DBS Wakra
Curriculum Overview
Year 10 Autumn Term 1 2021/2022

Year 10 Autumn Term 1	What are we learning?	What KUS will we gain?	What will excellence look like?
English	English as a Second Language Paper 1 - Reading English as a Second Language Paper 2 - Listening Grammar skills focus	Reading a range of text types for comprehension, analysis and to infer meaning; building vocabulary; understanding the requirements of the examination and practising in exam conditions; listening to a range of texts for understanding; understanding accent, the difference between spoken and written texts and colloquial language; understanding the requirements of the examination and practising in exam conditions; ensuring understanding of word classification and their usage; ensuring understanding of the different tenses and their application.	Identifying the key words in texts and summarise the content efficiently; identifying whether to skim read or read for meaning and to do both rapidly; answering comprehension questions quickly, following the instructions closely; inferring meaning and demonstrating understanding with clarity and grammatical accuracy; listening and identifying the key points of a variety of spoken texts; navigating accent and colloquial phraseology; answering discrete questions on word classification and tense; transferring this knowledge to their written and spoken English with ease.
How will this be assessed?		Reading: Paper 1 exam practice. Writing: Grammatically assessed short essay on a subject of their choice. Speaking and Listening: Paper 2 Listening exam practice.	
Maths	IGCSE key skills	Consolidating and stretching understanding of topics that will perform the basis of much of the	Understanding the concept of gradient and compare two lines using the gradient and y-intercept; drawing and interpreting graphs; extending understanding of graphs to Quadratic, and other non-linear

		future IGCSE content; revisiting some key skills from Number, Algebra, Graphs and Shapes	graphs; finding missing side lengths in 2D and 3D shapes using Pythagoras Theorem; using Circle Theorems; understanding how Trigonometry can be used, by using the Sin, Cos and Tan ratios to find missing side lengths and angles; factorising an algebraic equation; solving linear equations and simultaneous equations; finding the percentage of any amount and will extend this knowledge to growth and decay questions; using a compound interest formula to calculate the percentage change over time.
How will this be assessed?		Teacher/peer assessment, teacher stage grading, self-assessment, ongoing tests/quizzes. Exam at the end of Year 11.	
Biology	<u>The nature and variety of living organisms. Structure and functions in living organisms</u>	Carrying out investigations using the equipment accurately and safely; exploring the characteristics of living things; describing the common features shown by eukaryotic organisms: plants, animals, fungi and protoctists; describing the common features of prokaryotic organisms; understanding pathogens; understanding the level of organisation in organisms; exploring cell structure and functions; describing the key structures and function of plant and animal cells; explaining the similarities and difference between them; identifying structures of structure of biological molecules and understanding the role of enzymes as biological catalysts in	Justifying equipment choice and measurement that are used during investigations; explaining how to reduce risks and recording and analysing evidence in an effective way; describing the characteristics require to classify living things; describing the common features displayed with eukaryotic organisms and their functions; describing the common features displayed with prokaryotic organisms and their functions; describing examples of pathogens and their key features; describing the levels of organisation in organisms: organelles, cells, tissues, organs and systems; describing the structures and functions of the nucleus, cytoplasm, cell membrane, cell wall, mitochondria, chloroplasts, ribosomes and vacuole; explaining the difference between plant and animal cells; describing the structure of carbohydrates, proteins and lipids and Investigate food samples for the presence of glucose, starch, protein and fat; investigating how enzyme activity can be affected by temperature and pH; describing the different processes that allow substances to move within cells e.g. diffusion, osmosis and active transport; describing key structure and functions of in a leaf and explain the process of photosynthesis using word and symbol equations;

		metabolic reactions; describing how different factors affect the rate of enzyme reactions; investigating the different processes that allow movement of substances into and out of cells; identifying the leaf structure and describing photosynthesis; understanding balanced diet in human, the process of digestion.	investigating different factors that affect the rate of photosynthesis; describing the balanced diet in humans which includes appropriate proportions of carbohydrate, protein, lipid, vitamins, minerals, water and dietary fibre; identifying the structure and explain the functions of the human alimentary canal.
How will this be assessed?		Teacher/peer assessment, teacher stage grading, self-assessment, ongoing tests/quizzes. Exam at the end of Year 11.	
Chemistry	<u>Principles of chemistry</u>	Understanding the three states of matter and the inter-conversions; classifying a substance as an element, compound or mixture and describe the different experimental techniques for the separation of mixtures; looking at the periodic table; describing the structure of atoms and its sub-atomic particles; writing word equations and balanced chemical equations and doing accurate calculation; describing covalent and ionic bonding.	Describing the three states of matter in terms of the arrangement, movement and energy of the particles and explain the inter-conversions; describing these experimental techniques for the separation of mixtures: simple distillation, fractional distillation, filtration, crystallisation, paper chromatography; identifying the arrangement of elements in the Periodic Table; describing an atom and its sub-atomic particles (mass and charge); calculating the relative atomic mass of an element (Ar) from isotopic abundances; writing word equations and balanced chemical equations (including state symbols); carrying out calculations based on the amount of substances required or used; describing key features of covalent and ionic bonding and how they are formed.
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	**Forces and motion** **Electricity**	Plotting and explaining distance−time graphs along with using the relationship between	Using the following units: kilogram (kg), metre (m), metre/second (m/s), metre/second2 (m/s2), newton (N), second (s) and newton/kilogram (N/kg),

		average speed, distance moved and time; using the relationship between acceleration, change in velocity and time; describing the effects of forces between bodies such as changes in speed, shape or Direction; knowing that the initial linear region of a force-extension graph is associated with Hooke's law; using the following units: ampere (A), coulomb (C), joule (J), ohm (Ω), second (s), volt (V) and watt (W); understanding why a current in a resistor results in the electrical transfer of energy and an increase in temperature, and how this can be used in a variety of domestic contexts; knowing and using the relationship between power, current and voltage: power = current × voltage; using the relationship between energy transferred, current, voltage and time: energy transferred = current × voltage × time; knowing and using the relationship between voltage, current and resistance: voltage = current × resistance; knowing and using the	along with newton metre (Nm), kilogram metre/second (kg m/s); using the conservation of momentum to calculate the mass, velocity or momentum of objects; knowing and using the relationship between the moment of a force and its perpendicular distance from the pivot: moment = force × perpendicular distance from the pivot; explaining how positive and negative electrostatic charges are produced on materials by the loss and gain of electrons; explaining the potential dangers of electrostatic charges, e.g. when fuelling aircraft and tankers.

		relationship between charge, current and time: charge = current × time.	
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.	
Arabic	يدرس الطلاب مجموعة من الموضوعات الرئيسة المقررة من قبل (IGCSE) وهى 1- قضايا الشباب 2- التعليم 3- الإعلام كما يدرسون بعض القواعد النحوية ومنها: المعرب والمبنى إعراب الفعل المضارع وبناء الماضى والأمر	يقوم الطلاب بقراءة مجموعة مختلفة من النصوص للاستيعاب والفهم لتحصيل مجموعة من المفردات واللغويات الجديدة التي تساعدهم على تنمية مهارة الكتابة والارتقاء بالأسلوب كما تنمي لديهم القدرة النقدية وفهم المضمون كاملا للقدرة على إجابة الأسئلة المطروحة على النص كما يتدرب الطلاب على القواعد النحوية بالقدر الكافي حتى يستطيع ضبط ما يقرأه وما يكتبه .	القراءة يجب على الطلاب قراءة العديد من النصوص المرتبطة بالعناوين الرئيسية والتدريب على كيفية فهم النص والإجابة عن الأسئلة المرتبطة به وخاصة السؤال الرابع والثامن والتاسع من الورقة الأولى وأيضا يتدرب جيدا على الاختصار والاختزال من خلال الإجابة كثيرا عن السؤال العاشر أيضا من الورقة الأولى. القواعد: يجب عليه مراجعة دروس القواعد بصفة مستمرة والتدريب المستمر على إجابة الأسئلة المختلفة المرتبطة بالقواعد و بأشكالها المتنوعة وذلك من خلال السؤال الحادي عشر والثاني عشر والثالث عشر والرابع عشر من الورقة الأولى. الكتابة : على الطالب أن يستخدم المفردات والتراكيب الجديدة التي استمدها من خلال قراءته للنصوص في الكتابة ويكون قادر على توصيل المعلومات بشكل جيد ويكون لديه القدرة على الإقناع باستخدام الوسائل المختلفة مع استخدام بعض من التراكيب البلاغية وكذلك استخدام علامات الترقيم ويكون ذلك من خلال التدريب على إجابة السؤال الأول والثاني والثالث من الورقة الثانية
How will this be assessed?		التطبيقات الكاملة التى تحتوي على جميع – القواعد -المهارات(القراءة والفهم – الكتابة الإملاء الاختبارات الفصلية التى تحتوي على جميع – القواعد -المهارات (القراءة والفهم – الكتابة الإملاء) بجانب الاختبارات الشفوية التى تقيس قدرة الطالب على الاستماع الجيد التحدث باللغة العربية الفصيحة	
MFL	Mi familia y yo En mi barrio	Talking about daily lives, families and towns in detail; practising all 4 skills (listening, reading, writing and speaking).	Describing orally or in writing families, relationships, daily routine, chores, future plans and towns (pros and cons) with a good degree of grammar accuracy; applying knowledge to understand both written and oral texts.

		Grammar focus: Present, Past and future tenses, both regular and irregular verbs, as well as some conditional tense with regular verbs.	
How will this be assessed?		1 Mid Term examination 1 End of Term examination Keyword tests at regular intervals	
Geography	Physical Environments: Rivers, Coasts and Hazards	Applying and building on the fundamental 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; developing their knowledge and understanding of geographical concepts and appreciating the relevance of these concepts to our changing world	Demonstrating knowledge of locations, places, processes, environments and 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?		1 Mid Term examination 1 End of Term examination Keyword tests at regular intervals Extended writing tasks for exam style question	
History	Changes in medicine, c1848–c1948	Developing and extending knowledge and understanding of specified key events, periods and societies in history; engaging in historical enquiry to develop as independent learners and as critical and reflective thinkers; developing the ability to ask relevant	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 evaluating historical interpretations in the context of historical events studied.

		questions about the past; investigating issues critically and to make valid historical claims by using a range of sources in their historical context; developing an awareness that different people, events and developments have been accorded historical significance and how and why different interpretations have been constructed about them.	
How will this be assessed?		1 Mid Term examination 1 End of Term examination Keyword tests at regular intervals Extended writing tasks for exam style question	
ICT	<u>Topic 1 : Digital devices</u> <u>Topic 2 : Connectivity</u>	Learning about the range of digital devices available, including developments in the features and functionality of digital devices and how this impacts on the way that they are used by individuals, organisations and society; learning the need to understand the principles of these devices and selecting suitable devices and associated hardware and software to use in particular situations; understanding the ways in which digital devices exchange data	Demonstrating an understanding of various digital devices and their uses; selecting suitable devices/software to meet the needs of a selected task; knowing about types of mobile phones, smartphones and specialist phones and how they connect to the network (SIM); knowing that RAM stands for Random Access Memory and that ROM stands for Read Only Memory; explaining in detail how digital devices exchange data using accurate terminology; understanding the different methods implemented to improve data security; selecting suitable methods of securing data for a particular context.

		and communicate with each other and with the larger systems supporting online organisations; learning about the increasing importance of 'access everywhere' developments.	
How will this be assessed?		Teacher/peer assessment, teacher stage grading, self-assessment, ongoing tests/quizzes. Exam at the end of Year 11. Ongoing coursework.	
Design Technology	Advanced sketching skills	Tonal shading; isometric drawing; rendering techniques; single point perspective drawing; crating technique; presentation drawing	Developing and revising design ideas with both creativity and technical awareness; shading effectively with smoothing transition between dark shades and light tones; effective use of crating technique showing accurate and proportionate representation of objects; demonstrating the use of several drawing and rendering techniques.
How will this be assessed?		Teacher/peer assessment, teacher stage grading, self-assessment, ongoing tests/quizzes. Exam at the end of Year 11. Ongoing coursework.	