understanding of the theoretical framework of media to: • analyse media products, including in relation to their contexts and through the use of academic theories • evaluate academic theories • make judgements and draw conclusions. AO3 Create media products for an intended audience, by applying knowledge and understanding of the theoretical framework of media to communicate meaning.	Final Submissions and Initial grading of NEA production work -Nov/ December	Understanding of a range of social groups based on age, ability/disability, class & social status, gender, ethnicity, sexuality.
	Teacher 2 Component 1 Section B Radio Industry & Audience - Womans hour	Processes of production, distribution and circulation by organisations, groups and individuals in a global context	AO1 Demonstrate knowledge and understanding of: • the theoretical framework of media • contexts of media and their influence on media products and processes.	Mini mock exam questions throughout unit where necessary - peer & self assessment opportunities plus teacher moderation	Understanding of how different audiences interpret texts in alternative ways and at different times Examination of self identity

		The significance of patterns of ownership and control, including conglomerate ownership, vertical integration and diversification The significance of economic factors, including commercial and not-for-profit public funding, to media industries and their products The regulatory framework of contemporary media in the UK	AO2 Apply knowledge and understanding of the theoretical framework of media to: • analyse media products, including in relation to their contexts and through the use of academic theories • evaluate academic theories		Examination of feminist issues and the effect on audience
Spring	Teachers 1&2 Component 1 Section B Newspapers - Media Language and Representation - The Daily Mirror and The Times	Processes of production, distribution and circulation by organisations, groups and individuals in a global context	AO1 Demonstrate knowledge and understanding of: • the theoretical framework of media • contexts of media and their influence on media products and processes. AO2 Apply knowledge and understanding of the theoretical framework of media to: • analyse media products, including in relation to their contexts and through the use of academic theories • evaluate academic	Mini mock exam questions throughout unit where necessary - peer & self assessment opportunities plus teacher moderation Final Grades decided and moderated for NEA coursework cross media production Yr 13 mock examinations - Jan	Examination of stereotypes and how they have been eroded/subverted or changed over time Examination and understanding of differing political viewpoints and the reasons behind them - cause and effect Examination of power and control in both contemporary and historical society

			theories • make judgements and draw conclusions.		
Summer	Teacher 1 Component 2 Section C- Media in the Online Age Attitude magazine Teacher 2 Component 2 Section C - Media in the Online Age - Zoe Suggs Blog	Understanding and applying a range of media theories eg Sh End of audience' theories (including Shirky) Media effects (including Bandura) Cultivation theory (including Gerbner) Reception Theory (including Hall) Fandom (including Jenkins) How media organisations reflect the different needs of mass and specialised audiences, including through targeting and the role and significance of specialised audiences, including niche and fan, to the media How specialised audiences can be reached, both on a national and global scale, through different media technologies and platforms	AO1 Demonstrate knowledge and understanding of: • the theoretical framework of media • contexts of media and their influence on media products and processes. AO2 Apply knowledge and understanding of the theoretical framework of media to: • analyse media products, including in relation to their contexts and through the use of academic theories • evaluate academic theories • make judgements and draw conclusions.	End of unit assessments where necessary in unit MAY/JUNE FINAL EXAMINATIONS	Exploration of representations of sexuality and gender norms Exploration of feminist perspectives and identity theories Exploration of contemporary uses of social media sites Exploration of social issues such as audience grading according to financial, lifestyle and education limitations

		How audiences use media in different ways, reflecting demographic factors as well as aspects of identity and cultural capital The way in which different audience interpretations reflect social, cultural and historical circumstances Processes of production, distribution and circulation by organisations, groups and individuals in a global context			
--	--	---	--	--	--

[\(click here to go back to main menu\)](#)

Photography

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
Autumn	<u>Exam specification:</u> https://www.edugas.co.uk/media/a3ndenr/edugas-a-level-art-and-design-spec-from-2015-e-090119.pdf COMPONENT 1: <u>PORTFOLIO 60%-</u> The Personal Investigation consists of two integrated constituent parts: 1. a major in-depth critical, practical and theoretical investigative project/portfolio and outcome/s based on themes and subject matter that have personal significance; 2. An extended written element of 1000 words minimum, which may contain images and texts and must clearly relate to practical and theoretical work using an appropriate working vocabulary and specialist terminology.	The components for this specification have been devised to demonstrate knowledge and understanding of: - Relevant materials, processes, technologies and resources how ideas, feelings and meanings can be conveyed and interpreted in images and artefacts. - how images and artefacts relate to the time and place in which they were made and to their social and cultural contexts - continuity and change in different genres, styles and traditions - a working vocabulary and specialist terminology	The components equally require learners to develop the skills to: - Record experiences and observations, in a variety of ways using drawing or other appropriate visual forms; undertake research; and gather, select and organise visual and other appropriate information. - Explore relevant resources; analyse, discuss and evaluate images, objects and artefacts; and make and record independent judgements - Use knowledge and understanding of the	Learners will be assessed on the following: <u>Assessment Objective 1</u> Develop ideas through investigations, demonstrating critical understanding of sources. <u>Assessment Objective 2</u> Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes. <u>Assessment Objective 3</u> Record ideas, observations and insights relevant to intentions as work progresses. <u>Assessment Objective 4</u> Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language. <u>Formative assessment</u> throughout the term:	<u>SMSC:</u> <u>Spiritual:</u> Use imagination and creativity, to explore ideas and feelings in works of Photography and express themselves through their own art. <u>Moral:</u> Pupils projects often investigate and offer reasoned views about moral and ethical issues and how artists represent this through their work. <u>Social:</u> Respect each other's ideas and opinions when talking about pieces of art and design including the work of others in the class during group critiques. Recognise the need to consider the views of others. Develop collaborative, cooperative and teamwork skills.

	Both the practical/theoretical work and the written element will be assessed together using the assessment objectives. Learners will be required to select, evaluate and present their work for assessment. The Personal Investigation will be determined by the learner and teacher, assessed by the teacher and externally moderated. No time limit: duration to be determined by the centre.		work of others to develop and extend thinking and inform own work • Generate and explore potential lines of enquiry using appropriate media and techniques • Apply knowledge and understanding in making images and artefacts; review and modify work; and plan and develop ideas in the light of their own and others' evaluations • Organise, select and communicate ideas, solutions and responses and present them in a range of visual, tactile and/or sensory forms. Learners can work entirely in digital media or entirely in non-digital	Questioning during lesson Group critiques Peer, self and teacher assessment WOWO board responses <u>Summative assessment</u> Feedback will be recorded using the following marksheets and against the exam board mark scheme ks5 Marksheet templates	<u>Cultural:</u> learn to appreciate a wide range of cultural influences, history and values. Through their personal investigations, they will research and explore the religious and non-religious beliefs adopted by a variety of cultures from around the world. Students are encouraged to independently go to galleries and exhibitions to develop their cultural capital and use their inspiration to influence their own work.
--	---	--	--	--	---

			media, or in a mixture of both, provided the aims and assessment objectives are met.		
Spring	<u>The Externally Set Assignment consists of two parts:</u> <u>Part 1: Preparatory study period</u> The externally set assignment materials are to be released to learners from 1 February (in the second year of the course) and will consist of a series of visual and written stimuli, which are to be presented to the learner at the	As above	As above	<u>Jan/Dec:</u> <u>15 hour mock exam-</u> producing A04 Final outcome for personal investigation, in exam conditions. <u>Internally teacher assessed</u> and a final CWK grade given, marked against the mark scheme and grade boundaries. Standardised with other teachers. <u>Externally Set Assignment materials</u> set by WJEC are to be released to the students no earlier than 1 February Both the preparatory work and sustained focus work will be assessed together using the assessment objectives: <u>Assessment Objective 1</u> Develop ideas through investigations, demonstrating critical understanding of sources.	<u>BRITISH VALUES</u> <u>Democracy:</u> Take into account the views and ideas of others personal projects. <u>Cultural:</u> Develop ideas that are informed by investigative, contextual and cultural studies of historical and contemporary art, craft and design and other sources relevant to their selected areas of study in their own and other societies (through gallery/exhibition visits, online resources,books, blogs,podcasts,films, magazines).

	start of the preparatory study period. One of the stimuli is to be selected by the learner and used as a starting point from which to elicit a personal response. Responses are developed during the preparatory study period. They should take the form of critical, practical and theoretical preparatory work/supporting studies which inform the resolution of ideas in the 15 hours sustained focus study. The start of the preparatory study period is defined as the date upon which the externally set assignment materials are presented to the learner. The preparatory study period may commence on or after 1 February. The preparatory study period finishes upon commencement of the sustained focus work. Start and finish dates of the preparatory study period to be determined by the centre, taking into account the May			<u>Assessment Objective 2</u> Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes. <u>Assessment Objective 3</u> Record ideas, observations and insights relevant to intentions as work progresses. <u>Assessment Objective 4</u> Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language. <u>Formative assessment</u> throughout the term: Questioning during lesson Group critiques Peer, self and teacher assessment WOWO board responses <u>Summative assessment</u> <u>April/May:</u>	
--	---	--	--	---	--

	deadline for the submission of internally assessed marks to WJEC. <u>Part 2: 15 hour period of sustained focus work</u> The resolution of learners' ideas from the preparatory work must be completed during the designated 15 hours and they must show how their planning relates to the outcome/s. The period of sustained focus work must be completed under supervised conditions. Centres determine the scheduling of the supervised sustained focus sessions, taking into account the May deadline for the submission of internally assessed marks to WJEC. Both the preparatory work and sustained focus work will be assessed together, using the assessment objectives. Learners will be required to select, evaluate and present their work for assessment. The Externally Set Assignment will be set by WJEC,			<u>ESA 15 hour exam-</u> Supervised sustained focus time (3 days), invigilated in exam conditions.	
--	---	--	--	--	--

	assessed by the teacher and externally moderated.				
Summer	All work submitted by the end of May.			<u>Summative assessment</u> <u>May:</u> Deadline for the submission of internally assessed marks to WJEC. <u>June:</u> Work externally moderated by the exam board.	

[\(click here to go back to main menu\)](#)

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
Autumn	Research Methods Issues & Debates Forensic psychology	Correlations, case studies & content analysis, reliability & validity, probability & significance, Statistical testing; psychological reporting, features of science Gender & cultural bias, free will & determinism, nature- nurture, holism & reductionism, idiographic & nomothetic approaches, ethical implications Offender profiling, biological & genetic explanations for crime, psychological, cognitive & psychodynamic explanations, dealing with offenders - punishment & rehabilitation	AO1: demonstrate knowledge and understanding of scientific ideas, processes, techniques and procedures. AO2: Apply knowledge and understanding of scientific ideas, processes, techniques and procedures. AO3: Analyse, interpret and evaluate scientific information, ideas and evidence.	Exam style assessments at the end of each taught unit. Shorter assessments set as independent work and homework.	Appreciation of how exposure to different social groups can affect positive and negative behaviour
Spring	Stress	Stress, the body & illness, sources of stress in daily life, measuring stress, individual differences, coping with stress - drugs, therapy, social support	AO1: demonstrate knowledge and understanding of scientific ideas, processes, techniques and procedures.	Exam style assessments at the end of each taught unit.	Self-care; understanding the effects of stress and how to manage it

	Cognition & development	Piaget's theory of intellectual development, Vygotsky's theory, Baillargeon and infant abilities, social cognition - Selman, theory of mind and mirror neurons	AO2: Apply knowledge and understanding of scientific ideas, processes, techniques and procedures. AO3: Analyse, interpret and evaluate scientific information, ideas and evidence.	Shorter assessments set as independent work and homework.	
Summer	Revision and preparation for A Level exams			A level exams	

[\(click here to go back to main menu\)](#)

Physics

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
Autumn	Chapter 14 - Thermal physics Chapter 15 - Ideal gases Chapter 16 - Circular motion Chapter 17 - Oscillations Chapter 18 - Gravitational fields Chapter 19 - Stars Chapter 20 - Cosmology (the big bang)	• Temperature • Solids, liquids and gases • Internal energy • Specific heat capacity • Specific latent heat • The kinetic theory of gases • Gas laws • Root mean square speed • The Boltzmann constant • Angular velocity and the radian • Centripetal acceleration • Exploring centripetal forces • Oscillations and simple harmonic motion • Analysis of simple harmonic motion • Simple harmonic motion and energy • Damping and driving • Resonance • Gravitational fields • Newton's laws of gravity • Gravitational field strength for a point mass • Kepler's laws	Module 1 of the specification content relates to the practical skills learners are expected to gain throughout the course, which are assessed throughout the written examinations and also through the Practical Endorsement Practical activities are embedded within the learning outcomes of the course to encourage practical activities in the classroom which contribute to the achievement of the Practical Endorsement as well as enhancing learners' understanding of biological theory and practical skills.	Assessment point to include; levelled response questions for extended writing, timed MCQ's, analytical questions that include maths skills.	

		• Satellites • Gravitational potential Gravitational potential energy • Objects in the universe • The life cycle of stars • The Hertzsprung Russell diagram • Energy levels in atoms • Spectra • Analysing starlight • Stellar luminosity • Astronomical distances • The Doppler effect • Hubble's Law • The big bang theory • Evolution of the Universe			
Spring	Chapter 21 - Capacitance Chapter 22 - Electric fields Chapter 23 - Magnetic fields Chapter 24 - Particle physics Chapter 25 - Radioactivity Chapter 26 - Nuclear physics	• Capacitors • Capacitors in circuits • Energy stored by capacitors • Discharging capacitors • Charging capacitors • Using capacitors • Electric fields • Coulomb's law • Uniform electric fields and capacitance	Module 1 of the specification content relates to the practical skills learners are expected to gain throughout the course, which are assessed throughout the written examinations and also through the Practical Endorsement Practical activities are embedded within the learning outcomes of the course to encourage practical	Assessment point to include; levelled response questions for extended writing, timed MCQ's, analytical questions that include maths skills.	

	Chapter 27 - Medical imaging.	• Charged particles in uniform electric fields Electric potential and energy • Magnetic fields • Understanding magnetic fields • Charged particles in magnetic fields • Electromagnetic induction • Faraday's law and Lenz law • Transformers • Alpha particle scattering experiment • The nucleus • Antiparticles, hadrons, and leptons • Quarks • Beta decay • Radioactivity • Nuclear decay equations • Half life and activity • Radioactive decay calculations • Modelling radioactive decay • Radioactive dating • Einstein's mass - energy equation • Binding energy • Nuclear fission • Nuclear fusion	activities in the classroom which contribute to the achievement of the Practical Endorsement as well as enhancing learners' understanding of biological theory and practical skills.		
--	-------------------------------	--	--	--	--

		• X rays • Interaction of X rays with matter • CAT Scans • The gamma camera • PET scans • Ultrasound • Acoustic impedance • Doppler imaging.			
Summer	Revision and exam preparation.		Module 1 of the specification content relates to the practical skills learners are expected to gain throughout the course, which are assessed throughout the written examinations and also through the Practical Endorsement Practical activities are embedded within the learning outcomes of the course to encourage practical activities in the classroom which contribute to the achievement of the Practical Endorsement as well as enhancing learners' understanding of biological theory and practical skills.	Assessment point to include; levelled response questions for extended writing, timed MCQ's, analytical questions that include maths skills.	

[\(click here to go back to main menu\)](#)

Product Design

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
Autumn	Strand 2 & 3 to October Strand 4 October to December Students will be continuing to work on their NEA projects. They will be doing theory along side their NEA to complement understanding.	Viability of design solutions Pupils will re visit the chapters in the textbook from 1-0 via starters, and exam questions. Gaps in K/U will be addressed. These include 1) Identifying requirements 2) Learning from existing products 3) Implications of wider issues 4) Design, thinking and communication	Pupils will be working on their coursework, developing their design, modelling, annotation and iteration skills. Pupils will be developing their practical skills using different tools & equipment in the workshop. They will also be developing H&S awareness and recording both the above skills in the process of making their prototype but also the H&S and evaluation of the model. Exam techniques.	Each student will have a 121 with the teacher acting as a coach to ask open ended questions to get the pupil to think about their cw and self evaluate and assess. The final cw grade will be given at the end of the project after hand in. Pupils will have regular exam questions in lessons as starters and will have mock exams every half term to identify gaps in performance.	Pupils will learn about: 1) User needs and user centred design 2) Inclusive design 3) Designing products to make society a better place 4) sustainability 5) Life Cycle assessment 6) Types of energy / sustainable resources 7) Communication 8) Health & safety 9) Working responsibility
Spring	Strand 5	5) Materials and components 6) technical understanding 7) Manufacturing processes &	As above	Pupils work after the previous self assessment will be marked using	As above

	Students will be completing their Evaluation and completing their theory work. Afterwards the students will focus solely on revision and exam technique	techniques 8) Viability of design solutions 9) H&S.		the exam board mark sheets by the teacher. Pupils will be concentrating on their final exams so teachers will use individual exam questions from areas of development assessed over the past year.	
Summer					

[\(click here to go back to main menu\)](#)

Sociology

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
Autumn	Mrs Lewis - global development Ms Young - family	Global development: development, underdevelopment and global inequality • globalisation and its influence on the cultural, political and economic relationships between societies • the role of transnational corporations, non-governmental organisations and international agencies in local and global strategies for development • development in relation to aid and trade, industrialisation, urbanisation, the environment, and war and conflict • employment, education, health, demographic change and gender as aspects of development. Family:	AO1: Demonstrate knowledge and understanding of: - sociological theories, concepts and evidence • sociological research methods • AO2: Apply sociological theories, concepts, evidence and research methods to a range of issues • AO3: Analyse and evaluate sociological theories, concepts, evidence and research methods in order to: • present arguments • make judgements • draw conclusions	Review end of each half term on each topic Mock exams	Throughout the course Equality and diversity - gender, racial, social SMSC: patriarchy, social class, different perspectives Reaching conclusions

		The relationship of the family to the social structure and social change, with particular reference to the economy and to state policies • changing patterns of marriage, cohabitation, separation, divorce, childbearing and the life course, including the sociology of personal life, and the diversity of contemporary family and household structures • gender roles, domestic labour and power relationships within the family in contemporary society • the nature of childhood, and changes in the status of children in the family and society • demographic trends in the United Kingdom since 1900: birth rates, death rates, family size, life expectancy, ageing population, and migration and globalisation.			
Spring	Mrs Lewis - global development Ms Young - family	Global development: Complete outstanding from above	All AOs	Review end of each half term on each topic	

		Family: Complete outstanding from above			
Summer	Revision				

[\(click here to go back to main menu\)](#)

Sport

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
-------------	------------------------------------	------------------	---------------	-------------------	--

Autumn	Unit 2: Fitness Training and Programming for Health, Sport and Well-being	A Examine lifestyle factors and their effect on health and well-being A1 Positive lifestyle factors and their effects on health and well-being A2 Negative lifestyle factors and their effects on health and well-being A3 Lifestyle modification techniques B Understand the screening processes for training programming B1 Screening Processes B2 Health monitoring tests B3 Interpreting the results of health monitoring tests C Understand programme-related nutritional needs	In this unit, you will explore the process required for screening clients and assessing their lifestyle and nutritional intake. How to interpret this information will then be examined. From this information you will explore how to make judgements on a specific individual's current lifestyle and then suggest modifications to help improve the individual's fitness, health and overall well-being. Fitness training methods will be examined for each component of physical and skill-related fitness. The selection of appropriate training methods for a selected individual and their application into a training programme will then be explored. To complete the assessment task within this unit, you will need to draw on your learning from across your programme. Carrying out client screening and designing fitness training programmes is an essential skill for many people working in the sports industry,	AO1 Demonstrate knowledge and understanding of the effects of lifestyle choices on an individual's health and well-being AO2 Apply knowledge and understanding of fitness principles and theory, lifestyle modification techniques, nutritional requirements and training methods to an individual's needs and goals AO3 Analyse and interpret screening information relating to an individual's lifestyle questionnaire and health monitoring tests AO4 Evaluate qualitative and quantitative evidence to make informed judgements about how an individual's health and well-being could be improved AO5 Be able to develop a fitness training programme with appropriate justification	Building career aspirations Diverse knowledge of sporting industries Clear career pathways Work experience opportunities Opportunities to develop public speaking skills Opportunities to work in teams Opportunities to lead Knowledge of opportunities available in the local community Club and employment links
--------	---	--	--	---	--

		C1 Common terminology C2 Components of a balanced diet C3 Nutritional strategies for individuals taking part in training programmes D Examine training methods for different components of fitness D1 Components of fitness to be trained D2 Training methods for physical fitness-related components D3 Training methods for skill-related fitness components E Understand training programme design E1 Principles of fitness training programme design	including sports coaches looking to improve an individual or team's sporting performance. Any person working in these careers would need to be able to carry out client screening and the design of training programmes in time-constrained conditions, utilising knowledge gained from previous experiences. This unit has been selected as an externally-assessed unit as it replicates the processes that are carried out in the industry, and to complete the assessment you will need to draw on learning and application of content from across a number of units in the programme of study.		
--	--	---	---	--	--

	Unit 23- Skill acquisition in Sport	A Investigate the nature of skilled performance A1 Learning and performance A2 Characteristics and classification of skills A3 Characteristics and classification of abilities . B Examine ways that sport performers process information for skilled performance B1 Information processing models B2 Perception B3 Decision making and reaction time B4 Types of feedback C Explore theories of teaching and learning in sport C1 Behaviourist theories C2 Cognitive theories C3 Phases of skill learning C4 Transfer of learning	In this unit, you will develop an understanding of skilled performance and how an individual's abilities contribute to the development of their skills. You will examine how sports performers are able to take information from their environment, for example their position, the positions of their opponents or the speed and trajectory of a ball, and then process this information so that they can produce a response in the form of a skilled movement. You will explore the key theories of how individuals learn skills and how new skills can be presented, using different strategies to facilitate their learning. This unit provides a sound foundation of knowledge on the acquisition of skill for progression to higher education and employment. In particular, the skills and knowledge gained from this unit will help learners appreciate different types of skills, and how	Learning aim A: Investigate the nature of skilled performance AB.D1 Evaluate the effectiveness of information processing models in showing how sports performers produce skilled performance. A.P1 Discuss the qualities of skilled performers. A.P2 Explain the characteristics of skills and abilities. A.M1 Assess how abilities contribute to the production of sports skills. Learning aim B: Examine ways that sport performers process information for skilled performance B.P3 Explain how a sports performer processes information in a given situation	
--	-------------------------------------	---	---	---	--

		D Carry out teaching and learning strategies for sports skills D1 Presentation of skills D2 Types of practice D3 Styles of teaching D4 Styles of learning D5 Methods of guidance	teaching and learning strategies can be used to develop skills in sports performers.	B.P4 Discuss the value of different types of feedback to learning. B.M2 Assess the stages of information processing models. Learning aim C: Explore theories of teaching and learning in sport C.D2 Evaluate the effectiveness of selected behaviourist and cognitive theories of learning when teaching skills to sports performers. C.P5 Describe two contrasting theories of teaching and learning. C.P6 Explain the three phases a sports performer experiences when learning a new skill. C.M3 Analyse how selected theories of skill learning can be used when teaching skills to sports performers.	
--	--	---	---	--	--

				Learning aim D: Carry out teaching and learning strategies for sports skills D.D3 Evaluate the effectiveness of your use of teaching and learning strategies to develop selected sports skills. D.P7 Produce a plan showing how a skill can be taught to meet the needs of different sports performers. D.P8 Demonstrate the use of different types of teaching and learning strategies to develop sports skills. D.M4 Demonstrate the effective use of teaching and learning strategies appropriate to specific situations when developing sports skills.	
Spring	Unit 5: Application of Fitness Testing	A Understand the principles of fitness testing	In this unit, you will explore the principles of fitness testing and	A Understand the principles of fitness testing	

	Learners gain an understanding of the requirements of fitness testing and learn how to safely conduct a range of fitness tests for different components of fitness.	A1 Validity of fitness tests A2 Reliability of fitness tests A3 Practicality and suitability of fitness tests A4 Ethical issues associated with fitness screening B Explore fitness tests for different components of fitness B1 Fitness tests to assess components of physical fitness B2 Fitness tests to assess components of skill-related fitness B3 Planning of tests B4 Administration of tests C Undertake evaluation and feedback of fitness test results C1 Produce a fitness profile for a selected sports performer C2 Providing feedback to a selected sports performer	examine the factors affecting the selection and administration of tests, including validity, reliability and suitability of tests. You will explore a range of laboratory and field-based fitness tests and the administration process of each fitness test. You will consider the selection of appropriate tests for specific sports performers, and demonstrate your ability to conduct a range of fitness tests in accordance with the safety and ethical requirements of fitness testing. Finally, you will investigate the process of evaluating and comparing fitness test results to draw meaningful conclusions about a specific person's fitness. These activities will prepare you for a variety of careers in the sport sector, such as coaching, fitness instruction and working with elite sport performers. This unit will form a good basis for aspects of higher education study in sport and sport and exercise science-related qualifications.	A report on the principles of fitness testing, including practicality, suitability and ethics of fitness testing. A presentation justifying the selection of fitness tests B Explore fitness tests for different components of fitness A report that interprets the test results, analyses the test administration and makes recommendations for improvements to test administration practice, supported by observation and video evidence of fitness testing administration and recorded results from each test. C Undertake evaluation and feedback of fitness test results A written fitness profile for a selected sports performer, supported by evidence of interpretation of fitness test	
--	--	--	---	---	--

				results related to the selected sports performer. A report that evaluates the effectiveness of fitness testing and feedback methods, supported by observation/ video/verbal recordings of feedback sessions to selected sports performers.	
	Unit 3 - Professional Development in the sports industry	A Understand the career and job opportunities in the sports industry A1 Scope and provision of the sports industry A2 Careers and jobs in the sports industry A3 Professional training routes, legislation, skills in the sports industry A4 Sources of continuing professional development (CPD) B Explore own skills using a skills audit to inform a career development action plan	In this unit, you will research the different possible careers and the associated job roles in the sports industry, then plan your development towards achieving a selected career aim. You will analyse your own skills and identify how to develop them into a career through the use of a career plan. You will research your chosen career to understand how to access and progress within it. You will take part in application and interview assessment activities for a selected career pathway, drawing on knowledge and skills from across the	results related to the selected sports performer. A report that evaluates the effectiveness of fitness testing and feedback methods, supported by observation/ video/verbal recordings of feedback sessions to selected sports performers. Learning aim A: Understand the career and job opportunities in the sports industry A.P1 Explain the different career pathways, the associated job opportunities and their requirements in the sports industry. A.P2 Explain the development pathway into a selected career in the sports industry. A.M1 Analyse the professional development requirements and opportunities for specialism or promotion in different career pathways and the associated job opportunities in the sports industry.	

		B1 Personal skills audit for potential careers B2 Planning personal development towards a career in the sports industry B3 Maintaining a personal portfolio/record of achievement and experience C Undertake a recruitment activity to demonstrate the processes that can lead to a successful job offer in a selected career pathway C1 Job applications C2 Interviews and selected career pathway-specific skills D Reflect on the recruitment and selection process and your individual performance D1 Review and evaluation D2 Updated SWOT and action plan	qualification to identify your own strengths and gaps in knowledge and skills. You will evaluate your own performance to gain an understanding of the generic employability and specific-technical knowledge and skills required to access and progress in a selected career pathway in the sports industry. This unit will prepare you for progression to a career in the sports industry either directly or through higher education, by developing your understanding of investigation, career planning and awareness of the skills and qualities that sports employers look for in a potential employee.	Learning aim B: Explore own skills using a skills audit to inform a career development action plan B.P3 Explain how selected sports industry career matches own personal skills audit outcomes. B.P4 Develop a career development action plan, to meet the requirements of intended sports career using skills audit outcomes. B.M2 Analyse own personal skills audit outcomes against a selected career in the sports industry. B.M3 Develop a career development action plan that has specific relevance to the requirements of intended sports career and skills audit outcomes AB.D1 Justify how your own skills audit outcomes and development action plan aligns to chosen career pathway, based on a comprehensive knowledge and understanding of the career.	
--	--	---	---	--	--

				Learning aim C: Undertake a recruitment activity to demonstrate the processes that can lead to a successful job offer in a selected career pathway C.P5 Prepare appropriate documentation for use in selection and recruitment activities. C.P6 Participate in the selection interviews and activities as an interviewee. C.M4 In interviews and activities, demonstrate analytical responses and questioning and activities to allow assessment of skills and knowledge. Learning aim D: Reflect on the recruitment and selection process and your individual performance D.P7 Review own performance in role in the interviewing activities, supported by an updated SWOT analysis. D.M5 Analyse the results of the	
--	--	--	--	---	--

				process and how your skills development will contribute to your future success CD.D2 Demonstrate individual responsibility and effective self-management during the recruitment activity. CD.D3 Evaluate how well the documents prepared, and own performance in the interview activities, supported the process for accessing the selected career pathway.	
Summer					

[\(click here to go back to main menu\)](#)

Travel and Tourism

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
Autumn	Unit 3: Principles of Marketing in Travel and Tourism	Learning aim A: Explore role of marketing activities in influencing customer decisions and meeting customer needs in travel and tourism Learning aim B: Examine the impact that marketing activities have on the success of different travel and tourism organisations Learning aim C: Carry out market research in order to identify a new travel and tourism product or service Learning aim D: Produce a promotional campaign for a new travel and tourism product or service, to meet stated objectives.	In this unit you will: A Explore the role of marketing activities in influencing customer decisions and meeting customer needs in travel and tourism B Examine the impact that marketing activities have on the success of different travel and tourism organisations C Carry out market research in order to identify a new travel and tourism product or service D Produce a promotional campaign for a new travel and tourism product or service, to meet stated objectives.	This unit is assessed by a written coursework. Evaluate the potential impacts of the marketing mix and the ways in which effective marketing and customer service work together to influence customer decisions and meet customer needs. Evaluate the potential impacts of the different approaches to marketing activities used by two travel and tourism organisations to achieving organisational success, taking into account internal and external factors and justifying recommendations for improvement.	Customer needs Economy/GDP/Industry

				Identify a new travel and tourism product or service, justifying the data obtained from primary and secondary market research. Produce a comprehensive promotional campaign for a new travel and tourism product or service, including promotional material or activity, evaluating the extent to which campaign objectives can be achieved.	
Spring & Summer	Unit 9: Visitor Attractions	A Investigate the nature, role and appeal of visitor attractions B Examine how visitor attractions meet the diverse expectations of visitors C Explore how visitor attractions respond to competition and measure their success and appeal	A Investigate the nature, role and appeal of visitor attractions B Examine how visitor attractions meet the diverse expectations of visitors C Explore how visitor attractions respond to competition and measure their success and appeal.	A presentation, with speaker notes, that examines the different types of visitor attractions, showing why they appeal to visitors, how these attractions are funded and evaluates the importance of visitor attractions to the local and national economy. An article that explores how two contrasting visitor attractions offer products and services and use technology to meet and exceed visitor expectations.	Global Citizenship Money management Planning and Marketing

				A report that explores how two different types of visitor attraction respond to competition and the importance of effectively measuring their success and appeal.	
--	--	--	--	---	--

[\(click here to go back to main menu\)](#)

Further Maths

<u>Term</u>	<u>Topic title(s) and overview</u>	<u>Knowledge</u>	<u>Skills</u>	<u>Assessment</u>	<u>Wider learning (Equality and diversity, SMSC, cultural capital)</u>
Autumn	P1.1 Complex Numbers P1.2 Series P1.3 Methods in Calculus P1.4 Volumes of Revolution P1.5 Polar Coordinates P1.6 Hyperbolic Functions P1.7 Methods in Differential Equations P1.8 Modelling with Differential Equations D1.3 Floyd's Algorithm D1.8 Critical Path Analysis	<u>Overarching theme 1:</u> Mathematical argument, language and proof <u>Overarching theme 2:</u> Mathematical problem solving <u>Overarching theme 3:</u> Mathematical modelling	A Level Mathematics students must use the mathematical notation and be able to recall the mathematical formulae and identities. Students are required to develop skills in working scientifically over the course of this qualification. OT1 Construct and present mathematical arguments through appropriate use of diagrams; sketching graphs; logical deduction; precise statements involving correct use of symbols and connecting language, including: constant, coefficient,	4 formal exam style assessments based on taught chapters (1 hour each) P1.1 and P1.3 P1.2 and P1.5 P1.6 and P1.7 P1.4 and P1.8	

	M1.3 Momentum as a Vector		expression, equation, function, identity, index, term, variable. OT2 Recognise the underlying mathematical structure in a situation and simplify an abstract concept appropriately to enable problems to be solved. OT3 Translate a situation in context into a mathematical model, making simplifying assumptions.		
Spring	D1.2 Planarity Algorithm D1.4 Route Inspection D1.7 Simplex Algorithm M1.3 Elastic Strings and Springs M1.5 Elastic Collisions in 2D	<u>Overarching theme 1:</u> Mathematical argument, language and proof <u>Overarching theme 2:</u> Mathematical problem solving <u>Overarching theme 3:</u> Mathematical modelling	OT1 Understand and use mathematical language and syntax as set out in the content. OT1 Understand and use language and symbols associated with set theory, as set out in the content. Apply to solutions of inequalities and probability. OT2 Understand the concept of a mathematical problem-solving cycle, including specifying the problem, collecting information,	2 formal exam style assessments (1 hour each) All Decision All Further Mechanics Mock exams (2 Pure, 1 Decision and Further Mechanics)	

			processing and representing information and interpreting results, which may identify the need to repeat the cycle. OT2 Understand, interpret and extract information from diagrams and construct mathematical diagrams to solve problems, including in mechanics. OT3 Use a mathematical model with suitable inputs to engage with and explore situations (for a given model or a model constructed or selected by the student). OT3 Interpret the outputs of a mathematical model in the context of the original situation (for a given model or a model constructed or selected by the student).		
--	--	--	---	--	--

Summer	Revision and recap of previous topics before exams	<u>Overarching theme 1:</u> Mathematical argument, language and proof <u>Overarching theme 2:</u> Mathematical problem solving <u>Overarching theme 3:</u> Mathematical modelling	OT1 Select and correctly carry out routine procedures and accurately recall facts, terminology and definitions. OT1 Comprehend and critique mathematical arguments, proofs and justifications of methods and formulae, including those relating to applications of mathematics. OT2 Interpret and communicate solutions in the context of the original problem. OT3 Understand and use modelling assumptions. OT3 Evaluate the outcomes of modelling in context, recognise the limitations of models and, where appropriate, explain how to refine them.	Revision assessments in preparation for the final A level exams	
--------	--	---	--	---	--

[\(click here to go back to main menu\)](#)

