



DURHAM JOHNSTON
COMPREHENSIVE SCHOOL
— DARE TO BE WISE —

Year 13

Curriculum Overview *Half Term 3*

Dear Parent/Carer,

In the following booklet you should find an overview of what your child will be studying this half term in school. We've included key details on what they will be looking at in each subject, how they'll be assessed and what they might do to further develop their understanding. The aim is for this to make it easier for you to work with the school supporting your child with their work.

All lessons last for one hour. In Year 12, students spend 5 hours per week on each of their subjects. They also attend lessons in Preparation for Higher Education on a rotational basis.

The information for each subject is categorised as follows:

Topics / tasks: This is the overview of the topics Year 12 students will be covering this half term.

Content and skills: This explains what areas students will be looking at, and the skills they will be developing during the half term.

Assessment: This explains how students will be assessed on their understanding of this topic.

Stretch and challenge: This gives suggestions of how students can explore this area in more detail if they wish.

Exam Boards

This table shows which exam board the school uses for each qualification.

Click on the [exam board](#) to view the specification via their website.

Subject	Awarding Body	Subject	Awarding Body	Subject	Awarding Body
Art	Edexcel	Ethics and Philosophy (RS)	OCR	Music	AQA
Biology	OCR	French	AQA	Physical Education	AQA
Business	Edexcel	Geography	AQA	Physics	OCR
Chemistry	OCR	German	AQA	Psychology	AQA
Computer Science	AQA	Government and Politics	AQA	Sociology	AQA
Economics	Edexcel	History	OCR	Spanish	AQA
English Language	AQA	Latin	OCR		
English Literature	AQA	Maths	OCR		

Art

Topics / tasks:	Students will be continuing their Personal Investigation projects with guidance from their class teachers in their 2 double lessons. In the single lesson, students will focus on the Related Study element of their A Level coursework.
Content and skills:	The ethos of the Personal Investigation is that the project being created is identified by the individual student in both theme, media and techniques. Whilst it is anticipated that students will work ever more independently, class teachers will continue to give guidance and support. This term there will be more emphasis on utilising the exploratory nature of their previous work to produce increasingly sophisticated and resolved artwork.
Assessment:	• Their practical work will be reviewed and commented on regularly by their class teachers. • Technical skills will be assessed in conjunction with the imaginative and creative element of their work, as a higher level of fluency in being able to articulate their ideas using visual language is to be expected at A Level. This will also be expected where written language is used. • The Assessment Objectives (OCR exam board) will be referred to throughout the process. Regular verbal feedback by class teachers and a program of written self-assessment as part of creating the portfolio.
Stretch and challenge:	Extending their work through a greater degree of sophistication including the creative content of their work and the exploration of techniques, materials and processes being used. Students will be expected to gather independent research for their Related Study which will also inform their Personal Investigations. This could include further 'reading' around their chosen subject to provide a wider context and more in depth understanding of their ideas. A higher level of critical thinking will be evident in their annotation and extended analysis.

Biology

Topics / tasks:	Module 5 - Hormones and Nervous system Module 6 - Cellular control and genetics
Content and skills:	Hormonal control of blood glucose and diabetes Transmission of nerve impulses Mutations and control of gene expression Using genetic crosses to study inheritance
Assessment:	Assessment using past exam questions after each topic
Stretch and challenge:	Preparing for the British Biology Olympiad. (https://www.ukbiologycompetitions.org/british-biology-olympiad/syllabus/)

Business

Topics / tasks:	The importance of consolidation of Year 12 (Themes 1 & 2) work – recommendation 1 hour per Year 12 Theme per week + 1 hour per week Theme 3 consolidation. Use textbooks, CGP guides and in-class booklets for this – back up with revision guides/notes Theme 4: Global Business
Content and skills:	3.6 Completion & consolidation 4.1.3-5 Factors increasing globalisation, protectionism & trading blocs 4.2.4-5 Joint ventures, global competitiveness 4.3 Global Marketing: marketing, niche markets, cultural & social factors 4.4 Global industries and companies (MNCs) – impact, ethics of and controlling MNCs Re-enforcement / reminder of: 1. The expected approach / standards. 2. Exam board requirements & assessment overview. 4+8+10+12+20 mark answer expectations 3. Content + use of context + structure / technique. A synoptic approach to exam technique. Paper 3 – synoptic – researching the 2021 set industry: Fast food / takeaway and restaurant industry
Assessment:	Q & A in class. Making good use of plans to ATQ (answer the question) Past exam questions - exclusively time-constrained - building up in time covered. Full Paper 1 (Theme 1 (12) & Theme 4 (13) mock Full Paper 3 mock – in the context of the 2023 exam Much more synoptic assessments (4 themes into 3 exams). Theme 4 table
Stretch and challenge:	Taking a topic and leading our 'what's in the news' insight / class discussion into contemporary issues - relevant to previously studied areas of the course. Regularly reviewing / investigating news – seeing impact / response businesses / governments – BBC website good source. Access Teams regularly for up-to-date context to investigate.

Chemistry

Topics / tasks:	Module 5: Rates Module 5: Equilibrium Module 5: Redox
Content and skills:	• Monitoring rates • Reaction orders • The rate equation and rate determining step • Arrhenius equation • Redox Chemistry • Electrochemical Cells • Reversible Reactions • Equilibrium constant
Assessment:	End of topic tests for each section, past paper questions.
Stretch and challenge:	Students can prepare for the RSC Olympiad which happens in January: https://edu.rsc.org/resources/chemistry-olympiad-past-papers/1641.article

Computer Science

Topics / tasks:	Coursework completion (Implementation, Testing and Evaluation) The AQA Skeleton Program Recap of Paper 1 Topics: Turing Machines, Big-O Notation and Hashing Recap of Paper 2 Topics: Floating Point Notation, Internet and Internet Security
Content and skills:	Students will continue to develop their NEA project, providing evidence that extensive Testing has been carried out Students will analyse the AQA Skeleton Program and determine its purpose, as well as predict future additions Students will revisit Paper 1 Topics and develop exam technique in those areas Students will revisit Paper 2 Topics and develop exam technique in those areas
Assessment:	Coursework development review for Implementation Coursework development review for Testing Assessment on Networks, The Internet, and other Y12 topics /60 Floating Point Recap Assessment /30
Stretch and challenge:	Practical extension: Investigate the use of Backus-Naur Form and its relevance to Lexical/Syntax analysis Internet (theory) extension: Understand how Google makes use of the PageRank algorithm

Economics

Topics / tasks:	• Restrictions on free trade • Balance of payments • Exchange rates • International competitiveness • Absolute and relative poverty • Inequality	• Measures of development • Factors influencing growth and development • Strategies influencing growth and development • Role of financial markets • Market failure in the financial sector
Content and skills:	Use of basic and advanced economic terminology, mastering chains of reasoning, application of economic knowledge to different situations, quantitative and qualitative economic analysis and evaluation of case study material.	
Assessment:	Past Paper Questions.	
Stretch and challenge:	Use of textbook. Online material - follow @econdj on Twitter, stay up to date with current affairs - Financial Times, The Economist, The Guardian, BBC. Wider reading - see reading list.	

English Language

Topics / tasks:	Paper 1: Language, the individual and society Section B: Child Language Acquisition Non-exam assessment: Language in Action	Paper 2: Language Diversity and Change Section A: Diversity and Change
Content and skills:	- Developing an understanding of how children acquire the English Language, including literacy. This will include a study of phonological, lexical, pragmatic and grammatical development regarding speech acquisition. - Evaluate different theories, views and approaches as to how children acquire the English Language. - Practising writing essays by examining exemplars and producing their own paragraphs/essays. - Exploring and analysing language data independently and developing and reflecting upon their own writing expertise	- Revise and recap their understanding of how different social groups use language. - Revise and evaluate different theories, approaches and views to language change, gender, sociolect and accent and dialect. - Practice and complete essays/paragraphs to evaluate different views on Language Change and differing social groups. - Practise writing essays by examining exemplars and producing their own paragraphs/essays.
Assessment:	Writing Paper 1 Section B essays (50 minutes) Marking and grading of their investigation (10%)	Past paper questions/essays for Section A
Stretch and challenge:	- Read 'Language Development' (Speaking and Literacy sections) (Cambridge Topics in English Language) - Read 'Child Language' (Matthew Saxton) - Read literacy articles at: https://englishlangsfx.blogspot.com/search?q=literacy - Read 'Mastering Advanced English Language' (Sara Thorne)	- Read 'Language Variety and World Englishes' (Cambridge Topics in English Language) - Read 'Language Change' (Cambridge Topics in English Language) - Read 'Attitudes to Language' (Cambridge Topics in English Language) - Conduct personal research into examples of language change across time.

English Literature

Topics / tasks:	Paper 1 Revision	Paper 2 Revision
Content and skills:	- Revising all of the Pre-1900 Poetry Anthology poems. - Revising <i>The Great Gatsby</i>. - Comparing how key themes of love are presented in the Pre-1900 Poetry Anthology and in <i>The Great Gatsby</i>. - Practising writing comparative essays by examining exemplars and producing their own paragraphs/essays. - Revising Unseen Poetry - Revising <i>Othello</i>	- Continue evaluating and improving <i>Revolutionary Road/ Streetcar</i> essays. - Revising Unseen Prose by annotating aspects of structure, perspective, language etc - Exploring relevant contextual information in Unseen Prose. - Revising <i>Skirrid Hill</i> - Practising writing essays by examining exemplars and producing their own paragraphs/essays.
Assessment:	Writing a Paper 1 exam (3 hrs)	Writing a Paper 2 Exam. (2.5 hours)
Stretch and challenge:	Read other love poetry by writers such as Langston Hughes, Audre Lorde, etc. Read critical materials about the pre-1900 poems, such as Carol Rumens's <i>Poem of the Week</i> articles. Reading secondary material to establish strong debate in their independent NEA coursework such as from the British Library online collection: https://www.bl.uk/learning/online-resources	Reading widely prose texts from 1945 onwards that explore themes discussed such as political upheaval, isolation, gender and post-imperialism for example <i>Americanah</i> by Chimamanda Adichie and <i>Girl, Woman, Other</i> by Bernadine Evaristo. Reading secondary material about issues of 'modern times', for example: https://www.bl.uk/learning/online-resources

Ethics and Philosophy (Religious Studies)

Topics / tasks:	Philosophy of Religion: Religious Language Religious Ethics: Sexual Ethics Developments in Christian Thought: Liberation theology/Marxism
Content and skills:	Philosophy of Religion – Religious Language. Ethics – Sexual ethics and the application of natural law, situation ethics, Kantian ethics, and the various forms of utilitarianism. Developments in Christian Thought – Religious Pluralism and the challenges of Secularism.
Assessment:	Essays from each strand throughout the term to check understanding and provide feedback for areas of development in subject content and essay writing skills. Essays based upon revision material.
Stretch and challenge:	Ayer, A. J. (2001) Language, Truth and Logic, Dover Publications, Swinburne, R. (1997) 'God-talk is not evidently nonsense' in Davies, B. (2000) Philosophy of Religion: a guide and anthology, Oxford University Press, Internet Encyclopaedia of Philosophy Religious Language [http://www.iep.utm.edu/rel-lang/]. Pope Paul VI (1968) Humanae Vitae [Humanae Vitae (July 25, 1968) Paul VI (vatican.va)], Church of England House of Bishops (1991) Issues in Human Sexuality, London: Church House Publishing, Mill, J.S. (1859) On Liberty, Chapter 1 [The Project Gutenberg eBook of On Liberty, by John Stuart Mill.]. Boff, L. and Boff, C. (1987) Introducing Liberation Theology, Burns and Oates, Gutierrez, G. (1974/2000) A Theology of Liberation, SCM Press, Chapter 4, Congregation of the Doctrine of the Faith (1984) Instruction on Certain Aspects of the 'Theology of Liberation', Wilcockson, M. (2011) Christian Theology, Hodder Education, Chapter 7.

French

Topics / tasks:	1. Students will continue their work on “les marginalisés” (Unit 2). 2. Students will finish Unit 5 on Political power and start Unit 6 on Immigration. 3. Literature: Boule de Suif by Maupassant
Content and skills:	1. Students will learn specific vocabulary on the topic, discuss the issues of marginalisation in French speaking countries. 2. We will discuss different attitudes towards strikes and protests and discuss some of the political issues around immigration in francophone countries. 3. Students will study further stories from the selection: La mère sauvage and Un Duel.
Assessment:	1. Students will practise translations on the topic, will write their view on some aspects of the topic, and complete reading, listening, résumés and speaking activities. 2. Students will complete a test on unit 5 and complete regular vocabulary tests. 3. Students answer sets of questions each week and will complete short summaries.
Stretch and challenge:	1. Students can compare marginalisation in France, and other francophone countries with the situation in England. 2. Students can research the recent “gilets jaunes” movement and look into the recent racial tensions in metropolitan France. 3. Students can read further works by Maupassant.

Further Maths

Topics / tasks:	Additional Pure Mathematics: • Recurrence Relations: solving second order recurrence relations Mechanics • Centre of Mass: particles, laminae, compound shapes, integration, equilibrium, sliding and toppling
Content and skills:	Review and extension of AS topics. Applications and modelling. Interpretations of Results. Proof of Results Examination technique Problem solving Self-evaluation and study skills.
Assessment:	Regular Homework assignments Autumn Mock Exam Statistics Mock Exam once the Statistics Course is Complete
Stretch and challenge:	UKMT Maths Challenges: • British Mathematical Olympiad Round 2 Problem solving on www.maths.nrich.org There are a variety of courses available to help students with problem solving and preparation for entrance exams. Students should check Teams regularly for these opportunities.

Geography

Topics / tasks:	Hazards	Global Systems & Global Governance
Content and skills:	Earthquakes (including causes, impacts, effects and responses), associated hazards and case studies. Tropical revolving storms (including causes, effects and responses). The nature of wildfires and 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. 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.	Trading relationships and 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. Analysis and assessment of the geographical consequences of global systems to specifically consider how international trade and variable access to markets and impacts on students' and other people's lives across the globe. The impacts of globalisation to consider the benefits of growth, development, integration, stability against the costs in terms of inequalities, injustice, conflict and environmental impact.
Assessment:	Completing exam style questions that test the ability to interpret and analyse a range of figures as well questions that require the ability to accurately apply detailed knowledge to assess geographical issues and concepts.	Completing exam style questions that test the ability to interpret and analyse a range of figures as well questions that require the ability to accurately apply detailed knowledge to assess geographical issues and concepts.
Stretch and challenge:	Go to the AQA A level Geography website and download past copies of A level paper 1, practice exam questions and check answers using the mark schemes. Reading widely around the topic using the guide provided at the start of the year as well as articles shared on Teams.	Go to the AQA A level Geography website and download past copies of A level paper 2, practice exam questions and check answers using the mark schemes. Reading widely around the topic using the guide provided at the start of the year as well as articles shared on Teams.

German

Topics / tasks:	A2 UNIT 1: Continued A2 Unit 2: Multiculturalism in German-Speaking-Society: Integration A2 UNIT 4: Continued A2 Unit 5: Aspects of Political Life In The German-Speaking World: Politics And Young People A2 Writing: The Literature Book - Der Besuch Der Alten Dame A2 Speaking: Individual Research Project
Content and skills:	Students will study A2 UNIT 2: multiculturalism in the German-speaking-society - integration. Students will study A2 UNIT 5: politics and young people. Students will be developing their listening, speaking, reading, writing, grammar, translation and summarising skills. Students will learn new vocabulary and grammar to support their speaking and writing skills. Students will reinforce their vocabulary and grammar knowledge. Students will prepare their IRP for the speaking exam and practice writing A2 essays about the literature book "Der Besuch der alten Dame".
Assessment:	In class, there will be vocabulary and/ or grammar tests and assessment of listening, speaking, reading, translating, summarising and writing skills. There will also be formal mock exams in Listening, Reading, Translating, Writing and Speaking.
Stretch and challenge:	Students can learn further advanced vocabulary and practise German grammar. Students can complete in depth research on the IRP and write additional essays on the literature book topic. Students can research the wider topic of "The Fall of the Berlin Wall".

History

Topics / tasks:	The Pursuit of Native American Civil Rights
Content and skills:	Students will be studying the history of Native Americans in US society between 1865-1992, covering key events from the Plains Wars, the impact of the Dawes Act, the World Wars and the New Deal, through to the development of Red Power radicalism in the 1960s and 1970s and the issues facing Native communities in the 1980s/early 90s. Students will also continue to work on their coursework, whilst also revisiting parts of the British history course that were covered during lockdown, particularly from the 1960s onwards.
Assessment:	Students will be regularly assessed using practice examination questions that assess key skills of explanatory writing, building arguments and evaluating different issues and events over time. Students will complete their coursework.
Stretch and challenge:	For the US History course, <i>Bury My Heart At Wounded Knee</i> by Dee Brown comes very highly recommended, and is considered a classic for a reason. Many histories of the Native Americans end in the early 20th century as assimilation becomes a <i>fait accompli</i> for many Native tribes; however, there are numerous general histories of America which will help to provide a broader context to the events studied in class. For the British side, <i>White Heat</i>, <i>State of Emergency</i>, <i>Seasons in the Sun</i> and <i>Who Dares Wins</i> by Dominic Sandbrook are a good accompaniment to the upcoming material, as is Andrew Marr's <i>A History of Modern Britain</i>. The accompanying documentary series to Marr's book also provides an excellent overview of how British society changed during the twentieth century. Once students have completed the American course, they will be revisiting the French Revolution and Rule of Napoleon in class. For those wishing to make a head start on this, there is a wealth of literature about Napoleon. <i>Napoleon the Great</i> by Andrew Roberts is a comprehensive, detailed and enjoyable read by an author clearly infatuated with his subject. A recent episode of the Radio 4 series 'You're Dead to Me' is a light-hearted and worthwhile listen about Napoleon's early years (https://www.bbc.co.uk/programmes/p08yd09s). Mike Duncan's <i>Revolutions</i> podcast (series three) provides an excellent narrative overview of the period.

Latin

Topics / tasks:	Verse unseen translation & A-level language work Set texts (continued): Tacitus, Annals 14 & Virgil, Aeneid Book 2
Content and skills:	Latin verse vocabulary, translation of unseen prose and verse, plus practising A-level style comprehension questions. Continue with prose and verse set texts, aiming to complete the sections required in Latin this half-term.
Assessment:	Exam-style language and literature questions, in addition to regular vocabulary tests.
Stretch and challenge:	Using online resources such as Quizlet to consolidate vocabulary knowledge. Read about the Julio-Claudian emperors, as context for both authors; read Homer's Iliad and the whole of the Aeneid in translation.

Maths

Topics / tasks:	Proof by Contradiction Forces: resolving forces, connected particles Moments and equilibrium Statistical Hypothesis Testing for the mean of a normal distribution, and for the significance of a correlation Probability: conditional probability, tree diagrams and Venn diagrams Consolidation and Revision
Content and skills:	• Revision and consolidation of previously learned skills • Extension of skills to unfamiliar contexts • Reasoning and problem solving skills
Assessment:	Mock examination. Weekly homework tasks.
Stretch and challenge:	• Completing enrichment tasks on www.nrich.maths.org • Further reading and research

Music

Topics / tasks:	AOS1: Romantic Piano Music: Grieg AOS7: Art Music: Messiaen Composition: Free Composition Performance: Preparing Submission
Content and skills:	Continuing to develop aural perception skills Exploring cultural context of set topics/composers Assimilating advanced harmonic techniques free composition
Assessment:	Regular exam-style listening questions Longer passages of written prose analysis Formative assessment of evolving Free Composition
Stretch and challenge:	Undertake some further reading in the areas of 'Romantic Piano Music' and 'Art Music Since 1910' Revisit previous content and written work, improving in response to teacher feedback

Politics

Topics / tasks:	3.3.1. Ideologies
Content and skills:	3.3.1.1 Liberalism; 3.3.1.2 Socialism; 3.3.1.3 Conservatism; 3.3.1.4 Anarchism
Assessment:	Written assignments
Stretch and challenge:	Reading a textbook or teacher notes; Reading a broadsheet newspaper (Guardian, Times, Telegraph, Independent); picking a book from the reading list handed out at the start of term; using www.parliament.uk/briefing-papers/ or www.aqa.org.uk to look for past papers to practice

Physics

Topics / tasks:	Module 6 – Particles and medical physics			
Content and skills:	<u>Electric fields</u> • Coulombs law • Uniform electric fields and capacitance • Charged particles in uniform electric fields • Electric potential and energy	<u>Magnetic fields</u> • Charged particles in magnetic fields • Electromagnetic induction • Faraday's Law and Lenz's Law • Transformers	<u>Particle Physics</u> • The alpha particle scattering experiment • The nucleus • Antiparticles, hadrons and leptons • Quarks • Beta decay	<u>Medical Imaging</u> • X-rays • Interaction of X-rays with matter • CAT scans
Assessment:	In-class assessment, homework assignments, topic tests. Mock exam.			
Stretch and challenge:	Completing relevant exercises on Isaac Physics website.			

Physical Education

Topics / tasks:	Physiology, psychology and socio-cultural topics
Content and skills:	In psychology students will continue their work on Schmidt's schema theory. They will also study group dynamics in sport and models of leadership and how that affects performance. In physiology students will examine theories of angular momentum, Newton's analogues and conservation of angular momentum and their application to sporting performance. In socio-cultural topics students will conclude their work on deviance in sport, considering the link between sport and the law. They will examine the positive and negative impact of commercialisation in sport.
Assessment:	Everlearner checkpoint tests and long answer questions and exam style questions.
Stretch and challenge:	Use PE journals and internet sources to read beyond set A level text books. Also keep up to date with current sporting issues in relation to topics covered.

Psychology

Topics / tasks:	Research Methods
Content and skills:	Recap AS Research Methods, then introduce new research methods: reliability, validity, statistical testing, probability and significance, levels of measurement, stats tests, features of a science and answering long questions in research methods.
Assessment:	3 x homework assignment, 1 x mock assessment
Stretch and challenge:	Textbook Chapter 3

Sociology

Topics / tasks:	Sociology of Crime and Deviance, Theory and Methods
Content and skills:	Theories of Crime; Social distribution of Crime; State, Green crime and media; Globalisation and Crime; Punishment; CJS; Victimology
Assessment:	Written assignments
Stretch and challenge:	Use the textbook and read relevant sections; Read a broadsheet newspaper to find social commentary on these issues; Listening to 'Thinking allowed' on BBC Radio 4 and using their archive; Looking at 'TED' talks that are relevant to sociology; Looking at LSE blogs on social political commentary https://blogs.lse.ac.uk/

Spanish

Topics / tasks:	1. The topic of Multiculturalism in Hispanic Society. 2. The topic of Political Life in the Spanish speaking world. 3. Study of the play “La Casa de Bernarda Alba” by Fernando Fernán-Gómez. 4. Development of the Independent Research Project.
Content and skills:	In the topic of Multiculturalism in Hispanic Society, students will continue with the topic of racism, finishing off measures against racism and then moving onto anti-racist legislation. This will include using the conditional and future tenses as well as translating the gerund into Spanish and expressing obligation. In the topic of Aspects of political life in the Hispanic world students will finish off the topic of the evolution of the monarchy before moving onto Latin American dictatorships. This will include formation and the use of the imperfect subjunctive, using a sequence of tenses, recognising and using ordinal numbers and reading for gist for comprehension. Students will continue to develop their Independent Research Project (IRP), having chosen their title in half term 1. They must ensure that they have a range of sources, including an online source, to enable them to talk about their topic in depth.
Assessment:	No formal assessment takes place this half term. Students will have regular vocabulary and grammar tests in lesson as well as completing the <i>Repaso</i> exam style questions and the end of each unit.
Stretch and challenge:	Reading ahead in the literature. Listening to Spanish news and current affairs. Using Kerboodle interactive to consolidate grammar and vocabulary.