DBS Wakra
Curriculum Overview
Year 11 Spring Term 1 2021/2022

Year 11 Spring Term 1	What are we learning?	What KUS will we gain?	What will excellence look like?
English	English as a First Language Mock Examinations for Paper 1 and Paper 2 English as a First Language Paper 2B Imaginative response English Literature Paper 2A and B Poetry English Literature Paper 2C Of Mice and Men	Undertaking full examinations for the English as a First Language IGCSE and various revision activities; revising the skills needed for an imaginative piece of writing; understanding the mark scheme and being able to adapt writing to fit this and the precise timed conditions; continuing to work through the Literature section of the anthology; ensuring that students have excellent annotations for revision and are continuing to develop the analytical and written skills needed for the examination; completing initial analysis to develop the ability to respond to unseen poetry; understanding meaning and how meaning was created for the Literature prose section of the anthology; writing an extended answer based on theme and ideas and how these were created.	Developing a clear understanding of the requirements of the examination and mark scheme, and applying this in the exam situation; achieving no less than one grade beneath target; writing at the predicted grade level in strict exam conditions; reading and analysing an unseen text with confidence; understanding meaning and how the author has used language and structure to create this; finding and discussing the use of literary features clearly with consistent use of PEED+; writing concise and clear analysis of pre-seen texts, recounting key features and with developed answers; writing with excellent grammar, collocation and vocabulary level; with consistent use of literary terminology; having excellent notes and annotations of the Literature Prose section from which to revise; understanding clearly how meaning was created by the author and writing confidently and in detail regarding this; having a clear concept of which themes and ideas are presented in the texts and will be beginning to make links between them.

How will this be assessed?		Mock examinations: Reading and Writing English as a First Language. Practice examination papers for *Of Mice and Men* and Literature poetry.	
Maths	Algebra Shape Data Graphs	Extending knowledge of manipulating expressions to allow them to simplify algebraic fractions; learning how to complete all four number operations with algebraic fractions; learning how to answer complex 3D trigonometry questions, building on existing understanding of trigonometry; extending knowledge of the laws of probability; learning the difference between conditional and independent outcomes and how these impact the probability of a given event happening; learning how to use histograms to display data and how to interpret a histogram; understanding why this method of displaying data may be beneficial; learning how to calculate the gradient of a curve at a point on any given non-linear graph; learning how to complete transformations of curved graphs and appreciate how these relate to the equation of a line; learning how to determine the gradient of a function;	Competently rearranging, factorising and expanding algebraic expressions and finding common factors between two algebraic expressions; using these common factors to simplify a fraction; expanding multiple algebraic expressions and collecting like terms to correctly answer calculations with algebraic fractions; solving problems that involve Pythagoras theorem and/or the three trigonometric ratios in 3D shapes; quickly determining when a problem requires one of these methods; drawing a probability tree diagram to display and calculate the probabilities of certain events happening; determining the probability that two or more independent events will occur and use conditional probability with combined events; working out the probability of theoretical or experimental events occurring and explaining the differences between the two; constructing and interpreting histograms and constructing cumulative frequency diagrams from tabulated data; transforming any graph given a change to its function and also explaining how a function change would relate to a certain transformation; calculating the gradient of a tangent to a given point on a curved graph; understanding the concept of variable rate of change; differentiating to integer powers of x, and using this to determine gradients, rates of change, stationary points, turning points (maxima and minima) by differentiation; determining maxima and minima by considering the general shape of the graph only.

		learning how differentiation of algebraic and trigonometric expressions can be used for calculating rates of change, stationary points and their nature, or the gradient and equation of a tangent to a curve.	
How will this be assessed?		End of topic assessments Holiday exam papers End of term exam	
Biology	<u>Reproduction and inheritance</u> <u>Ecology and Environment</u>	Explaining how and why cells divide; describing how a change in DNA can bring about evolution through the process of naturel selection; understanding the dynamics of ecosystems and how to study them; stating the importance of biodiversity; explaining how carbon and nitrogen interacts with the environment; describing how pollution affects the environment; understanding the causes and effects of water pollution	Understanding how division of a diploid cell by mitosis produces two cells that contain identical sets of chromosomes; describing the division of a cell by meiosis produces four cells, each with half the number of chromosomes, and that this results in the formation of genetically different haploid gametes; explaining Darwin's theory of evolution by natural selection; understanding the terms population, community, habitat and ecosystem; understanding how abiotic and biotic factors affect the population size and distribution of Organisms; understanding the names given to different trophic levels, including producers, primary, secondary and tertiary consumers and decomposers; understanding the concepts of food chains, food webs, pyramids of number, pyramids of biomass and pyramids of energy transfer; understanding the transfer of substances and energy along a food chain; understanding why only about 10% of energy is transferred from one trophic level to the next; understanding the biological consequences of pollution of air by sulfur dioxide and carbon monoxide; understanding that water vapour, carbon dioxide, nitrous oxide, methane and CFCs are greenhouse gases; understanding how human activities contribute to greenhouse gases;

			understanding how an increase in greenhouse gases results in an enhanced greenhouse effect and that this may lead to global warming and its consequences; understanding the effects of deforestation, including leaching, soil erosion, disturbance of evapotranspiration and the carbon cycle, and the balance of atmospheric gases.
How will this be assessed?		Practical skills with fully written reports; students will apply their knowledge and understanding to complete the task with the guidance from the success criteria; end of topic test to develop and continue to build exam technique and challenge.	
Chemistry	<u>Physical Chemistry</u> <u>Organic Chemistry</u>	Knowing that chemical reactions in which heat energy is given out are described as exothermic, and those in which heat energy is taken in are described as endothermic; understanding that some reactions are reversible, and this is indicated by the symbol ⇌ in equations; learning about the chemistry of carbon; finding out how the fractional distillation of crude oil and its cracking are used to produce many of our fuels and petrochemicals; studying two homologous series – the alkanes and alkenes.	Describing simple calorimetry experiments for reactions such as combustion, displacement, dissolving and neutralisation; drawing and explaining energy level diagrams to represent exothermic and endothermic reactions; describing experiments to investigate the effects of changes in surface area of a solid, concentration of a solution, temperature, and the use of a catalyst on the rate of a reaction; knowing that the characteristics of a reaction at dynamic equilibrium are the forward and reverse reactions occur at the same rate, the concentrations of reactants and products remain constant; knowing that a hydrocarbon is a compound of hydrogen and carbon only; understanding how to represent organic molecules using empirical formulae, molecular formulae, general formulae, structural formulae and displayed formulae; describing how the industrial process of fractional distillation separates crude oil into fractions; knowing the possible products of complete and incomplete combustion of hydrocarbons with oxygen in the air; understanding how to draw the structural and displayed formulae for alkanes with up to five carbon atoms in the molecule, and to name the unbranched-chain isomers; explaining why alkenes are classified as unsaturated hydrocarbons; knowing that alcohols contain the functional group –

			OH; stating the structure and functions of carboxylic acids and esters.
How will this be assessed?		Fully written reports for investigation into students will apply their knowledge and understanding to complete the task with the guidance from the success criteria grade ladder; end of topic test to develop and continue to build exam technique and challenge.	
Physics	Radioactivity and particles	Describing the structure of an atom in terms of protons, neutrons and electrons; knowing that alpha (α) particles, beta (β−) particles, and gamma (γ) rays are ionising radiations emitted from unstable nuclei in a random process; describing the effects on the atomic and mass numbers of a nucleus of the emission of each of the four main types of radiation; describing the dangers of ionising radiations; knowing that nuclear reactions, including fission, fusion and radioactive decay, can be a source of energy; describing the role played by the control rods and moderator in the fission process; understanding the role of shielding around a nuclear reactor; explaining the difference between nuclear fusion and nuclear fission	Knowing that the activity of a radioactive source decreases over a period of time and is measured in becquerels; knowing the definition of the term half-life and understand that it is different for different radioactive isotopes; describing uses of radioactivity in industry and medicine; understanding how a nucleus of U-235 can be split (the process of fission) by collision with a neutron, and that this process releases energy as kinetic energy of the fission products; knowing that the fission of U-235 produces two radioactive daughter nuclei and a small number of neutrons; describing how a chain reaction can be set up if the neutrons produced by one fission strike other U-235 nuclei; explaining why nuclear fusion does not happen at low temperatures and pressures, due to electrostatic repulsion of protons
How will this be assessed?		Fully written reports for investigation into students will apply their knowledge and understanding to complete the task with the guidance from the success criteria grade ladder; end of topic test to develop and continue to build exam technique and challenge.	
Geography	Fragile Environments	Applying and building on the fundamental	Demonstrating knowledge of locations, places, processes, environments and

		building blocks of geographical knowledge; actively engaging in the process of geographical enquiry to develop as effective and independent learners, and as critical and reflective thinkers with enquiring minds; develop knowledge and understanding of geographical concepts and appreciating the relevance of these concepts to our changing world	different scales; demonstrating geographic understanding of concepts and how they are used in relation to places, environments and processes; applying knowledge and understanding to interpret, analyse and evaluate geographical information and issues and to make judgements; selecting, adapting and using a variety of skills and techniques to investigate questions and issues and communicate findings.
How will this be assessed?		This unit will be assessed through : 1 **Mid Term** examination 1 **End of Term** examination Keyword tests at regular intervals Extended writing tasks for exam style question	
History	<u>The USA, 1918-1941</u> <u>Germany: Development of a Dictatorship</u> <u>Changes in Medicine 1845-1945</u>	Developing and extending knowledge and understanding of specified key events, periods and societies in history; and of the wide diversity of human experience; engaging in historical enquiry to develop as independent learners and as critical and reflective thinkers; developing the ability to ask relevant questions about the past, to investigate issues critically and to make valid historical claims by using a range of sources in their historical context; developing an awareness that	Demonstrating knowledge and understanding of the key features and characteristics of the periods studied; explaining, analysing and making judgements about historical events and periods studied using second-order historical concepts; using a range of source material to comprehend, interpret and cross-refer sources; analysing and evaluate historical interpretations in the context of historical events studied.

		different people, events and developments have been accorded historical significance and how and why different interpretations have been constructed about them; organising and communicating their historical knowledge and understanding in different ways and reach substantiated conclusions.	
How will this be assessed?		This unit will be assessed through : ❑ 1 **Mid Term** examination ❑ 1 **End of Term** examination ❑ Keyword tests at regular intervals ❑ Extended writing tasks for exam style question	
Arabic	Week 1 ،الأعمال التجارية - .فرص العمل، الوظائف Week 2 ما هي الصعوبات التي تواجه الشباب العرب لفي الحصول على عم عالمضار إعراب Week 3 لمرأة قدرات خارقة لا يستهان بها في العمل والإنتاج وهي عامل مهم في الأداء الاقتصادي لكل مجتمع.ناقش هذا الرأي تابع اعراب iv. عالمضار Week 4 قضايا اقتصادية عربية .وعالمية الشباب والبطالة رضخألا ذكرلا، Week 5	1. . تطوير القراءة الصامتة والجهرية عند الطالب بحيث يصحح الطالب اخطاءه وذلك من خلال التحليل الصوتي للكلمة 2. تطوير مهارة جمع وتوليد الأفكار من الانترنت بهدف الوصول للقراءة الجهرية بطلاقة 3. تطوير توظيف معرفته بالفصحى للكتابة في موضوع مألوف بطلاقة نسبية تتفق و المطلوب منه في هذه المرحلة الدراسية الجديدة 4. تقديم تحليل متوازن لقضية معينة بتقييم وجهات النظر المختلفة وذلك من خلال استكشاف	هر تظ العمل على مستويات لمراعاة الفروق الفردية يت / قياس أسلوبًا قويًا وتصميمًا / مرونة ؛ توق تحمل –بدقة ؛ تدريب الأقران بشكل فعال ةالمسؤولي

	الأطفال يستحقون الرعاية والعناية لا أن يرمى بهم في أتون سوق العمل. كرامة العامل رأس مال لا يستهان به في دفع عجلة الاقتصاد والنهوض بالأمم. الفعل اللازم والفعل المتعدي البيئة Week 6 الاحتباس الحراري كم الخبرية وكم الاستفهامية Week 7 مصادر الطاقة التمييز الممنوع من الصرف Week 8 اثر الإنسان على الحيوانات والبحار تابع التمييز Week 9 مصادر الطاقة المتجددة Week 10 مصادر الطاقة المتجددة Week 12 الصحة الغذاء الصحي Week 13 الصحة تابع الغذاء الصحي Week 14 الصحة Week 15 الصحة القيادة والمهارة	طرق مختلفة للتخطيط للكتابة وعرضها من خلال عدد معين من الكلمات من :300) كلمة 5. اتقان القواعد النحوية والتدريب عليها بأشكالها المختلفة والقدرة على إجابة الأسئلة والتدريبات عليها . التذوق البلاغي والقدرة على استنتاج واستنباط مظاهر الجمال والتدليل عليها من خلال النص المقروء.	
How will this be assessed?		التطبيقات الكاملة التي تحتوي على الأسئلة المختلفة المطابقة لورقة الامتحان النهائية. • من خلال إجابة نماذج متكاملة من أولاق الامتحانات لسنين السابق	
MFL	<u>El mundo del trabajo</u>	Recapping vocabulary for different jobs and giving preferences; practising all 4 skills	Describing preferences; discussing career choices and reasons; comparing jobs; holding a conversation to discuss the importance the languages when finding a

		(listening, reading, writing and speaking); using present, past and future tenses as well as both regular and irregular verbs; using some conditional tense with regular verbs; expressing complex opinions; using idioms and higher order phrases.	job; applying knowledge to understand both written and oral texts.
How will this be assessed?		All 4 skills will be assessed: writing, speaking, reading and listening.	
PE	Athletics Rounders	Understanding and demonstrating sprint start technique; understanding and demonstrating sprinting technique; understanding and demonstrating triple jump technique; understanding and applying pace to a long distance race; understanding and applying the 3 baton change techniques in a relay race; understanding and demonstrating correct throwing technique in the shot put, discus and javelin; using correct technique in a hurdles race; developing under arm throwing/ bowling technique; understanding and demonstrating over arm throwing technique; applying fielding tactics to a game situation; developing an understanding of fielding positions;	Identifying correct techniques; applying correct techniques into race/competition/ game situations; peer-assessing and coaching, giving clear 'what went well' and 'even better if' feedback; self-assessing performance using correct techniques; exceeding physical expectations showing speed, power, accuracy, cardiovascular endurance and muscular endurance; applying a range of tactics in a small game; demonstrating leadership and communication skills in a game; competing to a high level outside of school; creating activities linked to the specific skill for lessons; promoting a love for the subject through their enthusiasm and commitment; developing understanding and knowledge on the key elements of health and well-being

		understanding and demonstrating correct batting technique; identifying short and long barrier techniques and applying it to a small game.	
How will this be assessed?		Continual assessment of skills and level of understanding via Q and A and observation.	
ICT	Applying Information and Communication Technology	Using the following software effectively: Word processing, Database management, Spreadsheet, Web authoring, Presentation (multimedia), Graphics; selecting appropriate software applications to meet needs; reviewing the outcomes of the use of software applications by comparing the digital product with the original requirements.	Demonstrating knowledge and understanding of software skills and producing high quality content in a range of different computer applications; entering, organising, developing, refining and formatting information, applying editing techniques to meet needs; organising different types of information to achieve a purpose and making modifications to improve the outcomes; identifying the main properties of software applications such as Microsoft Word, PDF Files, and JPEG and describing the benefits and drawbacks of using certain applications in comparison to other methods.
How will this be assessed?		Students will be internally assessed at the end of each unit in preparation for their external examination taking place at the end of the academic year. This will be through a range of practical and written tasks. Students will engage in peer assessments throughout the term to help improve their examination technique and ability to produce high quality answers.	
Design Technology	<u>Papers and boards</u>	Studying the categorisation and properties of paper, cards, boards and composite materials; considering properties in terms of their strength, folding ability, surface finish and absorbency; laminating papers, cards and boards to improve strength, finish and appearance; knowing	Demonstrating a broad understanding of the categorisation and properties of a range of materials; being aware of their source, use and application in products.

		the standard ISO sizes of paper, the use of microns to measure thickness of card, the use of recycled materials to manufacture papers and boards and the aesthetic and functional properties of common papers, cards and boards	
How will this be assessed?		Teacher/peer assessment, teacher stage grading, self-assessment, ongoing tests/quizzes.	