

Year 12 Art and Design Curriculum 2019/20 – OCR H601

Autumn Term	Spring Term	Summer Term
<p><b>TOPIC: PORTFOLIO SKILLS DEVELOPMENT</b>                      portraiture, still life, life drawing, landscape, abstraction, experimental imagery, narrative, installation.</p> <p><b>Key Skills: mark making/painting/drawing/printmaking/casting/carving/photographic printing and digital manipulation/mixed media/collage</b></p> <ul style="list-style-type: none"> <li>• pictorial space and real space, composition, rhythm, scale and structure.</li> <li>• selecting, editing and developing ideas</li> <li>• using appropriate visual language and terminology with fine art</li> <li>• manipulating imagery</li> <li>• developing outcomes</li> <li>• using different media and new techniques</li> </ul>	<p><b>TOPIC: THEMATIC PORTFOLIO DEVELOPMENT</b></p> <p><b>Key Skills: develop appropriate processes and techniques, using traditional and or digital media, appropriate to chosen subject area, enabling research, exploration and the creation of final outcomes.</b></p> <ul style="list-style-type: none"> <li>• visit to Art Galleries to inform work</li> <li>• understanding and using relevant conventions and genres in Art such as figurative, abstract and symbolic</li> <li>• sketchbook and portfolio development</li> <li>• working on location as appropriate to intentions</li> <li>• selecting, editing and developing ideas</li> <li>• Contextual research and presentations.</li> </ul>	<p><b>TOPIC: THEMATIC PORTFOLIO DEVELOPMENT Continued</b>  <b>INTERNAL ASSESSMENT/ INDEPENDENT ENQUIRY RELATED STUDY</b>                      Students will have to choose a theme to work from and create a body of work that takes them on their own independent and artistic journey.  <b>Key Skills: critical review and reflection/ selection/ contextual/cultural development/ assessment</b></p> <ul style="list-style-type: none"> <li>• portfolio development and selection</li> <li>• planning for summer exhibition</li> <li>• preparing for internal assessment</li> <li>• maximising potential</li> <li>• related personal study</li> <li>• (research over summer break for study)</li> <li>• presentation to peers on development of study</li> <li>• digital or tradition production of study started over the summer holiday</li> </ul>

## Year 12 Biology Curriculum 2019/20 – OCR H420

Autumn Term	Spring Term	Summer Term
<p><u>Module 2</u></p> <ul style="list-style-type: none"><li>• cell structure</li><li>• biological molecules</li><li>• Enzymes</li><li>• Cell membranes and cell transport</li></ul> <p><u>Module 3</u></p> <ul style="list-style-type: none"><li>• exchange surfaces</li><li>• transport in animals</li></ul>	<p><u>Module 2</u></p> <ul style="list-style-type: none"><li>• nucleotides and nucleic acids</li><li>• cell division, cell diversity and cellular organisation</li></ul> <p><u>Module 3</u></p> <ul style="list-style-type: none"><li>• transport in plants</li></ul> <p><u>Module 4</u></p> <ul style="list-style-type: none"><li>• health and disease</li><li>• classification and evolution</li></ul>	<p><u>Module 4</u></p> <ul style="list-style-type: none"><li>• classification and evolution (continued)</li><li>• biodiversity</li></ul> <p><u>Module 6</u></p> <ul style="list-style-type: none"><li>• ecosystems</li><li>• populations and sustainability</li></ul>

## Year 12 Chemistry Curriculum 2019/20 – OCR H432

Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none"><li>• atomic structure, atoms and reactions</li><li>• bonding and structure</li><li>• electron structure</li><li>• Group 2</li><li>• Group 7</li><li>• periodicity</li></ul>	<ul style="list-style-type: none"><li>• energetics</li><li>• reaction rates</li><li>• basics of organic chemistry</li><li>• alkanes and alkenes</li><li>• haloalkanes and alcohols</li><li>• organic synthesis</li><li>• analytical techniques</li></ul>	<ul style="list-style-type: none"><li>• chemical equilibria</li></ul> <p>After year 1 work is completed:</p> <ul style="list-style-type: none"><li>• aromatic compounds</li><li>• carboxyl compounds</li><li>• chromatography and qualitative analysis</li><li>• lattice enthalpy</li><li>• enthalpy and entropy</li></ul>

**Year 12 Classical Civilisation Curriculum 2019/20 – OCR H408**

Autumn Term	Spring Term	Summer Term
<p><b>Greek Art</b></p> <ul style="list-style-type: none"> <li>• introduction</li> <li>• development of free-standing Greek sculpture [ Archaic, Early Classical ]</li> </ul> <p><b>World of the Hero</b></p> <ul style="list-style-type: none"> <li>• Virgil's Aeneid Books 1-4</li> </ul>	<p><b>Greek Art</b></p> <ul style="list-style-type: none"> <li>• development of free-standing Greek sculpture [ High Classical, Late Classical]</li> <li>• Architectural Sculpture [ metopes &amp; friezes]</li> </ul> <p><b>World of the Hero</b></p> <ul style="list-style-type: none"> <li>• Virgil's Aeneid Books 5-10</li> </ul>	<p><b>Greek Art</b></p> <ul style="list-style-type: none"> <li>• Architectural Sculpture [ pediments, friezes and metopes with reference to specific temples]</li> <li>• Greek Vases</li> </ul> <p><b>World of the Hero</b></p> <ul style="list-style-type: none"> <li>• Virgil's Aeneid Books 11-12</li> <li>• Homer's Iliad</li> <li>• themes &amp; characterisation</li> </ul>

## Year 12 Computer Science Curriculum 2019/20 – OCR H446

Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none"><li>• 1.1.1 Structure and function of the processor</li><li>• 1.1.2 Types of processor</li><li>• 1.1.3 Input, output and storage</li><li>• 2.1.1 Thinking abstractly</li><li>• 2.1.2 Thinking ahead</li><li>• 2.1.3 Thinking procedurally</li><li>• 2.1.4 Thinking logically</li><li>• 2.1.5 Thinking concurrently</li><li>• 1.2.1 Systems software</li><li>• 1.2.2 Application generation</li><li>• 1.2.3 Software development</li></ul>	<ul style="list-style-type: none"><li>• 1.2.4 Types of programming language</li><li>• 2.2.1 Programming techniques</li><li>• 2.2.2 Computational methods</li><li>• Departmental assessment process</li></ul>	<ul style="list-style-type: none"><li>• 1.3.1 Compression, encryption and hashing</li><li>• 1.3.2 Databases</li><li>• 1.3.3 Networks</li><li>• 1.3.4 Web technologies</li><li>• 2.3.1 Algorithms</li><li>• Internal assessment process</li></ul>

Year 12 Economics Curriculum 2019/20 – AQA 7136

Autumn Term	Spring Term	Summer Term
<p><b>Microeconomics Unit</b>  <b>The economic problem and economic methodology</b></p> <ul style="list-style-type: none"> <li>• nature and purpose of economic activity</li> <li>• scarcity choice and the allocation of resources</li> <li>• production possibility diagrams</li> </ul> <p><b>Price determination in a competitive market</b></p> <ul style="list-style-type: none"> <li>• demand and supply determinants</li> <li>• elasticity</li> <li>• interrelationships between markets</li> </ul> <p><i>Half Term</i></p> <p><b>Microeconomics Unit</b>  <b>Production, costs and revenue:</b></p> <ul style="list-style-type: none"> <li>• production and efficiency</li> <li>• specialisation and labour division</li> <li>• law of diminishing returns</li> <li>• costs of production</li> <li>• Economies/Diseconomies of scale</li> </ul> <p><b>Competitive and Concentrated Markets</b></p> <ul style="list-style-type: none"> <li>• market Structures</li> <li>• objectives of firms</li> <li>• competitive markets</li> <li>• monopoly power</li> <li>• competitive market process</li> </ul> <p><b>Microeconomics Unit</b>  <b>The market mechanism, market failure and government intervention in markets:</b></p> <ul style="list-style-type: none"> <li>• price mechanism</li> <li>• public, private, quasi-public goods</li> <li>• market failure</li> <li>• externalities</li> <li>• market imperfections</li> <li>• inequitable distribution of income/wealth</li> <li>• merit/demerit goods</li> <li>• government intervention</li> <li>• government failure</li> </ul>	<p><b>Macroeconomics Unit</b></p> <p>Measurement of macroeconomic performance</p> <ul style="list-style-type: none"> <li>• policy objectives</li> <li>• macroeconomic indicators</li> <li>• use of index numbers</li> </ul> <p><b>How the macro economy works</b></p> <ul style="list-style-type: none"> <li>• circular flow of income</li> <li>• AD/AS Analysis</li> <li>• aggregate demand determinants</li> <li>• the level of economic activity</li> <li>• aggregate supply long and short run</li> </ul> <p><i>Half Term</i></p> <p><b>Economic Performance</b></p> <ul style="list-style-type: none"> <li>• Economic growth and the economic cycle</li> <li>• employment/unemployment</li> <li>• inflation/deflation</li> <li>• current account balance and policy conflicts</li> </ul>	<p><b>Macroeconomic policy</b></p> <ul style="list-style-type: none"> <li>• monetary policy</li> <li>• fiscal policy</li> <li>• supply side policies</li> </ul> <p>Revision for internal exam for A-Level</p> <p>Exam Feedback</p> <p><b>Distribution of income and wealth: poverty and inequality</b></p> <ul style="list-style-type: none"> <li>• distribution of income and wealth</li> <li>• the problem of poverty</li> <li>• government policies to alleviate poverty and influence the distribution of income and wealth.</li> </ul>

## Year 12 English Language Curriculum 2019/20 – AQA 7702

<b>Autumn Term</b>	<b>Spring Term</b>	<b>Summer Term</b>
<ul style="list-style-type: none"><li>• introduction to language levels and mode</li><li>• sociolinguistics (region and social groups)</li></ul>	<ul style="list-style-type: none"><li>• Language and representation</li><li>• Sociolinguistics (gender and occupation)</li></ul>	<ul style="list-style-type: none"><li>• Original Writing (NEA)</li><li>• Introduction to Language Change</li></ul>

## Year 12 English Literature Curriculum 2019/20 – OCR H472

Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none"><li>• introduction to the <i>Women in Literature</i> genre and main text <i>Sense and Sensibility</i> - Austen</li><li>• <i>The Merchant's Prologue and Tale</i> – Chaucer</li></ul>	<ul style="list-style-type: none"><li>• <i>Twelfth Night</i> – Shakespeare</li><li>• <i>A Doll's House</i> – Ibsen</li></ul>	<ul style="list-style-type: none"><li>• <i>Twelfth Night</i></li><li>• revision of <i>Sense and Sensibility</i></li><li>• comparison of <i>A Merchant's Tale</i> and <i>A Doll's House</i></li><li>• mock exams</li><li>• NEA – <i>The World's Wife</i>, <i>The Prime of Miss Jean Brodie</i> and <i>The History Boys</i>.</li></ul>



**Year 12 French Curriculum 2019/20 – AQA 7652**

Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none"> <li>• baseline assessment</li> <li>• grammar revision and consolidation from GCSE</li> <li>• developing translation skills</li> <li>• developing summary skills</li> <li>• speaking spontaneously</li> <li>• intensive grammar revision and extension</li> </ul> <p><b>Artistic culture in the French-speaking world</b></p> <p>Contemporary francophone music</p> <p>Cinema, the 7<sup>th</sup> form of art</p> <p><b>Artistic culture in the French-speaking world</b></p> <p>A culture proud of its heritage</p> <p><b>Aspects of French-speaking society: current trends</b></p> <p>The 'cyber-society'</p> <ul style="list-style-type: none"> <li>• translation practice for each topic</li> <li>• speaking practice for each topic</li> <li>• summary Writing for each topic</li> </ul> <p>(Regular vocabulary tests throughout)</p>	<ul style="list-style-type: none"> <li>• development of all examinations skills</li> </ul> <p><b>Aspects of French-speaking society: current trends</b></p> <p>Positive features of a diverse society</p> <p>Life for the marginalised</p> <p>How criminals are treated</p> <p><b>Aspects of French-speaking society: current trends</b></p> <p>The place of voluntary work</p> <p><b>Aspects of French-speaking society: current trends</b></p> <p>The changing nature of family</p> <ul style="list-style-type: none"> <li>• focus on essay writing related to the analysis of a film</li> <li>• begins studying the film La Haine</li> <li>• translation practice for each topic</li> <li>• speaking practice for each topic</li> <li>• summary Writing for each topic</li> </ul> <p>(Regular vocabulary tests throughout)</p>	<ul style="list-style-type: none"> <li>• consolidation of topics studied in Year 12</li> <li>• revision of the Year 12 end of Year examinations</li> <li>• individual Research project</li> </ul> <p>(Regular vocabulary tests throughout)</p>

**Year 12 Further Mathematics Curriculum (A level Mathematics year 1 content below, A level Further Mathematics Year 2 content taught in Year 13 2020-2021 ) 2019/20 – Edexcel 9FM0**

YEAR 1 Autumn Term	Spring Term	Summer Term
<p><b>Pure Mathematics(AS):</b>                      1) Algebra and functions                      Algebraic expressions – basic algebraic manipulation, indices and surds                      Quadratic functions – factorising, solving, graphs and the discriminants                      Equations – quadratic/linear simultaneous                      Inequalities – linear and quadratic (including graphical solutions)                      Graphs – cubic, quartic and reciprocal                      Transformations – transforming graphs – <math>f(x)</math> notation                      2) Coordinate geometry in the <math>(x, y)</math> plane                      Straight-line graphs, parallel/perpendicular, length and area problems                      Circles – equation of a circle, geometric problems on a grid                      3) Further algebra                      Algebraic division, factor theorem and proof                      The binomial expansion                      4) Trigonometry                      Trigonometric ratios and graphs                      Trigonometric identities and equations                      5)Vectors (2D)                      Definitions, magnitude/direction, addition and scalar multiplication                      Position vectors, distance between two points, geometric problems                      6) Differentiation                      Definition, differentiating polynomials, second derivatives                      Gradients, tangents, normals, maxima and minima</p>	<p><b>Statistics (AS):</b>                      3) Probability:                      Mutually exclusive events; Independent events                      4) Statistical distributions:                      Use discrete distributions to model real-world situations; Identify the discrete uniform distribution; Calculate probabilities using the binomial distribution (calculator use expected)                      5) Statistical hypothesis testing                      Language of hypothesis testing; Significance levels                      Carry out hypothesis tests involving the binomial distribution</p> <p><b>Mechanics (AS):</b>                      6) Quantities and units in mechanics                      Introduction to mathematical modelling and standard S.I. units of length, time and mass                      Definitions of force, velocity, speed, acceleration and weight and displacement; Vector and scalar quantities                      7) Kinematics 1 (constant acceleration)                      Graphical representation of velocity, acceleration and displacement                      Motion in a straight line under constant acceleration; suvat formulae for constant acceleration; Vertical motion under gravity                      8) Forces &amp; Newton’s laws                      Newton’s first law, force diagrams, equilibrium, introduction to <math>i, j</math> system                      Newton’s second law, ‘<math>F = ma</math>’, connected particles (no resolving forces or use of <math>F = \mu R</math>);                      Newton’s third law: equilibrium, problems involving smooth pulleys</p>	<p><b>Pure Mathematics:</b>                      9) Numerical methods*                      Location of roots                      Solving by iterative methods (knowledge of ‘staircase and cobweb’ diagrams)                      Newton-Raphson method                      Problem solving                      *See Integration (part 2) for the trapezium rule                      10) Integration (part 1)                      Integrating <math>x^n</math> (including when <math>n = -1</math>), exponentials and trigonometric functions                      Using the reverse of differentiation, and using trigonometric identities to manipulate integrals                      11) Integration (part 2)                      Integration by substitution                      Integration by parts                      Use of partial fractions                      Areas under graphs or between two curves, including understanding the area is the limit of a sum (using sigma notation)                      The trapezium rule                      Differential equations (including knowledge of the family of solution curves)                      12) Vectors (3D):                      Use of vectors in three dimensions; knowledge of column vectors and <math>i, j</math> and <math>k</math> unit vectors</p> <p><b>Statistics (A level):</b>                      1) Regression and correlation                      Change of variable                      Correlation coefficients                      Statistical hypothesis testing for zero correlation                      2) Probability                      Using set notation for probability                      Conditional probability</p>

**Year 12 Further Mathematics Curriculum (A level Mathematics year 1 content below, A level Further Mathematics Year 2 content taught in Year 13 2020-2021 ) 2019/20 (Cont'd) – Edexcel 9FM0**

YEAR 1 Autumn Term	Spring Term	Summer Term
<p>7) Integration Definition as opposite of differentiation, indefinite integrals of <math>x^n</math> Definite integrals and areas under curves</p> <p>8) Exponentials and logarithms: Exponential functions and natural logarithms</p> <p><b>Statistics (AS):</b> 1) Statistical sampling Introduction to sampling terminology; Advantages and disadvantages of sampling Understand and use sampling techniques; Compare sampling techniques in context 2) Data presentation and interpretation Calculation and interpretation of measures of location; Calculation and interpretation of measures of variation; Understand and use coding Interpret diagrams for single-variable data; Interpret scatter diagrams and regression lines; Recognise and interpret outliers; Draw simple conclusions from statistical problems</p>	<p>9) Kinematics 2 (variable acceleration) Variable force; Calculus to determine rates of change for kinematics Use of integration for kinematics problems i.e. <math>r = \int v dt, v = \int a dt</math></p> <p><b>Pure Mathematics (A level) :</b> 1) Proof: Examples including proof by deduction and proof by contradiction 2) Algebraic and partial fractions Simplifying algebraic fractions Partial fractions 3) Functions and modelling Modulus function Composite and inverse functions Transformations Modelling with functions* *examples may be Trigonometric, exponential, reciprocal etc. 4) Series and sequences Arithmetic and geometric progressions (proofs of 'sum formulae') Sigma notation Recurrence and iterations 5) The binomial theorem Expanding <math>(a + bx)^n</math> for rational n; knowledge of range of validity Expansion of functions by first using partial fractions</p>	<p>Questioning assumptions in probability 3) The Normal distribution Understand and use the Normal distribution Use the Normal distribution as an approximation to the binomial distribution Selecting the appropriate distribution Statistical hypothesis testing for the mean of the Normal distribution</p> <p><b>Mechanics (A level):</b> 4) Moments: Forces' turning effect 5) Forces at any angle Resolving forces Friction forces (including coefficient of friction <math>\mu</math>) 6) Applications of kinematics: Projectiles 7) Applications of forces Equilibrium and statics of a particle (including ladder problems) Dynamics of a particle 8) Further kinematics Constant acceleration (equations of motion in 2D; the i, j system) Variable acceleration (use of calculus and finding vectors <math>r'</math> and <math>r''</math> at a given time)</p> <p style="text-align: center;"><b>INTERNAL A LEVEL MATHEMATICS EXAMINATION</b></p>

**Year 12 Further Mathematics Curriculum (A level Mathematics year 1 *content below*, A level Further Mathematics Year 2 content taught in Year 13 2020-2021 ) 2019/20 (Cont'd) – Edexcel 9FM0**

YEAR 1	Autumn Term	Spring Term	Summer Term
		<p>6) Trigonometry  Radians (exact values), arcs and sectors  Small angles  Secant, cosecant and cotangent (definitions, identities and graphs);  Inverse trigonometrical functions; Inverse trigonometrical functions  Compound* and double (and half) angle formulae  *geometric proofs expected  <math>R \cos(x \pm \alpha)</math> or <math>R \sin(x \pm \alpha)</math>  Proving trigonometric identities  Solving problems in context (e.g. mechanics)  7) Parametric equations  Definition and converting between parametric and Cartesian forms  Curve sketching and modelling  8) Differentiation  Differentiating <math>\sin x</math> and <math>\cos x</math> from first principles  Differentiating exponentials and logarithms  Differentiating products, quotients, implicit and parametric functions.  Second derivatives (rates of change of gradient, inflections)  Rates of change problems* (including growth and kinematics)  *see Integration (part 2) – Differential equations</p>	

**Year 12 Geography Curriculum 2019/20 – AQA 7037**

<b>Autumn Term</b>	<b>Spring Term</b>	<b>Summer Term</b>
Water & Carbon Cycle Contemporary Urban Environments	Coastal Systems Changing Places	NEA – Independent Investigation  Fieldwork

**Year 12 German Curriculum 2019/20 – AQA 7662**

Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none"> <li>• baseline assessment</li> <li>• developing comprehension and writing skills</li> <li>• grammar revision and consolidation from GCSE</li> <li>• developing translation skills</li> <li>• speaking spontaneously</li> </ul> <p><b>September – October</b></p> <p>Intensive grammar revision and extension</p> <p><b>Aspects of German Speaking Society</b> Family</p> <p><b>Artistic Culture in the German-speaking World</b> Celebrations and traditions</p> <p><b>November – December</b></p> <p><b>Aspects of German Speaking Society</b> The digital world</p> <p><b>Artistic Culture in the German-speaking World</b> Art and architecture</p>	<ul style="list-style-type: none"> <li>• development of all examination skills</li> </ul> <p><b>January – April</b></p> <p><b>Aspects of German Speaking Society</b> Youth culture: fashion, music and television</p> <p><b>Artistic Culture in the German-speaking World</b> The cultural life of Berlin: past and present</p> <p>Begin studying the film <b>Goodbye Lenin.</b></p>	<ul style="list-style-type: none"> <li>• focus on essay writing related to the analysis of a film</li> <li>• introduction of the Independent Research Project</li> </ul> <p>Finish studying the film <b>Goodbye Lenin</b> and develop essay writing skills</p> <p>Consolidation of topics studied in Year 12.</p> <p>Individual research project</p>

Year 12 History Curriculum 2019/20 – AQA 7042

Autumn Term	Spring Term	Summer Term
<p><b><u>Consolidation of the Tudor Dynasty: England, 1485–1547</u></b>  <b>Henry VII, 1485–1509</b></p> <ul style="list-style-type: none"> <li>Henry Tudor’s consolidation of power: character and aims; establishing the Tudor dynasty</li> <li>Government: councils, parliament, justice, royal finance, domestic policies</li> <li>Relationships with Scotland and other foreign powers; securing the succession; marriage alliances</li> <li>Society: churchmen, nobles and commoners; regional division; social discontent and rebellions</li> <li>Economic development: trade, exploration, prosperity and depression</li> <li>Religion; humanism; arts and learning</li> </ul>	<p>Preparation for January Examinations.</p> <p><b>Henry VIII, 1509–1547</b></p> <ul style="list-style-type: none"> <li>Henry VIII: character and aims; addressing Henry VII’s legacy</li> <li>Government: Crown and Parliament, ministers, domestic policies including the establishment of Royal Supremacy</li> <li>Relationships with Scotland and other foreign powers; securing the succession</li> <li>Society: elites and commoners; regional issues and the social impact of religious upheaval; rebellion</li> </ul>	<ul style="list-style-type: none"> <li>Economic development: trade, exploration, prosperity and depression</li> <li>Religion: renaissance ideas; reform of the Church; continuity and change by 1547</li> </ul> <p>See NEA</p>
<p><b><u>Great Power rivalries and entry into war, c1890–1917</u></b>  <b>Great Powers: Britain, Germany, France, Russia and Austria-Hungary, c1890–1900</b></p> <ul style="list-style-type: none"> <li>The political structures of the Great Powers: liberal democracies in Britain and France and autocracies in Germany, Russia and Austria-Hungary; the effect of political structures on decision making</li> <li>Economic strengths and armed forces: the erosion of Britain’s economic supremacy; the rise of the German economy; economic reform in Russia; the relative strengths of the armed forces of the Great Powers</li> <li>Empires and rivalries: the ‘Scramble for Africa’; Russo-Austro-Hungarian rivalry in the Balkans;</li> <li>Russia and the Ottoman Empire</li> </ul>	<p>Preparation for January Examinations.</p> <p><b>The Great Powers and Crises, 1900–1911</b></p> <ul style="list-style-type: none"> <li>Forces of instability: Balkan nationalism and its significance for Austria-Hungary and Russia; militarism and the position of the German army in the Second Reich; the arms and naval races; military plans</li> <li>Evolving alliances: the Moroccan crises; Anglo-French Entente; the formation of the Triple Entente</li> <li>The decline of the Ottoman Empire: the weakening of the Empire in Eastern Europe; the causes and consequences of the Young Turk Movement</li> <li>Panslavism and the Bosnian Crisis: the causes, course and consequences of the Bosnian Crisis</li> </ul>	<ul style="list-style-type: none"> <li>General war in Europe: mobilisation of German and Russian forces; the implementation of the Schlieffen Plan and the invasion of Belgium; Britain’s declaration of war; the key decision makers and their motives</li> <li>From European to World War: the escalation of the conflict; Italy’s motives for war; reasons for the entry of the USA</li> </ul> <p>See NEA</p>

**Year 12 History Curriculum 2019/20 (Cont'd) – AQA 7042**

Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none"> <li>• The state of international relations by 1900: Anglo-French rivalry; Anglo-German relations; the</li> <li>• Franco-Russian alliance; Germany's Dual Alliance with Austria-Hungary; potential for conflict</li> </ul>	<p><b>The coming of war, 1911–1917</b></p> <ul style="list-style-type: none"> <li>• The First and Second Balkan Wars: causes; attempts by the Great Powers to impose peace on the</li> <li>• region; the impact of the Balkan Wars on the Great Powers and Serbia</li> <li>• The outbreak of war in the Balkans and the July Crisis: Austria-Hungary's and Germany's response to the assassination in Sarajevo; Russia's response to Austria-Hungary's demands on Serbia; the bombardment of Belgrade</li> </ul>	
<p>Individual research for coursework topic and sourcing of the required contemporary sources and historical debate. Preparation of research skills.</p>	<p>Individual research for coursework topic and resources. Preparation of research skills. Presentation of research to class. Work with class teacher to finalise approach to question. Planning and preparation of draft.</p>	<p>Examination board to approve question. Preparation for draft write up to be completed over the summer holiday.</p>



## Year 12 Latin Curriculum 2019/20 – OCR H443

Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none"><li>• revision of all aspects of GCSE grammar</li><li>• increasing speed and confidence in translating passages of increasing difficulty</li><li>• Defined vocabulary learning[ old AS style]</li><li>• Begin first A2 Prose text.</li></ul>	<ul style="list-style-type: none"><li>• consolidation of grammatical points</li><li>• new Grammar – impersonal verbs</li><li>• Defined vocabulary learning</li><li>• Begin first A2 Verse set text</li></ul>	<ul style="list-style-type: none"><li>• refinement of translation skills</li><li>• past translation papers</li><li>• completion of both set texts – past papers</li></ul>

**Year 12 Mathematics Curriculum 2019/20 – Edexcel 9MA0**

Autumn Term	Spring Term	Summer Term
<p><b>Pure Mathematics:</b></p> <p>1) Algebra and functions Algebraic expressions – basic algebraic manipulation, indices and surds Quadratic functions – factorising, solving, graphs and the discriminants Equations – quadratic/linear simultaneous Inequalities – linear and quadratic (including graphical solutions) Graphs – cubic, quartic and reciprocal Transformations – transforming graphs – <math>f(x)</math> notation</p> <p>2) Coordinate geometry in the <math>(x, y)</math> plane Straight-line graphs, parallel/perpendicular, length and area problems Circles – equation of a circle, geometric problems on a grid</p> <p>3) Further algebra Algebraic division, factor theorem and proof The binomial expansion</p> <p>4) Trigonometry Trigonometric ratios and graphs Trigonometric identities and equations</p> <p>5) Vectors (2D) Definitions, magnitude/direction, addition and scalar multiplication Position vectors, distance between two points, geometric problems</p>	<p><b>Pure Mathematics:</b></p> <p>6) Differentiation Definition, differentiating polynomials, second derivatives Gradients, tangents, normals, maxima and minima</p> <p>7) Integration Definition as opposite of differentiation, indefinite integrals of <math>x^n</math> Definite integrals and areas under curves</p> <p>8) Exponentials and logarithms: Exponential functions and natural logarithms</p> <p><b>Statistics:</b></p> <p>1) Statistical sampling Introduction to sampling terminology; Advantages and disadvantages of sampling Understand and use sampling techniques; Compare sampling techniques in context</p> <p>2) Data presentation and interpretation Calculation and interpretation of measures of location; Calculation and interpretation of measures of variation; Understand and use coding Interpret diagrams for single-variable data; Interpret scatter diagrams and regression lines; Recognise and interpret outliers; Draw simple conclusions from statistical problems</p> <p>3) Probability: Mutually exclusive events; Independent events</p>	<p><b>Statistics:</b></p> <p>4) Statistical distributions: Use discrete distributions to model real-world situations; Identify the discrete uniform distribution; Calculate probabilities using the binomial distribution (calculator use expected)</p> <p>5) Statistical hypothesis testing Language of hypothesis testing; Significance levels Carry out hypothesis tests involving the binomial distribution</p> <p><b>Mechanics:</b></p> <p>8) Forces &amp; Newton's laws Newton's first law, force diagrams, equilibrium, introduction to <math>i, j</math> system Newton's second law, '<math>F = ma</math>', connected particles (no resolving forces or use of <math>F = \mu R</math>); Newton's third law: equilibrium, problems involving smooth pulleys</p> <p>9) Kinematics 2 (variable acceleration) Variable force; Calculus to determine rates of change for kinematics Use of integration for kinematics problems i.e. <math>r = \int v dt, v = \int a dt</math></p> <p style="text-align: center;"><b>END OF AS MATHEMATICS COURSE – INTERNAL EXAMINATIONS</b></p> <p>-----</p>

Year 12 Mathematics Curriculum 2019/20 (Cont'd) – Edexcel 9MA0

Autumn Term	Spring Term	Summer Term
	<p><b>Mechanics:</b>                      6) Quantities and units in mechanics                      Introduction to mathematical modelling and standard S.I. units of length, time and mass                      Definitions of force, velocity, speed, acceleration and weight and displacement; Vector and scalar quantities                      7) Kinematics 1 (constant acceleration)                      Graphical representation of velocity, acceleration and displacement                      Motion in a straight line under constant acceleration; suvat formulae for constant acceleration; Vertical motion under gravity</p>	<p><b>Start of A Level course</b>  <b>Pure Mathematics:</b></p> <p>1) Proof:                      Examples including proof by deduction and proof by contradiction                      2) Algebraic and partial fractions                      Simplifying algebraic fractions                      Partial fractions  <b>If time:</b>                      3) Functions and modelling                      Modulus function                      Composite and inverse functions                      Transformations                      Modelling with functions*                      *examples may be Trigonometric, exponential, reciprocal etc.</p>

**Year 12 Music Curriculum 2019/20 – Edexcel 9MU0**

Autumn Term	Spring Term	Summer Term
<p><b>Unit 1 – Performing</b> Individual and ensemble performances Musical interpretation Initial recordings of performance</p> <p><b>Unit 2 – Composing</b> Introduction to advanced compositional methods Creating stylistic compositions linked to set works Bach Chorale writing</p> <p><b>Unit 3 – Appraising</b> Study and analysis of the following set works:</p> <ul style="list-style-type: none"> <li>• Danny Elfman, <i>Batman Returns</i></li> <li>• J.S. Bach, <i>Cantata, Ein feste Burg, BWV 80</i>: Movements 1, 2 and 8</li> <li>• Vivaldi, <i>Concerto in D Minor</i>, Op. 3 No. 11</li> <li>• Debussy, <i>Estampes</i></li> </ul>	<p><b>Unit 1 – Performing</b> Individual and ensemble performances Recital Performance</p> <p><b>Unit 2 – Composing</b> Completion of 1<sup>st</sup> composition assignment Continued Bach Chorale writing</p> <p><b>Unit 3 – Appraising</b></p> <ul style="list-style-type: none"> <li>• The Beatles: selected songs from <i>Revolver</i></li> <li>• Vaughan Williams, <i>On Wenlock Edge</i>: Nos. 1, 3 and 5</li> <li>• Shankar, <i>Burn &amp; Breathing Under Water</i></li> <li>• Stravinsky, <i>Rite of Spring</i></li> </ul>	<p><b>Unit 1 – Performing</b> Preparation for End of Year Recital</p> <p><b>Unit 2 – Composing</b> Completion of 2nd composition assignment Continued Bach Chorale writing</p> <p><b>Unit 3 – Appraising (Music for Film &amp; Popular Music and Jazz)</b></p> <p>Music for Film:</p> <ul style="list-style-type: none"> <li>• Danny Elfman, <i>Batman Returns</i> excerpts</li> </ul> <p>Popular Music and Jazz:</p> <ul style="list-style-type: none"> <li>• Berlioz, <i>Symphonie Fantastique</i>: Movement 1</li> <li>• Courtney Pine: selected songs from <i>Back in the Day</i></li> <li>• Kate Bush: selected songs from <i>Hounds of Love</i></li> <li>• Saahario: <i>Petals for cello and live electronics</i></li> </ul>

## Year 12 Physics Curriculum 2019/20 – OCR H556

Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none"><li>• motion</li><li>• forces</li><li>• electric current</li></ul>	<ul style="list-style-type: none"><li>• work and energy</li><li>• springs and materials</li><li>• momentum</li><li>• quantum physics</li><li>• waves</li></ul>	<ul style="list-style-type: none"><li>• waves (continued)</li><li>• practical skills</li><li>• astrophysics and cosmology</li><li>• particle physics</li><li>• nuclear fission and fusion</li></ul>

Year 12 Psychology Curriculum 2019/20 - Edexcel 9PSO

Autumn Term	Spring Term	Summer Term
<p><b>Paper 1 – Foundations in Psychology</b>  <b>Teacher 1</b>  <b>Social Psychology including:</b></p> <ul style="list-style-type: none"> <li>• Obedience</li> <li>• Prejudice</li> <li>• Classic (Sherif) &amp; Contemporary study (e.g. Burger)</li> <li>• Individual differences/ developmental psychology and obedience/ prejudice</li> <li>• Research methods applicable to Social Psychology (Questionnaires) &amp; related design &amp; analysis issues</li> <li>• Key question relating to Social Psychology</li> <li>• Practical report relating to Social Psychology (e.g. does gender affect obedience)</li> <li>• Issues &amp; Debates relating to Social Psychology – Is Psychology a Science, Ethical Issues, Reductionism, Social Control, Gender Bias</li> </ul> <p><b>Teacher 2</b>  <b>Cognitive Psychology including:</b></p> <ul style="list-style-type: none"> <li>• Multi-Store Model of Memory</li> <li>• Working Memory Model</li> <li>• Classic Study (Baddeley)</li> <li>• Case studies of brain damaged individuals – including HM</li> <li>• Long term memory</li> <li>• Reconstructive memory</li> <li>• Contemporary studies (e.g. Steyvers &amp; Hemmer)</li> <li>• Individual differences/ developmental psychology and mental processing</li> <li>• Research methods applicable to Cognitive Psychology (i.e the experimental method) &amp; related design &amp; analysis issues</li> </ul>	<p><b>Teacher 1</b>  <b>Biological psychology including:</b></p> <ul style="list-style-type: none"> <li>• Role of the CNS , structure of neurons, function of neurotransmitters &amp; synaptic transmission</li> <li>• Effect of recreational drugs on transmission process</li> <li>• Structure of the brain &amp; brain functioning including scanning techniques</li> <li>• Classic Study (Raine)</li> <li>• Role of evolution &amp; natural selection</li> <li>• Role of hormones in human development</li> <li>• <b>Yr 12 Examinations</b></li> <li>• Biological &amp; Freud’s explanation of aggression including his theory of personality</li> <li>• Individual differences/ developmental psychology and mental development</li> </ul> <p><b>Teacher 2</b>  <b>Cognitive Psychology continued...including:</b></p> <ul style="list-style-type: none"> <li>• Key question – e.g. Dementia/ Dyslexia</li> <li>• Practical report relating to Cognitive Psychology (e.g. is STM encoding acoustic)</li> <li>• <b>Yr 12 Examinations</b></li> <li>• Issues &amp; Debates relating to Cognitive Psychology – e.g.is Psychology a Science, Reductionism, Ethical Issues</li> </ul> <p><b>Learning theories including:</b></p> <ul style="list-style-type: none"> <li>• Classical Conditioning, Operant Conditioning, Social Learning Theory</li> <li>• Acquisition, maintenance and Treatment of Phobias – CC, OC, SLT, Flooding &amp; Systematic Desensitisation</li> </ul>	<p><b>Teacher 1</b>  <b>Biological psychology continued...including:</b></p> <ul style="list-style-type: none"> <li>• Research methods applicable to Biological Psychology (genetic studies, correlations and brain scanning) &amp; related design &amp; analysis issues</li> <li>• Contemporary Study (e.g. Brendgen)</li> </ul> <p><b>Yr 12 MOCK EXAMINATIONS</b></p> <ul style="list-style-type: none"> <li>• Key question relating to Bio psychology</li> <li>• Practical report relating to Biological e.g. is aggression caused by nature or nurture?</li> <li>• Issues &amp; Debates relating to Biological Psychology – e.g. Ethical Issues, Reductionism, Culture Bias, Is Psychology a Science</li> </ul> <p><b>Teacher 2</b>  <b>Learning theories including:</b></p> <ul style="list-style-type: none"> <li>• Classic (Watson &amp; Rayner) &amp; Contemporary studies (e.g. Becker)</li> <li>• Individual and developmental influences on learning</li> <li>• Research methods applicable to Learning Theories (i.e. observation) &amp; related design &amp; analysis issues</li> </ul> <p><b>Yr 12 MOCK EXAMINATIONS</b></p> <ul style="list-style-type: none"> <li>• Key question – relating to the Learning Approach e.g. ‘Should airline companies offer treatment for fear of flying?’</li> <li>• Issues &amp; Debates relating to the Learning approach.</li> </ul>

**Year 12 RS: Philosophy and Ethics Curriculum 2019/20 – OCR H573**

Autumn Term	Spring Term	Summer Term
<p><i>OCR Religious Studies A Level H573</i></p> <p><b>Philosophy of Religion</b></p> <p>Ancient philosophical influences Soul, mind and body Arguments based on observation Argument based on reason Religious experience Problem of evil</p> <p><b>Religious Ethics</b></p> <p>Natural Law Situation Ethics Kantian Ethics</p>	<p><b>Religious Ethics continued</b></p> <p>Utilitarianism Euthanasia Business ethics</p> <p><b>Developments in Christian Thought</b></p> <p>Augustine on human nature Death and the afterlife Knowledge of God's existence The person of Jesus Christ Christian moral principles Christian moral action</p>	<p>Exam practice and revision</p>

## YEAR 12 PSHCE 2019/20

Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none"> <li>• study Skills</li> <li>• NCS</li> <li>• apprenticeships</li> <li>• applying for universities</li> <li>• employment opportunities</li> <li>• safety (personal and e)</li> <li>• independent study and learning</li> <li>• British exploring</li> <li>• forward thinking day (year 11 sixth form)</li> <li>• personal statement talks</li> <li>• PC1 review</li> <li>• politics and British values</li> <li>• A star future</li> <li>• growth mindset</li> </ul>	<ul style="list-style-type: none"> <li>• coaching for Success</li> <li>• SRE</li> <li>• Future Learn</li> <li>• PC2 review</li> <li>• post 18 review</li> <li>• revision techniques</li> <li>• alcohol talk</li> <li>• revision</li> <li>• healthy living</li> <li>• admission tests</li> <li>• coping with stress</li> </ul>	<ul style="list-style-type: none"> <li>• personal statements worksheet</li> <li>• Bath university</li> <li>• report review</li> <li>• target setting and revision plan</li> <li>• UCAS registration</li> <li>• personal statements</li> <li>• internal assessment</li> <li>• assessment review</li> <li>• employment talk</li> <li>• CV writing</li> </ul>