

# QMGs Key Stage 4 Curriculum Topics



## Academically-Ambitious and Accessible to All

Queen Mary's Grammar School believes that the Quality of Education experienced by students is driven by a curriculum in its broadest sense: the entirety of a student's learning experience, in lessons and beyond. We aim to design and embed a curriculum that is planned and sequenced to develop in our highly academic students the knowledge and skills necessary for their future roles in society, while ensuring that the balanced curriculum offer is accessible to all.

Subject	Year 10	Year 11
Art	<p><b><u>Portfolio for coursework (60%)</u></b></p> <p>Learners will produce work in response to a chosen starting point, brief, scenario or stimulus. From this a portfolio of practical work is developed to show progression of ideas and influence towards a final outcome/response.</p> <p>Work is produced individually in class and at home to build a portfolio which covers, and is marked against the 4 assessment objectives.</p> <ul style="list-style-type: none"> <li>• (AO3) Excellent recording of ideas, observations and insights showing sophisticated links to intention. Pupils will produce a series of direct observational drawings showing their understanding of colour, line, form, tone &amp; texture. Pupils use secondary and primary sources to produce a variety of initial observations surrounding their chosen project theme/title. They will explore with a variety of medias at this initial stage of their individual projects.</li> <li>• (AO1) Artist Research. Pupils ideas are developed with sophisticated reference to chosen contextual sources, with evidence of perceptive investigation. Pupils will be expected to demonstrate excellent critical understanding of sources linked to their chosen project title. The following point will be covered for this assessment objective;               <ol style="list-style-type: none"> <li>1. Written artist research and analytical review of artwork explored.</li> <li>2. Confident reproduction piece created from one of the artist pieces.</li> <li>3. Experimental pieces linked to the artist's techniques and project title.</li> </ol> </li> <li>• (AO2) This assessment objective of experimenting with new materials will be demonstrated through the use of different medias throughout</li> </ul>	<ul style="list-style-type: none"> <li>• Developing of AO2 with further media experimentation and planning and reviewing techniques for final outcome.</li> <li>• Project work started in year 10 will be concluded into a <b>final outcome</b> after October half term. This covers <b>(AO4)</b> A personal response with sophisticated realisation of intentions. Understanding of visual language, applying formal elements, is perceptive and sophisticated.</li> </ul> <p><b><u>Externally set Exam project (40%)</u></b></p> <ol style="list-style-type: none"> <li>1. From January pupils will be given their OCR Exam papers where they will start working on <b>(AO3)</b> which focuses on the recording of ideas, observations and insights relevant to their chosen exam question.</li> <li>2. From February pupils will focus on <b>(AO1)</b> where they will explore chosen artists that inspire their own art work.</li> <li>3. From March pupils will focus on <b>(AO2)</b> and the experimentation of final outcome ideas, medias to demonstrate clear development of ideas.</li> <li>4. During the 10 hour Art exam after Easter, pupils will produce a final outcome for <b>(AO4)</b> which is to reflect their chosen exam question, development and artist inspirations.</li> </ol> <p>All work will be mounted onto display boards and presented to be marked and moderated after the 10 hour Exam. Marks are submitted to OCR in May and await candidate selection for moderation.</p>

# QMGS Key Stage 4 Curriculum Topics



	<p>year 10. Sophisticated refinement with perceptive selection of media, materials, techniques and processes will also be covered through the exploration of different artists work where different medias will be explored and experimented with further.</p> <p>By the end of year 10 pupils will have a minimum of 4 coursework boards mounted partially meeting AO1, 2 and 3 objectives.</p>	<p><b>Coursework and Exam project will be externally moderated with an exhibition to present selected work.</b></p>
<b>Biology</b>	<ul style="list-style-type: none"> <li>• 1. Cell biology</li> <li>• 2. Organisation</li> <li>• 3. Infection and response</li> <li>• 4. Bioenergetics</li> <li>• 5. Homeostasis and response</li> </ul> <p>Note – some parts of the curriculum are covered in Y9 due to the reduced number of lessons for GCSE science in year 10/11</p>	<ul style="list-style-type: none"> <li>• 6. Inheritance, variation and evolution</li> <li>• 7. Ecology</li> <li>• 8. Key ideas</li> </ul>
<b>Business</b>	<p>Investigating small business:</p> <ul style="list-style-type: none"> <li>• Topic 1.1 Enterprise and entrepreneurship</li> <li>• Topic 1.2 Spotting a business opportunity</li> <li>• Topic 1.3 Putting a business idea into practice</li> <li>• Topic 1.4 Making the business effective</li> </ul> <p>Topic 1.5 Understanding external influences on business</p>	<p>Building a business:</p> <ul style="list-style-type: none"> <li>• Topic 2.1 Growing the business</li> <li>• Topic 2.2 Making marketing decisions</li> <li>• Topic 2.3 Making operational decisions</li> <li>• Topic 2.4 Making financial decisions</li> </ul> <p>Topic 2.5 Making human resource decisions</p>
<b>Chemistry</b>	<ol style="list-style-type: none"> <li>1. Atomic structure and the periodic table</li> <li>2. Bonding, structure, and the properties of matter</li> <li>3. Quantitative chemistry</li> <li>4. Chemical changes</li> <li>5. Energy changes</li> </ol>	<ol style="list-style-type: none"> <li>6. The rate and extent of chemical change</li> <li>7. Organic chemistry</li> <li>8. Chemical analysis</li> <li>9. Chemistry of the atmosphere</li> <li>10. Using resources</li> </ol> <p>Lessons in both Year 10 and 11 cover theory and practical work, encouraging the development of knowledge and understanding in science by working scientifically. This is achieved by development of: scientific thinking, experimental skills and strategies, analysis and evaluation, and the use of scientific vocabulary, quantities, units, symbols, and nomenclature.</p>

# QMGS Key Stage 4 Curriculum Topics



<p><b>Computer Science</b></p>	<p><b>Unit 1</b> Systems Architecture (1.1) Memory and Storage (1.2) Systems software (1.5)</p> <p><b>Unit 2</b> Algorithms (2.1) Programming fundamentals (2.2)</p>	<p><b>Unit 1</b> Computer Networks (1.3) Computer Network Security (1.4) Ethical, legal and Cultural Impacts of digital technology. (1.5)</p> <p><b>Unit 2</b> Boolean logic (2.4) Programming languages and Integrated development environments (2.5) Producing robust programs (2.3)</p>
<p><b>Design &amp; Technology</b></p>	<p><b>The core content:</b></p> <ul style="list-style-type: none"> <li>• Woods</li> <li>• Metals</li> <li>• Plastics</li> <li>• Electronics</li> <li>• Textiles</li> <li>• Paper and board</li> <li>• New and emerging technologies</li> <li>• Sustainability</li> <li>• Designers and companies</li> </ul> <p>The SoW is available as a separate document.</p> <p>Each core content module is tackled through a design and make project with associated theory content and homework.</p> <p><b>Current projects:</b></p> <ul style="list-style-type: none"> <li>• Chopping Board (WOOD)</li> <li>• Speaker (electronics)</li> <li>• Product Models (polymers)</li> <li>• Book stand (polymers)</li> <li>• Candle Holder (metal)</li> </ul>	<p>The year 11 DT curriculum is split up into 3 keys elements:</p> <p><b>1. NEA</b></p> <p>An iterative design challenge that should take up about 40 hours of genuine working time for the students in lessons (and with some homework)</p> <p>This will test the students ability to:</p> <ul style="list-style-type: none"> <li>• Identify problems within a context</li> <li>• Collect relevant research data</li> <li>• Produce a range of creative design ideas through sketching, models or CAD</li> <li>• Evaluate their work as it progresses</li> <li>• Plan and make a prototype model</li> <li>• Present the NEA as a formal document</li> </ul> <p>NB: Summer 2021: There are key changes introduced by OPFQUAL and AQA for Summer 2021 only. “No final practical piece is expected”.</p> <p><b>2. POLYMERS</b></p> <p>Having studied the “CORE CONTENT” in year 10 classes study ONE specialist extension option. At QMGS we choose to study polymers</p> <p>This is done through regular theory lessons, regular theory homeworks and products analysis</p>

# QMGS Key Stage 4 Curriculum Topics



	<ul style="list-style-type: none"> <li>Contextual Challenge: Preparation for the year 11 NEA</li> </ul> <p><b>Graphics is taught through each project:</b></p> <ul style="list-style-type: none"> <li>Sketching</li> <li>Isometric</li> <li>Perspective</li> <li>Oblique</li> <li>Exploded views</li> <li>Sectional views</li> <li>Orthographic projection</li> </ul>	<p><b>3. REVISION</b></p> <p>The work covered in year 10 (and at KS3) will be revisited on a regular basis. The regular forms tests will revisit knowledge taught in previous years and lessons.</p>
<p><b>English Language</b></p>	<p><b>(New OCR specification)</b></p> <p>Component 2A Reading: unseen fiction and literary non-fiction          Component 2B Writing: creative writing          Component 1A Reading: unseen non-fiction          Component 1B Writing: transactional writing</p>	<p><b>English Language (New OCR specification)</b></p> <p><i>Complete Component 1B</i>  <i>Revision of Component 1A and B in advance of mock exam</i>  <i>Mock exam: Nov 16-24</i>  <i>Revision of Component 2A and B (fiction/creative writing)</i>  <i>Speaking and listening endorsement (March)</i></p> <p><i>Revision of C1 and C2 prior to examinations</i></p>
<p><b>English Literature</b></p>	<p><b>(New OCR specification)</b></p> <p><i>C2B: Macbeth by William Shakespeare</i>  <i>C2A: Poetry cluster from OCR anthology (Love and relationships cluster; up-dated, with increased cultural diversity)</i>          C1A: Leave Taking</p>	<p><b>English Literature: (New OCR specification)</b></p> <p><i>Baseline testing</i>  <i>Jekyll and Hyde</i>  <i>Mock exam: Nov 16-24</i>  <i>Completion of poetry anthology</i>  <i>Unseen poetry unit</i>  <i>Revision of Macbeth and J&amp;H, prior to examinations</i>  <i>Revision of Leave Taking, prior to examinations</i></p>

# QMGS Key Stage 4 Curriculum Topics



<p><b>French</b></p>	<ul style="list-style-type: none"> <li>• Topic coverage 1-12 at Foundation Level Family/technology/free-time activities/customs and festivals/home town/charity work/environment and poverty/holidays/current and future study/life at school/university or work/careers and topics 1-2 at Higher Level – family/technology.</li> <li>• Tenses covered - present (regular er/ir/re, irregular, reflexive)/near future/perfect/imperfect/perfect/future/conditional.</li> <li>• Two-verb structures. Negatives/questions.</li> <li>• Adjectives – agreement and position.</li> <li>• Pronouns: subject/direct/indirect object/disjunctive/possessives/position.</li> <li>• Listening/Reading/Writing/Speaking skills practised in class, together with translation into and out of the target language.</li> <li>• Role-plays, photocards and general conversation form the speaking exam.</li> </ul>	<ul style="list-style-type: none"> <li>• Topic coverage 1-12 at Higher Level (1-2 covered in Y10) Family/technology/free-time activities/customs and festivals/home town/charity work/environment and poverty/holidays/current and future study/life at school/university or work/careers.</li> <li>• Tenses covered by end of Y11 - present (regular, irregular, reflexive, impersonal verbs)/immediate future/imperfect/perfect/future/conditional, including irregulars in all tenses plus pluperfect/present subjunctive + key uses – for recognition purposes. The passive with être. Imperatives for use and recognition.</li> <li>• Two-verb structures. Negatives/questions.</li> <li>• Adjectives – agreement and position</li> <li>• Pronouns: subject/direct/indirect object/disjunctive/possessives + position.</li> <li>• Listening/Reading/Writing and Speaking all practised in class.</li> <li>• Role-plays, photocards and general conversation form the speaking exam.</li> </ul>
<p><b>Geography</b></p>	<ol style="list-style-type: none"> <li>1. Challenges of Natural Hazards <ul style="list-style-type: none"> <li>- Tectonic hazards</li> <li>- Climatic hazards</li> <li>- Extreme weather in the UK</li> <li>- Climate Change</li> </ul> </li> <li>2. Economic World <ul style="list-style-type: none"> <li>- Nigeria</li> <li>- UK economy</li> </ul> </li> <li>3. UK Physical Landscapes <ul style="list-style-type: none"> <li>- Rivers</li> <li>- Glaciers</li> </ul> </li> <li>4. Rivers Fieldwork <ul style="list-style-type: none"> <li>- Changing river profile</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>5. Urban Issues and Challenges <ul style="list-style-type: none"> <li>- Urbanisation</li> <li>- Mumbai</li> <li>- Birmingham</li> <li>- Sustainable cities</li> </ul> </li> <li>6. Urban fieldwork <ul style="list-style-type: none"> <li>- Birmingham (Big City Plan)</li> </ul> </li> <li>7. Living World <ul style="list-style-type: none"> <li>- Tropical rainforests</li> <li>- Hot Deserts</li> </ul> </li> <li>8. Challenge of Resource Management <ul style="list-style-type: none"> <li>- UK food, water and energy</li> <li>- Energy</li> </ul> </li> <li>9. Issue Evaluation and skills</li> </ol>

# QMGS Key Stage 4 Curriculum Topics



		- (Released 12 weeks prior to exam)
<b>History</b>	<p>Paper 1, Understanding the Modern world:</p> <p><b>1. Germany 1890–1945: Democracy and dictatorship</b></p> <p>Part one: Germany and the growth of democracy Part two: Germany and the Depression Part three: The experiences of Germans under the Nazis</p> <p><b>2. Conflict and tension between East and West, 1945–1972</b></p> <p>Part one: The origins of the Cold War</p> <p>Part two: The development of the Cold War</p> <p>Part three: Transformation of the Cold War</p> <p>Will have started the first section of Paper 2, Shaping the Nation, by the end of the year</p>	<p>Paper 2, Shaping the Nation, thus completing the course. This includes the Historic Environment which is part of Paper 2.</p> <p><b>1. British depth study: Elizabethan England, c1568–1603</b></p> <p>Part one: Elizabeth's court and Parliament Part two: Life in Elizabethan times Part three: Troubles at home and abroad</p> <p><b>2. Thematic studies: Britain: Health and the people: c1000 to the present day</b></p> <p>Part one: Medicine stands still</p> <p>Part two: The beginnings of change</p> <p>Part three: A revolution in medicine</p>
<b>Mandarin Chinese</b>	<p><b>A. Travel and tourism</b></p> <ul style="list-style-type: none"> <li>• Weather + climate</li> <li>• Transport, its development and problems</li> <li>• Booking tickets and hotel</li> <li>• Holiday activities/eco tourism</li> <li>• Problems when on holiday</li> <li>• Other Countries and places</li> </ul> <p><b>B. Home, town, neighbourhood and region</b></p> <ul style="list-style-type: none"> <li>• House and nearby</li> <li>• Local amenities &amp; where things are</li> <li>• Local attractions</li> <li>• Directions and asking ways</li> <li>• What to do to improve your area</li> </ul>	<p><b>A. Healthy living</b></p> <ul style="list-style-type: none"> <li>• Diet. food and drinks</li> <li>• Eating in and out</li> <li>• Healthy and unhealthy living</li> <li>• Change of lifestyles</li> </ul> <p><b>B. Education for post-16</b></p> <ul style="list-style-type: none"> <li>• Choosing a course</li> <li>• Going to colleges and universities + plan</li> <li>• Overseas study option</li> <li>• Volunteering and charity work</li> </ul> <p><b>C. Jobs, career choices and ambitions</b></p> <ul style="list-style-type: none"> <li>• Work experience / Doing a part-time job</li> <li>• Ideal jobs and future plan</li> <li>• Applying for a summer job</li> <li>• Learning a new skill</li> </ul>

# QMGs Key Stage 4 Curriculum Topics



	<p><b>C. Customs and festivals in Chinese speaking regions</b></p> <ul style="list-style-type: none"> <li>• Traditional festivals and customs</li> <li>• Festival eating and drinking/eating habit</li> <li>• Compare western traditions with the Asian ones</li> </ul> <p><b>D. Technology in everyday life</b></p> <ul style="list-style-type: none"> <li>• TV programme</li> <li>• Internet</li> <li>• Mobile phone and social media</li> <li>• Film and music</li> <li>• Celebrities and role models</li> </ul> <p><b>D. School life (GCSE Pathway group)</b></p> <ul style="list-style-type: none"> <li>• Talking about school sites and life</li> <li>• My studies</li> <li>• Extra-curricular activities</li> <li>• Compare education in the UK and China</li> <li>• School exchanges</li> </ul>	<p><b>D. Social issues &amp; Global issues</b></p> <ul style="list-style-type: none"> <li>• Protecting environment / Environmental problems and how to solve them</li> <li>• poverty and inequality: unemployment/homeless/addiction (mobile; drug; smoking; drinking) /crime rate</li> </ul> <p><b>Revising all topics to prepare for GCSE Examination</b></p>
<p><b>Maths and Additional Maths</b></p>	<p>Term 1</p> <p>Expressions</p> <p>Angles and polygons</p> <p>Handling data – histograms</p> <p>Fractions, decimals and percentages</p> <p>Formulae and functions</p> <p>Term 2</p> <p>Transformations of 2D shapes</p> <p>Probability</p> <p>Measures and accuracy</p> <p>Equations and inequalities</p> <p>Circles and constructions</p>	<p>Pupils continue to use the same resources as they have done in Year 11. Topics covered this year include:</p> <p>Term 1</p> <p>3D solids</p> <p>Handling data - box plots and cumulative frequency</p> <p>Exact calculations</p> <p>Graphs of reciprocal, trigonometric and exponential functions</p> <p>3D Pythagoras and trigonometry</p> <p>Vectors</p> <p>Term 2</p> <p>Probability</p> <p>Sequences</p>

# QMGS Key Stage 4 Curriculum Topics



	<p>Term 3</p> <p>Pythagoras' theorem and trigonometry of non-right-angled triangles</p> <p>Ratio and proportion</p> <p>Factors powers and roots</p> <p>Linear and quadratic graphs</p> <p>The main resource we use is the AQA GCSE Maths Higher textbook, available through Kerboodle and supplemented by drfrostmaths.com. This covers all necessary content required for the OCR GCSE specification (the material in the OCR and AQA books is essentially the same but the book's cover is different). The lessons cover all the fundamental skills so that any gaps in a pupil's knowledge from KS3 are filled.</p> <p>Within each topic there are opportunities for puzzles and extended problems which further challenge the pupils</p> <p>In addition to the above, a third of the cohort also studies the OCR Additional Maths course alongside GCSE Maths. Their scheme of work is designed so that the two courses interleave and complement each other. The course structure is as follows:</p> <p><b>Year 10:</b></p> <p>Binomial theorem</p> <p>Polynomials and the factor theorem</p> <p>Extension of linear graphs</p> <p>Differentiation</p>	<p>Units and proportionality</p> <p>After finishing the course, teachers work with their own groups re-capping on areas of mathematics that suit their classes.</p> <p>Exam practise is essential, this focusses the pupils on applying the mathematics they know so that they can achieve grades which are suitable for them based on their mathematical ability.</p> <p>Additional Maths content for Year 11:</p> <p>Integration</p> <p>Advanced trigonometric equations including trig identities</p> <p>Exponentials and logarithms</p> <p>Permutations and combinations</p> <p>Variable acceleration</p> <p>Linear programming</p>
<p><b>Music</b></p>	<p><b>Performing:</b></p> <p>A significant proportion of pupils that opt for GCSE usually have an instrumental teacher (private or school) and therefore we have found that we do not need to devote as much lesson time to this area. One 'performance' lesson is scheduled each half term providing the opportunity to monitor pupil's progress and ensure they are on track. Regular discussion also takes place with school instrumental teachers involved with preparing GCSE students. In Year 10, the focus is on developing pupil's general confidence &amp; solo technique.</p>	<p><b>Performing:</b></p> <p>In year 11, the focus is now on preparation for the ensemble component of the exam. 2 dates are set; 1 for the last week of the first half term and 1 for the end of the 2<sup>nd</sup> half term. On each occasion pupils are expected to prepare a part from an ensemble piece to perform in front of the class. This is a free choice. Pupils are encouraged to start preparing for this element of the course early so pupils are not expected to perform the whole piece at this stage. The first performance is not formally assessed. The second is assessed and this mark goes towards the mock exam grade.</p>



# QMGS Key Stage 4 Curriculum Topics



All pupils that take GCSE music are expected to join at least 1 extra-curricular music club at school. Pupils are also encouraged to play with the Local Music Service ensembles & other community groups.

## Set works:

Detailed study and analysis of 6 of the 8 set works leading to a final written/listening exam lasting 1 hr 45 mins.

Term1:

- Star Wars Main Title
- Music For a while

Term 2:

- Brandenburg Concerto
- Samba em Preludio

Term 3:

- Beethoven piano Sonata
- Killer Queen

## Composing:

Term 1: the focus is on revising basic music theory to ensure all pupils have the required compositional skills to start their first major composition after Christmas.

This includes:

- Different clefs (treble clef/bass clef/alto clef)
- rhythm and time signatures (semibreve, crotchet, quaver, semi quaver and the corresponding rests. Dotted rhythms. Rhythm dictation is introduced. Compound time signatures and simple time)
- Key signatures (how to name keys inc. major and minor relations. Tones and semitones. Intervals. Modes)
- Triads/ chords and their inversions (inc. primary and secondary triads)

## Composing:

1st half term: discuss the composition briefs set by the board and the demands associated with each. Pupils are encouraged to then select a brief and begin working on it.

2nd half term: Review & refine the first major composition (theme & variations) started in year 10. *(it is this mark that contributes towards the mock overall grade)*

## Set works: term 1

- Defying Gravity
- Release (Afro Celt Sound System)

A mock listening exam is set in this term (usually an edited passed exam paper). This is marked using the grade boundaries from that particular year. The result for the listening exam is used alongside a grade for performing and composing to give an overall mock grade for music.

## TERMS 2/3

### Performing

A date and time is set for the final performing exam which is normally in the last week of term before the Easter holiday. Pupils are encouraged however, to arrange a time before that date to relieve some of the exam pressure.

### Composing

A deadline date is set for the completion and handing in of all composition work. This is normally a date before the Easter holiday. Composition lessons throughout term 2 consist of ongoing work and verbal feedback on the composition brief.

### Set Work revision

# QMGS Key Stage 4 Curriculum Topics



	<ul style="list-style-type: none"> <li>• Cadences</li> <li>• Discussion on 'what makes a successful melody'. (inc. Phrases, auxillary notes, passing notes)</li> <li>• How to add a chord sequence to a melody</li> <li>• Part writing and accompaniment styles for piano</li> </ul> <p>Terms 2&amp;3: All pupils work to a similar brief (theme &amp; variations). Once this is completed, pupils have more freedom to compose in any style of their choice. Pupils are encouraged to attend 'composing club' held at lunchtimes to develop their Sibelius skills. Pupils are encouraged to download the 'free' version of Sibelius First on their home computers.</p>	<p>This term (and the remainder of the course in term 3) the focus is on:</p> <ol style="list-style-type: none"> <li>1) Revision of all the set works.</li> <li>2) Focussed essay writing practice (question 9)</li> <li>3) Dictation question practice</li> <li>4) Practice on answering questions on previously unseen music.</li> </ol>
<p><b>Physical Education (GCSE)</b></p>	<p>Applied anatomy and physiology</p> <ul style="list-style-type: none"> <li>• The structure and functions of the musculoskeletal system</li> <li>• The structure and functions of the cardio-respiratory system</li> <li>• Anaerobic and aerobic exercise</li> <li>• The short and long term effects of exercise</li> </ul> <p>Movement analysis</p> <ul style="list-style-type: none"> <li>• Lever systems, examples of their use in activity and the mechanical advantage they provide in movement</li> <li>• Planes and axes of movement</li> </ul> <p>Physical training</p> <ul style="list-style-type: none"> <li>• The relationship between health and fitness and the role that exercise plays in both</li> <li>• The components of fitness, for sport and how fitness is measured and improved</li> <li>• The principles of training and their application to personal exercise/training programmes</li> <li>• How to optimise training and prevent injury</li> <li>• Effective use of warm up and cool down</li> </ul> <p>Socio-cultural factors and wellbeing in physical activity and sport</p> <ul style="list-style-type: none"> <li>• Sports psychology</li> <li>• Classification of skills (basic/complex, open/closed)</li> </ul>	<p>Health, fitness and wellbeing</p> <ul style="list-style-type: none"> <li>• Physical, emotional and social health, fitness and wellbeing</li> <li>• The consequences of a sedentary lifestyle</li> <li>• Energy use, diet, nutrition and hydration</li> </ul> <p>Use of data</p> <ul style="list-style-type: none"> <li>• Demonstrate an understanding of how data are collected – both qualitative and quantitative</li> <li>• Present data (including tables and graphs)</li> </ul> <p>Analyse and evaluate data</p>

# QMGS Key Stage 4 Curriculum Topics



	<ul style="list-style-type: none"> <li>• The use of goal setting and SMART targets to improve and/or optimise performance</li> <li>• Basic information processing</li> <li>• Guidance and feedback on performance</li> <li>• Mental preparation for performance</li> <li>• Socio-cultural factors</li> <li>• Engagement patterns of different social groups in physical activity and sport</li> <li>• Commercialisation of physical activity and sport</li> <li>• Ethical and socio-cultural issues in physical activity and sport</li> </ul>	
<b>Physical Education (Core)</b>	<p>Rugby</p> <ul style="list-style-type: none"> <li>• Spin Passing</li> <li>• Kicking Techniques</li> <li>• Fending</li> <li>• Set Plays</li> <li>• Tackling (2 man)</li> <li>• Mauling</li> <li>• Full scrums</li> <li>• Line Outs</li> <li>• Rucking/Counter Rucking</li> <li>• Positional play</li> </ul> <p>Hockey</p> <ul style="list-style-type: none"> <li>• Dribbling</li> <li>• Passing</li> <li>• Receiving</li> <li>• Tackling</li> <li>• Shooting (Backhand)</li> <li>• Positional play]</li> <li>• Formations</li> <li>• Short/Long corners</li> </ul> <p>Cricket</p> <ul style="list-style-type: none"> <li>• Batting – Match Scenarios – Plan! Introduce White-Pink Ball/Red ball</li> <li>• Bowling – Power play and death bowling</li> <li>• Fielding – Difficulty increased through increased speed/distance. Different types of dive, boundary fielding (Athletic development)</li> </ul>	<p>Rugby</p> <ul style="list-style-type: none"> <li>• Spin Passing</li> <li>• Kicking Techniques</li> <li>• Fending</li> <li>• Set Plays</li> <li>• Full scrums</li> <li>• Tackling/Grapple</li> <li>• Mauling</li> <li>• Line Outs (Lifting)</li> <li>• Rucking/Counter Rucking</li> <li>• Positional play</li> </ul> <p>Hockey</p> <ul style="list-style-type: none"> <li>• Dribbling</li> <li>• Passing</li> <li>• Receiving</li> <li>• Tackling</li> <li>• Shooting (Backhand)</li> <li>• Positional play]</li> <li>• Formations</li> <li>• Short/Long corners</li> </ul> <p>Cricket</p> <ul style="list-style-type: none"> <li>• Batting – Match Scenarios – Plan! Introduce White-Pink Ball/Red ball</li> <li>• Bowling – Power play and death bowling</li> <li>• Fielding – Difficulty increased through increased speed/distance. Different types of dive, boundary fielding (Athletic development)</li> </ul>

# QMGS Key Stage 4 Curriculum Topics



<p>Volleyball</p> <ul style="list-style-type: none"> <li>• Set</li> <li>• Dig</li> <li>• Serve (over arm)</li> <li>• Spike</li> <li>• Positional play</li> <li>• Team work</li> </ul> <p>Badminton</p> <ul style="list-style-type: none"> <li>• Serve (long/short)</li> <li>• High Clearance</li> <li>• Forehand</li> <li>• Backhand</li> <li>• Smash (Backhand)</li> <li>• Dropshot</li> <li>• Doubles play</li> </ul> <p>Table tennis</p> <ul style="list-style-type: none"> <li>• Forehand Push/Smash – Topspin/Backspin</li> <li>• Backhand Push/Smash – Topspin/Backspin</li> <li>• Grip</li> <li>• Forehand and Backhand Serve (with spin) and Increased Speed and Accuracy</li> <li>• Develop serve (Spin)</li> <li>• Singles/Doubles – Tactics</li> <li>• Forehand/backhand Slice and Flick</li> </ul> <p>Basketball</p> <ul style="list-style-type: none"> <li>• Passing</li> <li>• Receiving</li> <li>• Dribbling</li> <li>• Defensive stance</li> <li>• Tactics</li> <li>• Shooting</li> <li>• Lay Ups</li> </ul> <p>Athletics</p> <ul style="list-style-type: none"> <li>• Various track events (not 400m)</li> <li>• All throwing events (basic run up)</li> </ul>	<ul style="list-style-type: none"> <li>• Introduce boys to Senior Cricket (Completely different standard, coloured kit)</li> <li>• Psychology of the game – How do you deal with pressure</li> </ul> <p>Volleyball</p> <ul style="list-style-type: none"> <li>• Set</li> <li>• Dig</li> <li>• Serve (over arm)</li> <li>• Spike</li> <li>• Positional play</li> <li>• Team work</li> </ul> <p>Badminton</p> <ul style="list-style-type: none"> <li>• Serve (long/short)</li> <li>• High Clearance</li> <li>• Forehand</li> <li>• Backhand</li> <li>• Smash (Backhand)</li> <li>• Dropshot</li> <li>• Doubles play</li> </ul> <p>Table tennis</p> <ul style="list-style-type: none"> <li>• Forehand Push/Smash – Topspin/Backspin</li> <li>• Backhand Push/Smash – Topspin/Backspin</li> <li>• Grip</li> <li>• Forehand and Backhand Serve (with spin) and Increased Speed and Accuracy</li> <li>• Singles/Doubles – Tactics</li> <li>• Develop serve (Spin)</li> <li>• Forehand/backhand Slice and Flick</li> <li>• Focus on gameplay – How can you work out an opponent. What are their weaknesses?</li> <li>• Full matches played at a high speed/intensity</li> </ul> <p>Basketball</p> <ul style="list-style-type: none"> <li>• Passing</li> <li>• Receiving</li> <li>• Dribbling</li> <li>• Defensive stance</li> <li>• Tactics</li> </ul>
---	---

# QMGS Key Stage 4 Curriculum Topics



	<ul style="list-style-type: none"> <li>All jumping events Fitness testing will be done on a termly basis.</li> </ul> <p>Students practical ability and knowledge will be assessed when performing practically. Fitness testing will be done on a termly basis.</p> <p>Students practical ability and knowledge will be assessed when performing practically. Fitness testing will be done on a termly basis.</p> <p>Practical performances will be assessed on a weekly basis.</p> <p>Students knowledge of lesson content will be assessed using questioning on a weekly basis.</p>	<ul style="list-style-type: none"> <li>Set Plays</li> <li>Positional play</li> <li>Shooting</li> <li>Lay Ups</li> </ul>
<b>Physics</b>	<ol style="list-style-type: none"> <li>Energy <ul style="list-style-type: none"> <li>Energy stores and systems</li> <li>Energy changes</li> <li>Conservation of energy</li> <li>National and global energy resources</li> </ul> </li> <li>Electricity <ul style="list-style-type: none"> <li>Current, potential difference and resistance</li> <li>Series and parallel circuits</li> <li>Electricity in the home</li> <li>Energy transfer in electricity</li> <li>Static electricity</li> </ul> </li> <li>Particle Model of Matter <ul style="list-style-type: none"> <li>Changes of state</li> <li>Internal energy</li> <li>Gases and pressure</li> </ul> </li> <li>Atomic Structure <ul style="list-style-type: none"> <li>Atoms and isotopes</li> <li>Nuclear radiation</li> <li>Nuclear safety</li> <li>Fission and fusion</li> </ul> </li> <li>Forces <ul style="list-style-type: none"> <li>Scalars and vectors</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>Waves <ul style="list-style-type: none"> <li>Transverse and Longitudinal waves</li> <li>Wave properties and interactions</li> <li>Electromagnetic waves</li> <li>Optics</li> <li>Black body radiation</li> </ul> </li> <li>Magnetism and Electromagnetism <ul style="list-style-type: none"> <li>Magnetic fields</li> <li>Motor effect</li> <li>Generator effect</li> <li>Induction</li> <li>Transformers</li> <li>The National Grid</li> </ul> </li> <li>Space Physics <ul style="list-style-type: none"> <li>Solar System</li> <li>Life cycle of stars</li> <li>Orbital motion</li> <li>Doppler effect</li> <li>Big Bang Theory</li> </ul> </li> </ol>

# QMGS Key Stage 4 Curriculum Topics



	<ul style="list-style-type: none"> <li>• Forces</li> <li>• Work done and energy transfer</li> <li>• Elasticity</li> <li>• Moments</li> <li>• Pressure in fluids</li> <li>• Linear motion</li> <li>• Newton’s Laws of Motion</li> <li>• Momentum</li> </ul>	
<p><b>PSHEE</b></p>	<p><u>Health &amp; Wellbeing</u></p> <ul style="list-style-type: none"> <li>• Stress Management</li> <li>• Sleep</li> <li>• Drugs &amp; Alcohol</li> <li>• First Aid: Key Stage 3 Re-cap and Seizures</li> </ul> <p><u>Relationships &amp; Sex Education</u></p> <ul style="list-style-type: none"> <li>• Sexual Health</li> <li>• Contraception</li> <li>• Consensual Sexual Communication</li> </ul> <p><u>Media Literacy</u></p> <ul style="list-style-type: none"> <li>• Social Media Algorithms</li> <li>• Pornography</li> <li>• Desensitisation and Radicalisation: Extreme Content</li> </ul> <p><u>Citizenship &amp; Politics</u></p> <ul style="list-style-type: none"> <li>• Unconscious Bias and Microaggressions</li> <li>• Historical Politics</li> <li>• Global Politics</li> <li>• Culture and Community</li> </ul> <p><u>Careers &amp; Finance</u></p> <ul style="list-style-type: none"> <li>• Post-18 Pathways</li> </ul>	<p><u>Careers &amp; Finance</u></p> <ul style="list-style-type: none"> <li>• Post-16 Pathways</li> <li>• Work Experience &amp; Volunteering</li> <li>• Money Worries &amp; Gambling</li> </ul> <p><u>Citizenship &amp; Politics</u></p> <ul style="list-style-type: none"> <li>• Crime and Deviance</li> <li>• Drugs and the Law</li> <li>• Serious and Organised Crime</li> <li>• Class</li> <li>• Gender</li> <li>• Family</li> </ul> <p><u>Relationships &amp; Sex Education</u></p> <ul style="list-style-type: none"> <li>• Gender-Based Violence</li> <li>• ‘Banter’ and Harassment</li> <li>• Relationships Online</li> </ul> <p><u>Media Literacy</u></p> <ul style="list-style-type: none"> <li>• Media and Society</li> <li>• Online Grooming</li> </ul> <p><u>Health &amp; Wellbeing</u></p> <ul style="list-style-type: none"> <li>• First Aid: Bleeding and Shock</li> </ul>

# QMGs Key Stage 4 Curriculum Topics



	<ul style="list-style-type: none"> <li>Higher Education Finance</li> </ul>	
<b>Psychology</b>	<p>Development</p> <ul style="list-style-type: none"> <li>How the brain develops</li> <li>Cognitive and Intellectual development</li> <li>Education and intelligence</li> <li>Mindsets and learning</li> <li>Moral psychology, and moral development</li> </ul> <p>Memory</p> <ul style="list-style-type: none"> <li>The structure of memory</li> <li>Short- and Long- Term memory and working memory</li> <li>Amnesia</li> <li>Reconstructive Memory and false memories</li> <li>Are we more than mere computers?</li> </ul> <p>Psychological Problems</p> <ul style="list-style-type: none"> <li>Depression and Addiction</li> <li>Treatments and Therapy</li> <li>The Nature/Nurture Debate</li> </ul> <p>Neuropsychology</p> <ul style="list-style-type: none"> <li>The structure of the brain, and functions of brain parts</li> <li>Lateralisation of function and sex differences</li> <li>Neurobiology and neuropsychology</li> <li>Brain damage, including damage to the PFC and optical cortex.</li> <li>How Psychology developed</li> </ul> <p>Social Influence</p> <ul style="list-style-type: none"> <li>Obedience, conformity, deindividuation and the bystander effect</li> <li>Majority and minority influence</li> <li>Crowds and the dangers of blind obedience</li> <li>Social psychology and culture</li> </ul> <p>Criminal Psychology</p>	<p>Everything listed in the table on the left, and in addition:</p> <p>Development</p> <ul style="list-style-type: none"> <li>Piaget and Inhelder (1956) Three mountains task</li> <li>Gunderson et al. (2013) Parent Praise to 1-to 3-Year-Olds Predicts Children's Motivational Frameworks 5 Years Later</li> </ul> <p>Memory</p> <ul style="list-style-type: none"> <li>Bartlett (1932) War of the Ghosts</li> <li>Peterson and Peterson (1959) Short-term Retention of Individual Verbal Items</li> </ul> <p>Psychological Problems</p> <ul style="list-style-type: none"> <li>Caspi et al. (2003) Influence of Life Stress on Depression: Moderation by a Polymorphism in the 5-HTT Gene</li> <li>Young (2007) Cognitive Behavior [sic] Therapy with Internet Addicts: Treatment Outcomes and Implications</li> </ul> <p>Neuropsychology</p> <ul style="list-style-type: none"> <li>Damasio et al (1994) The Return of Phineas Gage: Clues About the Brain from the Skull of a Famous Patient</li> <li>Sperry (1968) Hemisphere Deconnection and Unity in Conscious Awareness</li> </ul> <p>Social Influence</p> <ul style="list-style-type: none"> <li>Piliavin et al (1969) Good Samaritanism: An Underground Phenomenon?</li> <li>Haney, Banks, and Zimbardo (1973) A Study of Prisoners and Guards in a Simulated Prison</li> </ul> <p>Criminal Psychology</p> <ul style="list-style-type: none"> <li>Bandura, Ross and Ross (1961) Transmission of Aggression through Imitation of Aggressive Models</li> <li>Charlton et al (2000) Children's Playground Behaviour Across Five Years of Broadcast Television: A Naturalistic Study in a Remote Community</li> </ul>

# QMGS Key Stage 4 Curriculum Topics



	<ul style="list-style-type: none"> <li>• Conditioning and other explanations of criminality</li> <li>• Social Learning Theory</li> <li>• Personality theory, and psychopathy/ psychoticism</li> <li>• Punishment and recidivism</li> <li>• Token economies and anger-management</li> </ul> <p>The Self (subject to change in 2023)</p> <ul style="list-style-type: none"> <li>• Self-concept</li> <li>• Identity and free will</li> <li>• Humanistic Psychology</li> <li>• Temperament</li> <li>• Personality Types</li> </ul> <p>Research Methods and Mathematics</p> <ul style="list-style-type: none"> <li>• Scientific methods and research designs</li> <li>• Sampling</li> <li>• Reliability and validity</li> <li>• Ethical and unethical research</li> <li>• Statistical analysis and descriptive statistics</li> <li>• Analysing and interpreting results and data</li> </ul>	<p>The Self</p> <ul style="list-style-type: none"> <li>• Allport (1936) cardinal, central and secondary personality traits</li> <li>• Cattell (1946) 16PF personality factor assessment</li> </ul>
<p><b>RPE (Religion, Philosophy, Ethics)</b></p>	<p>Everything outlined in the document “QMGS Key Stage 3 Curriculum” and in addition:</p> <ol style="list-style-type: none"> <li>GCSE.01 :: Introductory work in the realms of philosophy, religious understanding and ethics             <ol style="list-style-type: none"> <li>Religious practices (esp. wudu and baptism);</li> <li>Religious phenomenology and syncretism, pragmatism and themes of ultimate concern (God, revelation, the dignity of humanity)</li> <li>Ethical dilemmas and critical thinking skills</li> </ol> </li> <li>GCSE.02 :: Philosophy of Religion             <ol style="list-style-type: none"> <li>Theism, God, Revelation</li> <li>Life after Death</li> </ol> </li> </ol>	<p>Everything outlined in the table to the left; everything noted in the relevant GCSE specification; and including:</p> <ol style="list-style-type: none"> <li>GCSE.07 :: Social Justice             <ol style="list-style-type: none"> <li>Prejudice and discrimination;</li> <li>Distribution of Wealth;</li> <li>Social Justice</li> <li>Medical Ethics (Abortions)</li> </ol> </li> <li>GCSE.08 :: Sexual Ethics             <ol style="list-style-type: none"> <li>Marriage, divorce and the Family;</li> <li>Cultural practices and beliefs about marriage, and religious views of same; non-religious marital ethics and practices;</li> </ol> </li> </ol>



# QMGS Key Stage 4 Curriculum Topics



	<p>c. Atheism, Humanism, Secularism</p> <p>3. GCSE.03 :: Jesus Christ</p> <p>a. Eschatology (Islamic and Christian)</p> <p>i. Shia/ Sunni</p> <p>b. Revelation</p> <p>c. Historicity of Jesus; Christological questions of the nature and purpose of Jesus’s earthly life;</p> <p>d. Credibility of religious text;</p> <p>4. GCSE.04 :: The Muslim Worldview</p> <p>a. Female Genital Mutilation, tolerance, culture;</p> <p>b. The image of Islam in the UK;</p> <p>c. basic Islamic history, including general aspects of the Rise of Islam</p> <p>5. GCSE.05 :: Legal Ethics</p> <p>a. The nature and purpose of state-sanctioned (legitimate) punishment;</p> <p>b. Theories of punishment and religious ideas about sin, forgiveness, punishment and post-mortem existence;</p> <p>c. Capital Punishment and its role in a religious worldview, and the appropriateness of same in the modern British context</p> <p>6. GCSE.06 :: Politics and Civics</p> <p>a. State of Nature, community, family, society;</p> <p>b. Hajj and Ummah; Christian fellowship;</p> <p>c. Original Sin;</p> <p>d. Essay skills, and skills for extended writing, deployment of argument and evidence and skills required for answering questions in a GCSE examination.</p>	<p>c. Homosexuality and religious attitudes to minority sexualities;</p> <p>d. The roles of men and women;</p> <p>e. Equality and human rights;</p> <p>3. GCSE.09 :: Religious Literature</p> <p>a. Islamic and Christian sacred texts;</p> <p>b. Islamic and Christian beliefs and practices, esp. the practice of religious duties and obligations;</p> <p>c. Revelation and knowledge; interpretation and relevance in modern British society;</p> <p>4. GCSE.10 :: Evil and Suffering</p> <p>a. Philosophical and ethical ideas about suffering and undeserved suffering, sin, Original Sin, shirk and the response of religious thinkers to both philosophical and practical issues of evil and suffering;</p> <p>b. The way in which religious people deal with suffering, loss and pain in a non-philosophical context, but as a truth of the human condition;</p> <p>c. Secular and humanist ethics and philosophies around the nature of God, the nature of suffering and the alleviation of pain.</p> <p>5. GCSE.11 :: Death</p> <p>a. Religious and non-religious beliefs and practices about death and the afterlife, including Heaven and Hell;</p> <p>b. Funeral rites, and customs around death;</p> <p>c. Philosophical and psychological ideas about death and dying, including personhood, survival throughout time and the ethics of punishment or reward post-mortem;</p> <p>d. The Resurrection of Jesus Christ; Christian and Islamic ideas about post-mortem existence, and how to understand and contextualise these ideas as either fact or myth.</p>
<p><b>Spanish</b></p>	<ul style="list-style-type: none"> <li>• Topic coverage 1-12 at Foundation Level Family/technology/free-time activities/customs and festivals/home town/charity work/environment and poverty/holidays/current and future study/life at school/university or work/careers and 1-2 at Higher Level – family/technology.</li> </ul>	<ul style="list-style-type: none"> <li>• Topic coverage 1-12 at Higher Level (1-2 covered in Y10) – Family/technology/free-time activities/customs and festivals/home town/charity work/environment and poverty/holidays/current and future study/life at school/university or work/careers.</li> </ul>

# QMGS Key Stage 4 Curriculum Topics



	<ul style="list-style-type: none"><li>• Tenses covered by end of Y10 - present (regular, irregular, reflexive, stem-change, impersonal verbs)/immediate future/preterite/imperfect/perfect/future/conditional.</li><li>• Two verbs together. Negatives/questions. Use of por/para.</li><li>• Adjectives – agreement and position</li><li>• Pronouns: subject/direct + indirect object/disjunctive/possessive + position</li><li>• Listening/Reading/Writing/Speaking practised in class, together with translation into and out of the target language.</li><li>• Role-plays, photocards and general conversation form the speaking exam.</li></ul>	<ul style="list-style-type: none"><li>• Tenses covered by end of Y11 - present (regular, irregular, reflexive, stem-change, impersonal verbs)/immediate future/preterite/imperfect/perfect/future/conditional + irregulars of all types of verb and all tenses + pluperfect/present subjunctive + key uses/imperfect subjunctive + key uses/present and imperfect continuous – for recognition purposes. The passive with Ser and reflexives. Imperatives taught for use and recognition.</li><li>• Two verbs together. Negatives/questions. Use of por/para.</li><li>• Adjectives – agreement and position</li><li>• Pronouns: subject/direct + indirect object/disjunctive/possessive + position</li><li>• Listening/Reading/Writing and Speaking practised in class, together with translation into and out of the target language.</li><li>• Role-plays, photocards and general conversation form the speaking exam.</li></ul>
--	---	--