



DBS Wakra
Curriculum Overview
Year 10 Autumn Term 2 2021/2022

Year 10 Autumn Term 2	What are we learning?	What KUS will we gain?	What will excellence look like?
English	<u>English as a Second Language</u>	<u>Reading</u> 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; <u>listening</u> 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; <u>writing</u> : this will involve writing in a range of different forms for different purposes and understanding the conventions of each of these entities; writing within time limits and following word counts closely as per the examinations; ensuring understanding of word classification and their usage; ensuring understanding of the	Identifying the key words in texts and summarise the content efficiently; identifying if they need to skim read or read for meaning and to do both rapidly; answering the comprehension questions quickly, following the instructions closely; inferring meaning and demonstrating their understanding with clarity and grammatical accuracy; listening and identifying the key points of a variety of spoken texts; navigating accent and colloquial phraseology; answering questions easily whilst listening to the texts; identifying the purpose, audience and form from the question efficiently and writing using the conventions with ease; writing using correctly formatting and with highly accurate and wide ranging vocabulary and punctuation; understanding the requirements of the mark scheme and how to implement it; answering discrete questions on word classification and tense; transferring knowledge to written and spoken English with ease.

		different tenses and their application.	
How will this be assessed?		<ol style="list-style-type: none"> 1. Assessed writing response 2. Full Reading and Writing Exam Paper 3. Listening Paper 	
Maths	<u>IGCSE key skills</u> Topic 1: Number Topic 2: Probability Topic 3: Algebra Topic 4: Shape and Space	Strengthening and expanding knowledge of topics that will perform the basis of much of the future IGCSE content; applying key concepts and knowledge to real life situations and problem solving scenarios; re-examining a variety of important skills from algebra, probability and shapes and number to provide the strong foundations that the IGCSE requires.	Number: completing advanced calculator problems; converting units of measurements accurately alongside solving problems involving rational and irrational numbers. Algebra: setting up and solving quadratic problems using both the quadratic formula and inequalities. Probability: using 2 and 3 circle Venn diagrams to display data through intersecting circles; using set notation to represent data correctly and calculating a range of probabilities. Shapes: applying knowledge of formulas and shape properties to calculate <ul style="list-style-type: none"> • Area and circumference of a circle • Area and arc length of a sector • Volume and surface area of 3D shapes; using algebra to answer problem solving examples
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.</u> <u>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	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

		<p>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 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.</p>	<p>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; 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.</p>
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>	<p>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</p>	<p>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</p>

		and balanced chemical equations and doing accurate calculation; describing covalent and ionic bonding.	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	<u>Forces and motion</u> <u>Electricity</u>	Plotting and explaining distance–time graphs along with using the relationship between 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 \times voltage; using the	Using the following units: kilogram (kg), metre (m), metre/second (m/s), metre/second ² (m/s ²), newton (N), second (s) and newton/kilogram (N/kg), 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 \times 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.

		<p>relationship between energy transferred, current, voltage and time:</p> <p>energy transferred = current × voltage × time; knowing and using the relationship between voltage, current and resistance:</p> <p>voltage = current × resistance; knowing and using the relationship between charge, current and time:</p> <p>charge = current × time.</p>	
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	<p><u>يدرس الطلاب مجموعة من الموضوعات الرئيسية المقررة من قبل (IGCSE) وهي</u></p> <p><u>1- قضايا الشباب</u></p> <p><u>2- التعليم</u></p> <p><u>3- الإعلام</u></p> <p><u>كما يدرسون بعض القواعد النحوية ومنها:</u></p> <p><u>المعرب والمبني</u></p> <p><u>إعراب الفعل المضارع وبناء الماضي والأمر</u></p>	<p>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 .</p>	<p>القراءة</p> <p>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 وأيضاً يتدرب جيداً على الاختصار والاختزال من خلال الإجابة كثيراً عن السؤال العاشر أيضاً من الورقة الأولى.</p> <p>القواعد:</p> <p>يجب عليه مراجعة دروس القواعد بصفة مستمرة والتدريب المستمر على إجابة الأسئلة المختلفة المرتبطة بالقواعد وأشكالها المتنوعة وذلك من خلال السؤال الحادي عشر والثاني عشر والثالث عشر والرابع عشر من الورقة الأولى.</p> <p>الكتابة :</p> <p>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 التقييم ويكون ذلك من خلال التدريب على إجابة السؤال الأول والثاني والثالث من الورقة الثانية</p>
How will this be assessed?		التطبيقات الكاملة التي تحتوي على جميع القواعد -المهارات (القراءة والفهم – الكتابة الإملاء	

		<p>الاختبارات الفصلية التي تحتوي على جميع القواعد-المهارات (القراءة والفهم – الكتابة الإملاء) بجانب الاختبارات الشفوية التي تقيس قدرة الطالب على الاستماع الجيد التحدث باللغة العربية الفصيحة</p>	
MFL	<p><u>Mi familia y yo</u> <u>En mi barrio</u></p>	<p>Talking about daily lives, families and towns in detail; practising all 4 skills (listening, reading, writing and speaking). Grammar focus: Present, Past and future tenses, both regular and irregular verbs, as well as some conditional tense with regular verbs.</p>	<p>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.</p>
How will this be assessed?		<p>1 Mid Term examination 1 End of Term examination Keyword tests at regular intervals</p>	
Geography	<p><u>Physical Environments:</u> <u>Rivers, Coasts and</u> <u>Hazards</u></p>	<p>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</p>	<p>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.</p>
How will this be assessed?		<p>1 Mid Term examination 1 End of Term examination Keyword tests at regular intervals Extended writing tasks for exam style question</p>	

History	<u>The USA, 1918-41</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 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.	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.
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	Demonstrating an understanding of various digital devices and their uses;

		<p>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 and communicate with each other and with the larger systems supporting online organisations; learning about the increasing importance of 'access everywhere' developments.</p>	<p>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.</p>
<p>How will this be assessed?</p>		<p>Teacher/peer assessment, teacher stage grading, self-assessment, ongoing tests/quizzes. Exam at the end of Year 11. Ongoing coursework.</p>	
<p>Design Technology</p>	<p><u>Core content</u></p>	<p>Applying a breadth of technical knowledge and understanding of the characteristics, advantages and disadvantages of emerging technologies; recognising the importance of the evaluative process and respective criteria when considering the impact of new and emerging technologies</p>	<p>Demonstrating understanding that all design and technological activity takes place in contexts that influence the outcomes of design practice; identifying methods of generating energy and its uses; identifying characteristics, application, advantages and disadvantages of modern & smart materials, composites and technical textiles; showing understanding of how different components can be used within mechanisms; understanding how an electrical system can make a product function; differentiating between various</p>

		<p>to a range of scenarios; learning about the processes, applications, characteristics, advantages and disadvantages of sources of energy, in order to be able to discriminate between them and to select appropriately; applying technical knowledge and understanding of the characteristics, applications, advantages and disadvantages of smart materials; understanding the performance, principles, applications and the influence on the design of mechanical devices; understanding the performance and functionality of using programmable components between them and selecting appropriately.</p>	<p>paper and boards and metals by properties, structures and uses.</p>
<p>How will this be assessed?</p>		<p>Teacher/peer assessment, teacher stage grading, self-assessment, ongoing tests/quizzes. Exam at the end of Year 11. Ongoing coursework.</p>	